

## Self-Study for Autonomous Colleges

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## Profile of the Autonomous College

### 1. Name and address of the College:

<b>Name:</b> Nitte Meenakshi Institute of Technology
<b>Address:</b> P.B.No 6429, Govindapura, Gollahalli, Yelahanka
<b>City:</b> Bangalore
<b>State:</b> Karnataka – 560064
<b>Website:</b> <a href="http://www.nmit.ac.in">www.nmit.ac.in</a>

### 2. For communication:

Designation	Name	Telephone with STD code	Mobile	Fax	Email
Principal	Dr.H.C. Nagaraj	080-22167803 22167800	9845275240	22167805	<a href="mailto:principal@nmit.ac.in">principal@nmit.ac.in</a>
Vice Principal/ Dean (Academics)	Prof.K.A. Ranganatha Setty	080-22167822	9845923345	22167805	<a href="mailto:karsetty@hotmail.com">karsetty@hotmail.com</a>
Steering Committee Coordinator	Dr.Sanjay H A	080-22167864	9342560303	22167805	<a href="mailto:sanju.smg@gmail.com">sanju.smg@gmail.com</a>

### 3. Status of the Autonomous College by management:

- i. Government
- ii. Private: Private Self Financing
- iii. Constituent College of the University

### 4. Name of University to which the College is affiliated

Visvesvaraya Technological University, "JnanaSangama" Machhe, Belgaum- 590 018 Karnataka
--

**5. a. Date of establishment, prior to the grant of 'Autonomy':** 01/09/2001

**b. Date of grant of 'Autonomy' to the College by UGC:** 25/04/2008

**6. Type of institution:**

**a. By Gender**

i. For Men

ii. For Women

iii. Co-education

**b. By shift**

i. Regular

ii. Day

iii. Evening




**c. Source of funding**

i. Government

ii. Grant-in-aid

iii. Self-financing




**iv. Any other (Please specify)**

**7. Is it a recognized minority institution?**

Yes

NO

**If yes specify the minority status (Religious/linguistic/ any other) and provide documentary evidence.**

Tulu Linguistic Minority

**8. a. Details of UGC recognition:**

Under Section	Date, Month & Year (dd-mm-yyyy)	Remarks (If any)
i. 2 (f)	25-04-2008 F.8.367/2007 (CPP-1)	-
ii. 12 (B)	Applied	Applied

(Enclose the Certificate of recognition u/s 2 (f) and 12 (B) of the UGC Act)

Ph. 23236351, 23232791, 23237721, 23234116  
23239733, 23232317, 23236735, 23239437  
UGC Website: www.ugc.ac.in



विश्वविद्यालय अनुदान आयोग  
बहादुरशाह जफर मार्ग  
नई दिल्ली-110 002  
UNIVERSITY GRANTS COMMISSION  
BAHADURSHAH ZAFAR MARG  
NEW DELHI-110 002

April, 2008

F.8-367/2007 (CPP-I)

The Registrar,  
Visvesvaraya Technological University,  
"Jnana Sangama",  
Belgaum-590 014 (Karnataka).

25 APR 2008

Sub:- List of Colleges prepared under Section 2 (f) of the UGC Act, 1956-Inclusion of New College-

Sir,

I am directed to refer to the letter No. NMIT/UGC/2008/28476 dated 08.04.2008 received from the Principal, Nitte Meenakshi Institute of Technology, Govindapura, Gollahalli, P.B. No. 6429, Yelahanka, Bangalore (Karnataka) on the subject cited above and to say that the name of the following College has been included in the list of Colleges prepared under Section 2 (f) of the UGC Act, 1956 under the head Non-Government Colleges teaching upto Bachelor's Degree:-

Name of the College	Year of Establishment	Remarks
Nitte Meenakshi Institute of Technology, Govindapura, Gollahalli, P.B. No. 6429, Yelahanka, Bangalore-560 064 (Karnataka) (On permanent affiliation)	2001	The College is <b>not</b> eligible to receive Central assistance in terms of rules framed under Section 12 (B) of the UGC Act, 1956, as the UGC has not yet finalized the details to provide financial assistance to "Self Financed Colleges".

The Indemnity Bond and other documents submitted in respect of the above College have been accepted by the Commission.

Yours faithfully

(P.K. Sharma)  
Under Secretary

Copy to:-

- The Principal, Nitte Meenakshi Institute of Technology, Govindapura, Gollahalli, P.B. No. 6429, Yelahanka, Bangalore (Karnataka)
- The Secretary, Government of India, Ministry of Human Resource Development, Department of Secondary & Higher Education, Shastri Bhawan, New Delhi-110 001.
- The Principal Secretary, (Higher Education), M.S. Building, 5<sup>th</sup> Floor, Dr. B.R. Ambedkar Road, Bangalore (Karnataka)
- The Deputy Secretary, UGC, South-Western Regional Office, Prasanna Kumar Block, Palace Road, Bangalore-560 009.
- Publication Officer, UGC-Website, New Delhi.
- Section Officer, FD-iii Section, UGC, New Delhi.
- All Sections, UGC, New Delhi.
- Guard file.

(Mrs. Sunita Gulati)  
Section Officer

**b. Details of recognition/approval by statutory/regulatory bodies other than UGC (AICTE, NCTE, MCI, DCI, PCI, RCI etc.)**

UnderSection/clause	Day, Month & Year (dd-mm/yyyy)	Validity	Programme/ institution	Remarks
i. AICTE	19/03/2013	1 year	BE- CSE BE-ISE BE-ECE BE-EEE BE-MECH BE-AERO BE-CIVIL M.Tech.-CSE M.Tech.- CNE M.Tech.- VLSI & ES M.Tech.- DCN M.Tech.- TPE M.Tech-Structural Engg M.Tech-Machine Design MBA MCA	
ii. VTU	29/07/2013	5 years	BE- CSE BE-ISE BE-ECE BE-EEE BE-MECH BE-AERO BE-CIVIL M.Tech.-CSE M.Tech.- CNE M.Tech.- VLSI & ES M.Tech.- DCN M.Tech.- TPE M.Tech-Structural Engg M.Tech-Machine Design MBA MCA <b><u>Research Centers</u></b> <ul style="list-style-type: none"> <li>• CSE</li> <li>• ISE</li> <li>• ECE</li> <li>• EEE</li> </ul>	

			<ul style="list-style-type: none"><li>• Mechanical</li><li>• Mathematics</li><li>• Chemistry</li><li>• Management Studies</li></ul>	
--	--	--	---	--



**All India Council for Technical Education**  
(A Statutory body under Ministry of HRD, Govt. of India)  
7th Floor, Chandralok Building, Janpath, New Delhi- 110 001  
PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-India.org

F.No. South-West/1-1374575174/2013/EOA

Date: 19-Mar-2013

To,  
The Principal Secretary (Hr. & Tech Education)  
Govt. of Karnataka, K. G.S., 6th Floor,  
M.S. Building, R. N. 645, Dr. B. R. Ambedkar Road,  
Bangalore-560001

Sub: Extension of approval for the academic year 2013-14

Ref: Application of the Institution for Extension of approval for the academic year 2013-14

Sir/Madam,

In terms of the provisions under the All India Council for Technical Education (Grant of Approvals for Technical Institutions) Regulations 2012 notified by the Council vide notification number F-No.37-3/Legal/2012 dated 27/09/2012 and norms standards, procedures and conditions prescribed by the Council from time to time, I am directed to convey the approval to

Regional Office	South-West	Application Id	1-1374575174
		Permanent Id	1-10233900
Name of the Institute	NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY	Institute Address	GOLLAHALLI, GOVINDAPURA, P B NO 6429 YELAHANKA, BANGALORE-560064, BANGALORE, BANGALORE RURAL, Karnataka, 560064
Name of the Society/Trust	NITTE EDUCATION TRUST	Society/Trust Address	NITTE EDUCATION TRUST, UNIVERSITY ENCLAVE, DERALAKATTE, MANGALORE-575018, MANGALORE, D KANNADA(DK), Karnataka, 575018
Institute Type	Unaided - Private		

Opted for change from Women to Co-ed	No	Opted for change of name	No	Opted for change of site	No
Change from Women to Co-ed approved	Not Applicable	Change of name Approved	Not Applicable	Change of site Approved	Not Applicable

to conduct following courses with the intake indicated below for the academic year 2013-14


Application Number: 1-1374575174

Page 1 of 5

Note: This is a Computer generated Extension of Approval Letter. No signature is required.

Letter Printed On: 21 March 2013.

Printed By : AE3632065

  
PRINCIPAL  
NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY  
P.B No 6429, GOVINDAPURA, GOLLAHALLI  
YELAHANKA, BANGALORE-560 064.



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 7th Floor, Chandralok Building, Janpath, New Delhi- 110 001  
 PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org

Application Id: 1-1374575174			Course	Affiliating Body						
Program	Shift	Level		Full/Part Time		Intake 2012-13	Intake Approved for 13-14	NRI	PIO	Foreign Collaboration
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	COMPUTER NETWORKING AND ENGINEERING	FULL TIME	Vesveswaraiah Technological University, Belgaum	18	18	No	Yes	No
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	COMPUTER SCIENCE AND ENGINEERING	FULL TIME	Vesveswaraiah Technological University, Belgaum	36	36	No	Yes	No
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	DIGITAL COMMUNICATIONS AND NETWORKING	FULL TIME	Vesveswaraiah Technological University, Belgaum	18	18	No	Yes	No
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	MACHINE DESIGN	FULL TIME	Vesveswaraiah Technological University, Belgaum	0	24	No	Yes	No
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	STRUCTURAL ENGINEERING	FULL TIME	Vesveswaraiah Technological University, Belgaum	0	24	No	Yes	No
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	THERMAL POWER ENGINEERING	FULL TIME	Vesveswaraiah Technological University, Belgaum	18	18	No	Yes	No
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	VLSI DESIGN AND EMBEDDED SYSTEMS	FULL TIME	Vesveswaraiah Technological University, Belgaum	18	18	No	Yes	No
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	AERONAUTICAL ENGINEERING	FULL TIME	Vesveswaraiah Technological University, Belgaum	60	60	No	Yes	No
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	CIVIL ENGINEERING	FULL TIME	Vesveswaraiah Technological University, Belgaum	60	120	No	Yes	No


Application Number: 1-1374575174\*

Page 2 of 5

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 YELAHANKA, BANGALORE-560 064.





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 PHONE: 23724151/52/53/54/55/56/57. FAX: 011-23724183. www.aicte-india.org

Application Id: 1-1374575174			Course	Affiliating Body		Intake 2012-13	Intake Approved for 13-14	NRI	P.O.	Foreign Collaboration
Program	Shift	Level		Full/Part Time						
MCA	1st Shift	POST GRADUATE	MASTERS IN COMPUTER APPLICATIONS	FULL TIME	Vesveswaralah Technological University, Belgaum	120	120	No	Yes	No

• Validity of the course details may be verified at [www.aicte-india.org>departments>approvals](http://www.aicte-india.org>departments>approvals)

The above mentioned approval is subject to the condition that NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY shall follow and adhere to the Regulations, guidelines and directions issued by AICTE from time to time and the undertaking / affidavit given by the institution along with the application submitted by the institution on portal.

In case of any differences in content in this Computer generated Extension of Approval Letter, the content/information as approved by the Executive Council / General Council as available on the record of AICTE shall be final and binding.

Strict compliance of Anti-Ragging Regulation:- Approval is subject to strict compliance of provisions made in AICTE Regulation notified vide F. No. 37-3/Legal/AICTE/2009 dated July 1, 2009 for Prevention and Prohibition of Ragging in Technical Institutions. In case Institution fails to take adequate steps to Prevent Ragging or fails to act in accordance with AICTE Regulation or fails to punish perpetrators or incidents of Ragging, it will be liable to take any action as defined under clause 9(4) of the said Regulation.

(Dr. Kuncheria P. Isaac)  
 Member Secretary, AICTE

Copy to:

1. The Regional Officer,  
 All India Council for Technical Education  
 Health Centre Building  
 Bangalore University Campus  
 Bangalore - 560 009, Karnataka
2. The Director Of Technical Education,  
 Karnataka
3. The Registrar,  
 Vesveswaraiiah Technological University, Belgaum
4. The Principal / Director,  
 NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY


Application Number: 1-1374575174\*

Page 4 of 5

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Printed By : AE3632065

  
 PRINCIPAL  
 NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY  
 P.B. No. 6429, GOVINDAPURA, GOLLAHALLI  
 YELAHANKA, BANGALORE-560 064



All India Council for Technical Education  
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GOLLAHALLI, GOVINDAPURA, P.B NO 6429  
YELAHANKA, BANGALORE-560064,  
BANGALORE, BANGALORE RURAL,  
Karnataka, 560064

5. The Secretary / Chairman,  
NITTE EDUCATION TRUST  
NITTE EDUCATION TRUST, UNIVERSITY ENCLAVE, DERALAKATTE, MANGALORE-575018,  
MANGALORE, D KANNADA(DK),  
Karnataka, 575018
6. Guard File(AICTE)

Application Number: 1-1374575174\*

Page 5 of 5

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Letter Printed On: 21 March 2013.

Printed By : AE3632065

PRINCIPAL

NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY  
P.B. No. 6429, GOVINDAPURA, GOLLAHALLI  
YELAHANKA, BANGALORE-560 064.



**Visvesvaraya Technological University**

"Jnana Sangama", Belgaum-590 018, Karnataka State

Phone : (0831) 2498100  
Fax : (0831) 2405467

Registrar

Ref: VTU/Aca/2013-14/A1/ 3455

Date : 29 JUL 2013

To,

The Principal,  
Nitte Meenakshi Institute of Technology,  
Bangalore

Sir,

- Sub : Affiliation Notification for the academic year 2013-2014...reg.  
Ref : 1. Your affiliation application dt. 10-01-2013  
2. Our letter to Gov. of Karnataka No.VTU/Academic/Government/  
2013-14/2512, dt. 06-07-2013  
3. Vice Chancellor's approval dt. 25-07-2013

With reference to the above, you are hereby informed that the following courses are recommended for Permanent Affiliation from the academic year 2013-2014 to 2017-2018 and recommendations of VTU are sent to State Government through our letter dt. 06-07-2013, after the receipt of the State Government order VTU Notification for the same will be issued.

**UG Programmes :**

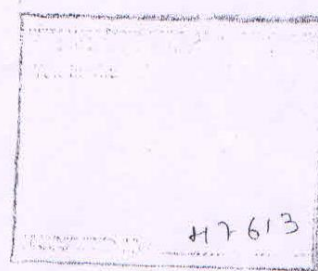
1. Mechanical Engineering
2. Electronics & Communication Engineering
3. Computer Science and Engineering
4. Electrical & Electronics Engineering  
and
5. Information Science & Engineering is recommended for Permanent Affiliation from the academic year 2010 to 2014.

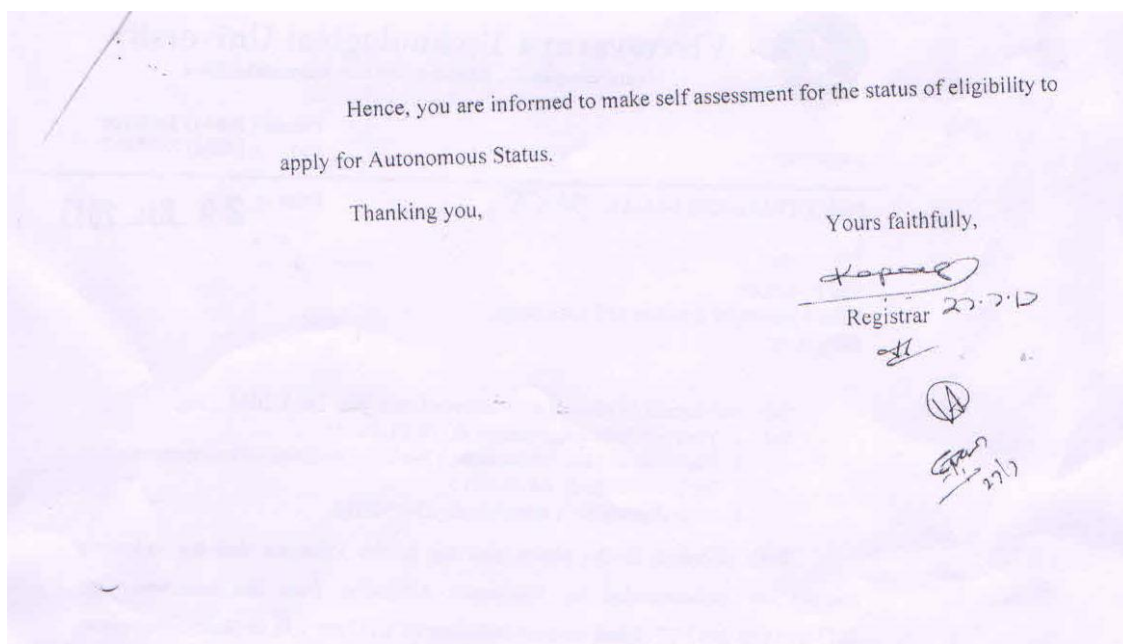
Further, the following eligibility criteria is followed / used to decide the status for application to Autonomous Status.

**Eligibility for Institutions to apply for Autonomous Status :**

<u>No. of Permanently Affiliated Courses</u>	x 100 ≥ 80%
<u>No. of Eligible Courses</u> and	
<u>No. of Not Eligible Courses</u>	x 100 < 20%
<u>Total (Eligible + Not Eligible) Courses</u>	

*KS*  
*Dear*  
*Academics,*  
*3/07/13*





**9. Has the College been recognized?**

**a. By UGC as a ‘College with Potential for Excellence’(CPE)?**

Yes  No

**If yes, date of recognition: ..... (Dd/mm/yyyy)**

**b. For its contributions/performance by any other governmental agency?**

Yes  No

**If yes, Name of the agency**

- ISRO for Research in Small Satellites Program  
Date of recognition: 10/01/2009
- ADE for Video & Image Processing Research
- DST, CVRDE and CAIR for robotics research
- DIT for cloud and HPC research

**10. Location of the campus and area:**

<b>Location *</b>	Urban
<b>Campus area in sq. mts or acres</b>	23 Acres
<b>Built up area in sq. mts.</b>	39,721

(\* Urban, Semi-urban, Rural, Tribal, Hilly Area, Any others specify)

**11. Does the College have the following facilities on the campus (Tick the available facility)? In case the College has an agreement with other agencies in using such facilities provide information on the facilities covered under the agreement:**

- Auditorium/seminar complex ✓
- Sports facilities
  - play ground ✓
  - swimming pool ×
  - gymnasium ✓
- Hostel
  - Boys' hostels ✓
  - Girls' hostels ✓
- Residential facilities
  - for teaching staff ✓
  - for non-teaching staff ✓
- Cafeteria ✓
- Health centre –
  - First aid facility ✓
  - Inpatient facility ×
  - Outpatient facility ✓
  - ambulance facility ✓
  - emergency care facility ✓
- Health centre staff –

○ Qualified doctor	Full time ✓	Part-time
○ Qualified Nurse	Full time ✓	Part-time
- Other facilities
  - Bank
  - ATM ✓
  - post office
  - book shops ✓
- Transport facilities
  - for students ✓
  - for staff ✓
- Power house ✓
- Waste management ✓

**12. Details of programmes offered by the institution: (Give data for current academic year):**

Sl. No	Programme Level	Name of the Programme/ Course	Duration	Entry Qualification	Medium of instruction	Sanctioned/ approved Student intake	No.of students admitted
1	UG	BE- CSE	4 years	10+2	English	180	171
		BE-ISE	4 years	10+2	English	120	101
		BE-ECE	4 years	10+2	English	180	153
		BE-EEE	4 years	10+2	English	60	52
		BE-MECH	4 years	10+2	English	180	166
		BE-AERO	4 years	10+2	English	60	57
		BE-CIVIL	4 years	10+2	English	120	115
2	PG	M.Tech.- CSE	2 years	B.E	English	36	36
		M.Tech.- CNE	2 years	B.E	English	18	18
		M.Tech.- VLSI&ES	2 years	B.E	English	18	18
		M.Tech.- DCN	2 years	B.E	English	18	17
		M.Tech.- TPE	2 years	B.E	English	18	15
		M.Tech- Structural Engg	2 years	B.E	English	24	22
		M.Tech- Machine Design	2 years	B.E	English	24	19
		MBA	2 years	Degree	English	120	17
		MCA	3 years	Degree	English	120	83
3	Integrated Masters	-	-	-	-	-	-
4	M.Phil.	-	-	-	-	-	-
5	Ph.D	CSE					14
		ISE					04
		ECE					21
		EEE					02
		MECH					04
		MBA					12
		CHEMIST					00

		R.Y					
		Mathematics					03
6	Integrated Ph.D.	-	-	-	-	-	-
7	Certificate	-	-	-	-	-	-
8	Diploma	-	-	-	-	-	-
9	PG Diploma	-	-	-	-	-	-
10	Any other (please Specify)	-	-	-	-	-	-

**13. Does the institution offer self-financed Programmes?**

Yes	√	No	
-----	---	----	--

If yes, how many?

Number	14
--------	----

**14. Whether new programmes have been introduced during the last five years:**

Yes	√	No	
-----	---	----	--

If yes,

Number	06
--------	----

**15. List the departments: (Do not list facilities like library, Physical Education as departments unless these are teaching departments and offer programmes to students):**

- Dept. of Computer Science & Engineering
- Dept. of Information Science & Engineering
- Dept. of Electronics & Communication Engineering
- Dept. of Electrical & Electronics Engineering
- Dept. of Mechanical Engineering
- Dept. of Civil Engineering
- Dept. of Aeronautical Engineering
- Dept. of Master of Business Administration
- Dept. of Master of Computer Applications

Particulars	Number	Number of Students
<b>Science</b>		
Under Graduate	Nil	
Post Graduate	01(MCA)	235
Research centre(s)	02	04
<b>Arts</b>		
Under Graduate	Nil	
Post Graduate	Nil	
Research centre(s)		
<b>Commerce</b>		
Under Graduate	Nil	
Post Graduate	Nil	
Research centre(s)		
<b>Engineering</b>		
Under Graduate	07	3229
Post Graduate	07	246
Research centre(s)	05	46
<b>Management</b>		
Under Graduate	Nil	
Post Graduate	01	118
Research centre(s)	01	14

**16. Are there any UG and/or PG programmes offered by the College, which are not covered under Autonomous status of UGC? Give details:**

- M.Tech. in Computer Science & Engineering
- M.Tech. in Computer Network Engineering
- M.Tech. in VLSI Design & Embedded Systems
- M.Tech. in Digital Communications & Networking
- M.Tech. in Thermal Power Engineering
- M.Tech in Structural Engineering
- M.Tech in Machine Design
- Master of Business Administration
- Master of Computer Applications

**17. Number of Programmes offered under (Programme means a degree course like BA, MA, BSc, M Sc, BCom etc.):**

a. annual system

b. semester system



c. trimester system

**18. Number of Programmes with:**

a. Choice Based Credit System

b. Inter/multidisciplinary approach

c. As per affiliated university system

**19. Unit Cost of Education:**

(Unit cost = total annual recurring expenditure (actual) divided by total number of students enrolled)

(a) Including the salary component

(b) Excluding the salary component

**20. Does the College have a department of Teacher Education offering NCTE recognized degree programmes in Education?**

Yes  No

If yes,

a. How many years of standing does the department have?  
..... years

b. NCTE recognition details (if applicable)

Notification No.: .....

Date: ..... (Dd/mm/yyyy)

c. Is the department opting for assessment and accreditation separately?

Yes  No

**21. Does the College have a teaching department of Physical Education offering NCTE recognized degree programmes in Physical Education?**

Yes  No

If yes,

a. How many years of standing does the department have?  
..... years

**b. NCTE recognition details (if applicable)**

**Notification No.:** .....

**Date:** ..... (dd/mm/yyyy)

**c. Is the department opting for assessment and accreditation separately?**

Yes  No

**22. Whether the College is offering professional programme:**

Yes  No

**If yes, please enclose approval / recognition details issued by the statutory body governing the programme.**



**All India Council for Technical Education**  
(A Statutory body under Ministry of HRD, Govt. of India)  
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F.No. South-West/1-1374575174/2013/EOA

Date: 19-Mar-2013

To,  
The Principal Secretary (Hr. & Tech Education)  
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M.S. Building, R. N. 645, Dr. B. R. Ambedkar Road,  
Bangalore-560001

Sub: Extension of approval for the academic year 2013-14

Ref: Application of the Institution for Extension of approval for the academic year 2013-14

Sir/Madam,

In terms of the provisions under the All India Council for Technical Education (Grant of Approvals for Technical Institutions) Regulations 2012 notified by the Council vide notification number F-No.37-3/Legal/2012 dated 27/09/2012 and norms standards, procedures and conditions prescribed by the Council from time to time, I am directed to convey the approval to

Regional Office	South-West	Application Id	1-1374575174
		Permanent Id	1-10233900
Name of the Institute	NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY	Institute Address	GOLLAHALLI, GOVINDAPURA, P.B NO 6429 YELAHANKA, BANGALORE-560064, BANGALORE RURAL, Karnataka, 560064
Name of the Society/Trust	NITTE EDUCATION TRUST	Society/Trust Address	NITTE EDUCATION TRUST, UNIVERSITY ENCLAVE, DERALAKATTE, MANGALORE-575018, MANGALORE, D KANNADA(DK), Karnataka, 575018
Institute Type	Unaided - Private		

Opted for change from Women to Co-ed	No	Opted for change of name	No	Opted for change of site	No
Change from Women to Co-ed approved	Not Applicable	Change of name Approved	Not Applicable	Change of site Approved	Not Applicable

to conduct following courses with the intake indicated below for the academic year 2013-14


Application Number: 1-1374575174\*

Page 1 of 5

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PRINCIPAL  
NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY  
P B No 6429, GOVINDAPURA, GOLLAHALLI  
YELAHANKA, BANGALORE-560 064.



**All India Council for Technical Education**  
 (A Statutory body under Ministry of HRD, Govt. of India)  
 7th Floor, Chandralok Building, Janpath, New Delhi- 110 001  
 PHONE: 23724151/52/53/54/55/56/57 FAX: 011-23724183 www.aicte-india.org

Application Id: 1-1374575174			Course		Affiliating Body					
Program	Shift	Level		Full/Part Time		Intake 2012-13	Intake Approved for 13-14	NRI	PIC	Foreign Collaboration
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	COMPUTER NETWORKING AND ENGINEERING	FULL TIME	Vesveswaraiah Technological University, Belgaum	18	18	No	Yes	No
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	COMPUTER SCIENCE AND ENGINEERING	FULL TIME	Vesveswaraiah Technological University, Belgaum	36	36	No	Yes	No
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	DIGITAL COMMUNICATIONS AND NETWORKING	FULL TIME	Vesveswaraiah Technological University, Belgaum	18	18	No	Yes	No
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	MACHINE DESIGN	FULL TIME	Vesveswaraiah Technological University, Belgaum	0	24	No	Yes	No
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	STRUCTURAL ENGINEERING	FULL TIME	Vesveswaraiah Technological University, Belgaum	0	24	No	Yes	No
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	THERMAL POWER ENGINEERING	FULL TIME	Vesveswaraiah Technological University, Belgaum	18	18	No	Yes	No
ENGINEERING AND TECHNOLOGY	1st Shift	POST GRADUATE	VLSI DESIGN AND EMBEDDED SYSTEMS	FULL TIME	Vesveswaraiah Technological University, Belgaum	18	18	No	Yes	No
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	AERONAUTICAL ENGINEERING	FULL TIME	Vesveswaraiah Technological University, Belgaum	60	60	No	Yes	No
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	CIVIL ENGINEERING	FULL TIME	Vesveswaraiah Technological University, Belgaum	60	120	No	Yes	No

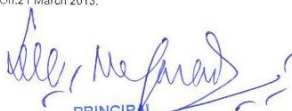
Application Number: 1-1374575174\*

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 PHONE: 23724151/52/53/54/55/56/57. FAX: 011-23724183 www.aicte-india.org

Application Id: 1-1374575174			Course	Affiliating Body	Full Part Time	Intake 2012-13	Intake Approved for 13-14	NRI	PIO	Foreign Collaboration
Program	Shift	Level								
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	COMPUTER SCIENCE AND ENGINEERING	FULL TIME	Vesveswaraiiah Technological University, Belgaum	180	180	No	Yes	No
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	ELECTRICAL AND ELECTRONICS ENGINEERING	FULL TIME	Vesveswaraiiah Technological University, Belgaum	60	60	No	Yes	No
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	ELECTRONICS AND COMMUNICATIONS ENGINEERING	FULL TIME	Vesveswaraiiah Technological University, Belgaum	180	180	No	Yes	No
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	INFORMATION SCIENCE AND ENGINEERING	FULL TIME	Vesveswaraiiah Technological University, Belgaum	60	120	No	Yes	No
ENGINEERING AND TECHNOLOGY	1st Shift	UNDER GRADUATE	MECHANICAL ENGINEERING	FULL TIME	Vesveswaraiiah Technological University, Belgaum	180	180	No	Yes	No
ENGINEERING AND TECHNOLOGY	2nd Shift	DIPLOMA	CIVIL ENGINEERING	FULL TIME	Department of Technical Education	0	60	No	No	No
ENGINEERING AND TECHNOLOGY	2nd Shift	DIPLOMA	ELECTRONICS AND COMMUNICATIONS ENGINEERING	FULL TIME	Vesveswaraiiah Technological University, Belgaum	60	60	No	No	No
ENGINEERING AND TECHNOLOGY	2nd Shift	DIPLOMA	MECHANICAL ENGINEERING	FULL TIME	Vesveswaraiiah Technological University, Belgaum	60	60	No	No	No
MANAGEMENT	1st Shift	POST GRADUATE	MASTERS IN BUSINESS ADMINISTRATION	FULL TIME	Vesveswaraiiah Technological University, Belgaum	120	120	No	Yes	No

Application Number: 1-1374575174\*

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*(Signature)*  
 PRINCIPAL

NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY  
 P.B. No. 6429, GOVINDAPURA, GOLLAHALLI  
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Application Id: 1-1374575174			Course	Affiliating Body	Intake 2012/13	Intake Approved for 13/14	NRI	PIO	Foreign Collaboration	
Program	Shift	Level	Full Part Time							
MCA	1st Shift	POST GRADUATE	MASTERS IN COMPUTER APPLICATIONS	FULL TIME	Vesveswaralah Technological University, Belgaum	120	120	No	Yes	No

- Validity of the course details may be verified at [www.aicte-india.org>departments>approvals](http://www.aicte-india.org/departments/approvals)

The above mentioned approval is subject to the condition that NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY shall follow and adhere to the Regulations, guidelines and directions issued by AICTE from time to time and the undertaking / affidavit given by the institution along with the application submitted by the institution on portal.

In case of any differences in content in this Computer generated Extension of Approval Letter, the content/information as approved by the Executive Council / General Council as available on the record of AICTE shall be final and binding.

Strict compliance of Anti-Ragging Regulation:- Approval is subject to strict compliance of provisions made in AICTE Regulation notified vide F. No. 37-3/Legal/AICTE/2009 dated July 1, 2009 for Prevention and Prohibition of Ragging in Technical Institutions. In case Institution fails to take adequate steps to Prevent Ragging or fails to act in accordance with AICTE Regulation or fails to punish perpetrators or incidents of Ragging, it will be liable to take any action as defined under clause 9(4) of the said Regulation.

(Dr. Kuncheria P. Isaac)  
 Member Secretary, AICTE

Copy to:

1. **The Regional Officer,**  
 All India Council for Technical Education  
 Health Centre Building  
 Bangalore University Campus  
 Bangalore - 560 009, Karnataka
2. **The Director Of Technical Education,**  
 Karnataka
3. **The Registrar,**  
 Vesveswaralah Technological University, Belgaum
4. **The Principal / Director,**  
 NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY

Application Number: 1-1374575174\*

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 NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY  
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GOLLAHALLI, GOVINDAPURA, P.B NO 6429  
YELAHANKA, BANGALORE-560064,  
BANGALORE, BANGALORE RURAL,  
Karnataka, 560064

5. The Secretary / Chairman,  
NITTE EDUCATION TRUST  
NITTE EDUCATION TRUST, UNIVERSITY ENCLAVE, DERALAKATTE, MANGALORE-575018,  
MANGALORE, D KANNADA(DK),  
Karnataka, 575018
6. Guard File(AICTE)

Application Number: 1-1374575174\*

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Letter Printed On: 21 March 2013.

PRINCIPAL

NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY  
P.B. No. 6429, GOVINDAPURA, GOLLAHALLI  
YELAHANKA, BANGALORE-560 064.

**23. Has the College been reviewed by any regulatory authority? If so, furnish a copy of the report and action taken there upon:**

Yes, National Board of Accreditation (AICTE)

*Annexure - X*

**NATIONAL BOARD OF ACCREDITATION**  
(An Autonomous Body of All India Council for Technical Education)  
4<sup>th</sup> Floor, NBCC Place, East Tower,  
Bhisham Pitamah Marg, Pragati Vihar, Lodhi Road,  
New Delhi- 110 003  
Tel: 011-24360681, Fax: 011-24360682

F. NO.25-16/2010-NBA  
To, Date: 12-05-2011

The Principal/Director  
Nitte Meenakshi Institute of Technology  
Govindapura, Gollahalli,  
P.B.No. 6429, Yelahanka,  
Bangalore - 560064,  
Karnataka, India.

Sub:- Accreditation Status of Programmes of Nitte Meenakshi Institute of Technology, Bangalore, Karnataka.

Madam/Sir,

The records of NBA indicate the following status as regards application(s) filed by the Nitte Meenakshi Institute of Technology, Bangalore, Karnataka for accreditation:

S. No	Date of first application available in the file	Name of the Courses / programmes applied for	Status of Accreditation, if any	Status of Appeals, if any	Remarks
1	12-03-2008	BE. Mechanical Engineering	Accredited for 3 years w.e.f. 10-02-2009		
		BE. Electrical & Electronics Engg.			
		BE. Electronics & Comm. Engg.			
		BE. Information Science & Engg.		Not Accredited	
2	02-05-2009	BE. Computer Science & Engineering	Appeal	Accredited for 3 years w.e.f. 21-06-2010	
		Computer Science & Engineering			

If you have anything more to say (add or delete in the above stated list of status) please indicate the same with the nature of discrepancy, if any to be pointed out, with documentary proof. This may please be done within one month's time from the date of the receipt of this letter, otherwise the above indicated status shall be treated as final for all official purposes in respect of Nitte Meenakshi Institute of Technology, Bangalore, Karnataka.

STATE MEENAKSHI INSTITUTE OF TECHNOLOGY  
Yelahanka, BANGALORE - 560064.

19 MAY 2011

INWARD No. 38965

Your's Faithfully,  
*B. C. Ibbey*  
(B. C. Ibbey)  
Consultant N.B.A.



**24. Number of teaching and non-teaching positions in the College:**

Positions	Teaching faculty						Non-teaching staff		Technical staff		
	Professor		Associate Professor		Assistant Professor						
	*M	*F	*M	*F	*M	*F	*M	*F	*M	*F	
Sanctioned by the UGC / University / State Government Recruited Yet to recruit	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Sanctioned by the Management/Society or other authorized bodies	22	7	14	15	73	105	59	30	46	24	
Recruited  Yet to recruit	22	7	14	15	73	104	59	30	46	24	
	--	--	--	--	--	--	--	--	--	--	

\*M-Male \*F-Female

**25. Qualifications of the teaching staff:**

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
<b>Permanent Teachers</b>							
D.Sc./D.Litt.							
Ph.D.	15	07	03	02	04	03	34
M.Phil.			01		06	01	08
PG	07		10	13	63	100	193
<b>Temportory Teachers</b>							
Ph.D.							
M.Phil.							
PG							
<b>Part-Time Teachers</b>							
Ph.D.	01						
M.Phil.							
PG							

**26. Number of Visiting Faculty/ Guest Faculty engaged by the College:**

Ashwini Kumar

**27. Students enrolled in the College during the current academic year, with the following details:**

Students	UG	PG	Integrated Masters	M.Phil.	Ph.D.	Integrated Ph.D.	D.Litt / D.Sc.	Certificate	Diploma	PG Diploma
From the state where the College is located	563	280			58					
From other states of India	244	34			02					
NRI students	61	4								
Foreign students										
<b>Total</b>	868	318			60					

**28. Dropout rate in UG and PG (average for the last two batches):**

UG

5

PG

2

**29. Number of working days during the last academic year:**

102 + 109=211 Days

**30. Number of teaching days during the last academic year:**

90 + 90=180 Days

**31. Is the College registered as a study centre for offering distance education programmes for any University?**

Yes

No

If yes, provide the

a. Name of the University

b. Is it recognized by the Distance Education Council?

Yes

No

c. Indicate the number of programmes offered.

**32. Provide Teacher-student ratio for each of the programme/course offered:**

Department		No. of Students	No of Faculty	Staff Student Ratio
I year –B .E.	All first year B.E. students	900	54	1:16
B.E-Computer Science & Engineering	Intake of 2 <sup>nd</sup> + 3 <sup>rd</sup> + 4 <sup>th</sup>	420	28	1:15
B.E-Information Science & Engineering	Intake of 2 <sup>nd</sup> + 3 <sup>rd</sup> + 4 <sup>th</sup>	180	13	1:13
B.E-Electronics & Communication Engineering	Intake of 2 <sup>nd</sup> + 3 <sup>rd</sup> + 4 <sup>th</sup>	420	28	1:15
B.E-Electrical & Electronics Engineering	Intake of 2 <sup>nd</sup> + 3 <sup>rd</sup> + 4 <sup>th</sup>	180	12	1:15
B.E -Mechanical Engineering	Intake of 2 <sup>nd</sup> + 3 <sup>rd</sup> + 4 <sup>th</sup>	420	28	1:15
B.E-Civil Engineering	Intake of 2 <sup>nd</sup> + 3 <sup>rd</sup> + 4 <sup>th</sup>	180	12	1:15
B.E-Aeronautical Engineering	Intake of 2 <sup>nd</sup> + 3 <sup>rd</sup>	120	8	1:15
M.Tech in Computer Science & Engineering	Intake of 1 <sup>st</sup> + 2 <sup>nd</sup>	72	6	1:12

M.Tech. in Computer Network Engineering	Intake of 1 <sup>st</sup> +2 <sup>nd</sup>	35	3	1:12
M.Tech. in VLSI Design & Embedded Systems	Intake of 1 <sup>st</sup> + 2 <sup>nd</sup>	36	3	1:12
M.Tech. in Digital Communications & Networking	Intake of 1 <sup>st</sup>	36	3	1:12
M.Tech. in Thermal Power Engineering	Intake of 1 <sup>st</sup> + 2 <sup>nd</sup>	36	3	1:12
M.Tech. in Machine Design	Intake of 1 <sup>st</sup> Year	20	2	1:10
M.Tech. in Structural Engineering	Intake of 1 <sup>st</sup> Year	22	2	1:11
Master of Business Administration	Intake of 1 <sup>st</sup> + 2 <sup>nd</sup>	118	14	1:8
Master of Computer Applications	Intake of 1 <sup>st</sup> + 2 <sup>nd</sup> +3 <sup>rd</sup>	235	16	1:15

### 33. Is the College applying for?

**Accreditation :**

Cycle 1  Cycle 2  Cycle 3  Cycle 4

**Re-Assessment:**

### 34. Date of accreditation\* (applicable for Cycle 2, Cycle 3, Cycle 4 and re-assessment only):

Cycle 1: ..... (Dd/mm/yyyy) Accreditation outcome/results

Cycle 2: ..... (Dd/mm/yyyy) Accreditation outcome/results

Cycle 3: ..... (Dd/mm/yyyy) Accreditation outcome/results

\* Kindly enclose copy of accreditation certificate(s) and peer team report(s)

Cycle 1 refers to first accreditation; Cycle 2 and beyond refers to reaccreditation

**NOT APPLICABLE**

### 35. a. Date of establishment of Internal Quality Assurance Cell (IQAC)

26/02/2013

**b. Dates of submission of Annual Quality Assurance Reports (AQARs).**

- (i) AQAR for year ..... on ..... (Dd/mm/yyyy)
- (ii) AQAR for year ..... on ..... (Dd/mm/yyyy)
- (iii) AQAR for year ..... on ..... (dd/mm/yyyy)
- (iv) AQAR for year ..... on..... (dd/mm/yyyy)

**NOT APPLICABLE**

**36. Any other relevant data, the College would like to include. (Not exceeding one page):**

- The institute is involved in R&D in the frontier/cutting edge/multidisciplinary areas of Engineering and Science.
- Only an unaided private engineering college in Karnataka State selected by the Govt. of India for World Bank Funding under TEQIP Phase II-Subcomponent 1.1 in the year 2011. TEQIP provides funding to the tune of Rs. 4 Crores and is primarily focused on Faculty development, strengthening PG & Research programs and enhancing employability of students. Duration of project is 3 years.

## Criteria-Wise Inputs

### CRITERION I: CURRICULAR ASPECTS

#### 1.1 Curriculum Design and Development

##### 1.1.1 How are the institutional vision / mission reflected in the academic programmes of the College?

###### VISION

**To provide India and the World, technical manpower of the highest academic excellence and World class by shaping our youth through holistic and integrated education of the highest quality.**

###### MISSION

**To develop Nitte Meenakshi Institute of Technology through Quality, Innovative and State-of-art educational initiatives into a center of academic excellence that will turn out youth with well balanced personality & commitment to rich cultural heritage of India and who will successfully face the Scientific and Technological challenges in the fast-evolving Globalscenario with a high degree of credibility, integrity and ethical standards.**

- Curriculum for all professional programmes are designed so as to enable the students to get employment in Indian & Global/Multinational Organizations
- The Graduates and Post Graduates passing out of the institution get employment in Private/Public organizations which are involved in National Development.
- The courses like Communicative English, Constitution of India, Environmental and Professional Ethics, Engineering Economics & Management, Entrepreneurship and IPR are taught to produce graduates with holistic and integrated education.
- Every programme has interdisciplinary courses to mould the graduates to work in collaborative environments.
- The students are trained in Soft skills & Personality development to make them ready to face scientific and technological challenges across the globe successfully.

### 1.1.2 Describe the mechanism used in the design and development of the curriculum? Give details on the process. (Need Assessment, Feedback, etc)

- We are offering conventional Engineering Courses for which there are good job opportunities. The courses are designed keeping in mind Programme Educational Objectives and Programme Outcomes.
- The courses are aligned for the current requirements of the Industry, the opportunities available in the R&D institutions and the requirements for pursuing higher studies.
- While designing courses, the curriculum of premier Institutions like IITs, NITs etc. are also considered.
- The model curriculum defined by Professional Bodies like IEEE, ASME, IETE, AICTE etc. are also referred to while designing the curriculum.
- Due to the advent of emerging technologies, the course contents are revised periodically taking also in to account the feedback from Industries/Associations like NASSCOM/Alumni etc.
- Large number of program specific and Interdisciplinary Electives are introduced by taking feedback/Suggestions from stake holders.

The Institute has adopted following mechanism towards the design and development of the curriculum. The following committees will ensure the quality in curriculum design.

#### DEPARTMENTAL UNDER GRADUATE COMMITTEE (DUGC):

Committee shall consist of the following:

Head of the Department concerned	Chairperson	1
One faculty member at different cadre based on seniority basis and by rotation every year.	Members	3
HOD's nominee	Member Secretary	1
	Total	5

**Meeting:** At least once in a month

#### Functions towards design and development of the curriculum

1	To monitor the conduct of all undergraduate courses of the department.
2	To develop the curriculum for undergraduate courses offered by the department and recommend the same to the BOS.
3	Any appropriate responsibility or function assigned by the Academic Council /Governing Council.

#### BOARDS OF STUDIES (BOS): STRUCTURE & FUNCTIONS

Each Board of studies shall consist of the following:

Head of the Department concerned	Chairperson	1
At least five faculty members at different cadre covering different specializations to be nominated by the Academic Council -one of the five to function as member-secretary	Members	5
Two experts in the subject from outside the college, to be nominated by the Academic Council	Members	2
One expert from outside the college, to be nominated by the Vice Chancellor from a panel of six recommended by the Principal	Member	1
One representative from Industry / corporate sector allied area relating to placement to be nominated by the Academic Council	Member	1
One postgraduate meritorious Alumnus to be nominated by the Principal	Member	1
	<b>Total</b>	<b>11</b>

The Chairperson, Board of studies, may with the approval of the Principal of the College, co-opt as members:

- a) Experts from outside the college whenever special courses of studies are to be formulated.
- b) Other members of staff of the same faculty.

The governing body of the college, in consultation with the Academic Council, shall have the power to constitute such number of Boards of studies as it deems fit keeping in view the types of courses / subjects offered

**Term of Members:** The term of the nominated members shall be two academic years.

**Meetings:** The meetings shall be scheduled as and when necessary, but at least once a semester.

**Functions (Highlights):**

- To consider the recommendations of the DUGC on matters relating to Under-graduate Programme and to make suitable recommendations to the Senate.
- To approve curriculum framed/ revised by DUGC for the undergraduate courses of study.
- To ensure that all norms and regulations pertaining to undergraduate programme are strictly followed.
- To make periodic review of these Regulations pertaining to undergraduate Programme and to recommend to the Senate any modifications thereof.
- To review the academic performances and make suitable recommendations to the Senate regarding declaration of results, award of degree etc.
- To recommend to the Senate, the award of stipends, scholarships, medals and prizes etc.,



- To draw up general time table for the undergraduate course and finalize the UG academic calendar to be put up to the Senate for approval.
- To constitute a sub-committee for monitoring the implementation of the academic curriculum provided by the BOS and to provide guidance in curriculum assessment, evaluation process.
- To conduct at least one meeting each semester and send the Resolutions to the Chairman of the Senate, and also to maintain a record of the same in the office of the Dean.
- Any appropriate responsibility or function assigned by the AC/GC or the Chairman of the AC/GC.

**Academic Council shall have powers to:**

- Scrutinize and approve the proposals, with or without modifications, of the Boards of Studies with regards to courses of study, academic regulations, curricula, scheme, syllabi and modifications thereof, instructional and evaluation arrangements, methods, procedures relevant thereof etc., provided that where the Academic Council differs on any proposal, it shall have the right to return the matter for reconsideration to the Board of Studies concerned or reject it, after giving reasons to do so.

**Board of Governors will oversee the functionalities of all the above said bodies.**

**1.1.3 How does the College involve industry, research bodies, and civil society in the curriculum design and development process? How did the College benefit through the involvement of the stakeholders?**

- The Board of Studies and the Academic Council which are the important academic bodies for curriculum design and development have representations from Academics from Premier educational institutes, Industry and R&D Organizations.
- The relevant feedback from stakeholders will help the institute to fill the gaps in the curricula.
- Every department has MOUs/Tie Ups with well known industries in their respective fields the DUGC/Faculty are interacting with these industries to upgrade the syllabi and also to introduce new courses which are very relevant to current industrial needs.
- DUGC/Faculty are interacting with Subject Experts from premier institutions like IISc, IITs, NITs, DRDO Labs, NAL, ISRO etc. while revising the curriculum.

**1.1.4 How are the following aspects ensured through curriculum design and development?**

\* **Employability**

- The curriculum has been designed by keeping in view the industry requirements and involving the experts from Industry in BOS and Academic Council.

- The updated curriculum with respect to the Industry needs has increased the employability of the students.
- The feedback from all stakeholders has helped the institution to adopt the courses which prepare the students as Industry ready products.

\* **Innovation**

- The emphasis on the strong fundamentals in the respective fields and its applications to solutions of problems has created Innovative thinking among the students.
- It is further strengthened by introducing Projects/Mini Projects/Internships at various levels.
- Curriculum has Courses that motivate the students to become Entrepreneurs also.

\* **Research**

- The strong thrust on the Innovation & Product Development by the Faculty at the departmental level through the curriculum design has increased the research activities & interest among the student community which has yielded in many research publications, products development, innovative ideas etc.
- Introduction of seminars and projects in the curriculum has motivated the students to go through the literature in advanced research areas as well.
- Emphasis & Flexibility imparted in the curriculum design in terms of programme specific & interdisciplinary Electives pertaining to current trends in technologies motivate the students to take up research even at the undergraduate level.
- The introduction of Mini Projects & Industry Case studies at the subject level has inculcated interest in research among the student community.

**1.1.5 How does College ensure that the curriculum developed addresses the needs of the society and have relevance to the regional / national developmental needs?**

- The subjects have been introduced to take care of the overall development of a student, not only in terms of technical skills but also towards the betterment of the society by imparting the importance of social cause, ethics, environment, working culture etc.
- Regular revision of the syllabus will make possible the introduction of new topics related to industry and Societal needs.
- The curriculum is designed to meet the requirements of national developments in sectors like energy, communication, infrastructure, transportation, information technology, etc.
- Additional Technical talks/Workshops make sure that students will get to know the problems faced by the community/Society/Industry.

- The Mini Projects/Final year projects/Co-curricular activities are also aligned towards the community services.

**1.1.6 To what extent does the College use the guidelines of the regulatory bodies for developing or restructuring the curricula? Has the College been instrumental in leading any curricular reform which has created a national impact?**

- The following Boards/Councils/Committees have been formed to design the curricula according to the UGC Norms
  - Board of Governance
  - Academic Council
  - Board of Studies
  - Departmental Under Graduate Committee
- The engineering curricula comprises of components such as Basic sciences, Engineering Sciences , programme specific core &electives courses in engineering and Humanities, as per the guidelines of the statutory bodies like AICTE .
- The curriculum is also designed to meet the requirements of the affiliating university in terms of number of credits, flexibility, choice based credit system, grading in terms of CGPA, CIE standards, SEE standards etc.

## 1.2 Academic Flexibility

### 1.2.1 Give details on the following provisions with reference to academic flexibility

- Undergraduate programmes are as per the autonomous scheme.
- Choice based Credit System
- Total Credits : 200 (Each semester :Minimum 20 credits and maximum 30 credits)

#### a. Core / Elective options:

- ProgrammeCore : 80 Credits
- Basic science: 30 credits
- Humanities & Social sciences : 10 credits

#### b. Enrichment courses:

- Programme specific Electives: 16 credits
- Open Electives: 6 credits
- Add-on courses- Industry/Design/Management related courses

#### c. Courses offered in modular form:

- Courses offered with 1.5/2/3/4 credits
- Projects
- Each course is sub grouped into units based on course modules

#### d. Credit transfer and accumulation facility

- A student has to earn & accumulate 200 credits for the award of degree
- Additional credits can be earned from add-on courses beyond the degree requirements.
- The transfer of credits when the students migrate from other institutions is permitted.

#### e. Lateral and vertical mobility within and across programmes and courses

- Lateral mobility only at the beginning of the third semester for all the UG programmes.
- Vertical mobility within the programmes
  - From odd to even semester- full mobility.
  - From even to the next odd semester: A student can carry a maximum of 4 courses of the previous year.
  - Unless a student clears all the subjects of 1<sup>st</sup> year/2<sup>nd</sup> year cannot get vertical mobility to 3<sup>rd</sup> year /4<sup>th</sup> year.
  - For all the PG programs, we follow the VTU norms

**1.2.2 Have any courses been developed specially targeting international students? If so, how successful have they been? If ‘no’, explain the impediments.**

- In general the UG programs are designed to meet the international students’ requirements also.
- Bridge courses are offered to support the international students wherever required.

**1.2.3 Does the College offer dual degree and twinning programmes? If yes, give details.**

No

**1.2.4 Does the College offer self-financing programmes? If yes, list them and indicate if policies regarding admission, fee structure, teacher qualification and salary are at par with the aided programmes?**

- Yes, all programmes are under self-financing

<b>B.E.</b>	<b>Admission</b>	45% through KEA(CET) 30% through COMED-K 25% through Management Quota
	<b>Fee Structure</b>	KEA: As prescribed by the State Govt. COMED-K: As prescribed by the State Govt. Management: As prescribed by the State Govt from time to time.
	<b>Teacher Qualification</b>	As per AICTE norms
	<b>Salary</b>	As per the AICTE 6 <sup>th</sup> Pay commission
<b>M.Tech</b>	<b>Admission</b>	80% through KEA(PGCET/GATE) 20% through Management Quota (PGCET/GATE)
	<b>Fee Structure</b>	KEA: As prescribed by the State Govt. Management: As prescribed by the State Govt from time to time.
	<b>Teacher Qualification</b>	As per AICTE norms
	<b>Salary</b>	As per the AICTE 6 <sup>th</sup> Pay commission
<b>MBA</b>	<b>Admission</b>	Minimum 50% through KEA(PGCET) Maximum 50% through Management Quota (PGCET/MAT/CAT/KMAT)
	<b>Fee Structure</b>	PGCET: As prescribed by the State Govt. Management: As prescribed by the State Govt from time to time.

	<b>Teacher Qualification</b>	As per AICTE norms
	<b>Salary</b>	As per the AICTE 6 <sup>th</sup> Pay commission
<b>MCA</b>	<b>Admission</b>	Minimum 50% through KEA(PGCET) Maximum 50% through Management Quota (PGCET/ KMAT)
	<b>Fee Structure</b>	PGCET: As prescribed by the State Govt. Management: As prescribed by the State Govt from time to time.
	<b>Teacher Qualification</b>	As per AICTE norms
	<b>Salary</b>	As per the AICTE 6 <sup>th</sup> Pay commission

### 1.2.5 Has the College adopted the Choice Based Credit System (CBCS)? If yes, how many programmes are covered under the system?

Yes, All 7 Undergraduate courses (BE) are covered under CBCS

### 1.2.6 What percentage of programmes offered by the College follows?

- \* Annual system:
- \* Semester system: 100%
- \* Trimester system:

### 1.2.7 What is the policy of the College to promote inter-disciplinary programmes? Name the programmes and what is the outcome?

- The programmes offered by the Institute are as per the guidelines of AICTE & VTU. Most of the programs are inter-disciplinary in nature.
- The college has instituted several steps to promote research in inter-disciplinary areas by setting up inter-disciplinary research centers like
  - Center for design and development and launching of Small satellite in collaboration with ISRO
  - Center for design and development of vision based ROBOTS in collaboration with Korean Institute of Science and Technology
  - Center for Nano materials and MEMS comprising faculty of Departments of ECE, EEE, ME, Physics and chemistry.
  - Center for Design & Development and Launching of Small Sattellite
  - Center for Design & Development of Vission Based Robots
  - Center for Nano Materials & MEMS
  - Center for Design & Process Simulation
  - Center for Computational Fluid Dynamics
  -
- OUTCOMES

- Design, Development and Launch of Pico satellite STUDSAT-1 in collaboration with ISRO
- Design and development of vision based ROBOTS for various applications in collaboration with DRDO labs.
- MEMS - Department of Physics and Electronics Engineering have been granted a VGST-KFIST Level II sponsored project titled “ Fabrication and Characterization of Polymer Nano composites for MEMS Application” Amount granted is Rs. 40 Lakhs.
- Started national MEMS design center in the year 2009, and become as a nodal center and actively participating in the collecting the designs for the development of MEMS chip under INUP programme, CeNSE, IISc, Bangalore in collaboration with NPMASS, India.
- Submitted unique inter-disciplinary research proposals with a worth of Rs. 4.9 crore to national funding agencies of MHRD, DIT, DRDO and VGST collaboratively, i.e. Mechanical Engineering, Electronics and Communication Engineering, Physics and Chemistry with the institutions/universities viz. IISc, S.V. University, NITK.

## 1.3 Curriculum Enrichment

### 1.3.1 How often is the curriculum of the College reviewed for making it socially relevant and/or job oriented / knowledge intensive and meeting the emerging needs of students and other stakeholders?

- Curricula is reviewed once in 3 years to meet the emerging needs of students and other stakeholders

### 1.3.2 How many new programmes at have been introduced UG and PG level during the last four years? Mention details.

\* **Inter-disciplinary:**

NIL

\* **programmes in emerging areas :**

- B.E. Civil Engineering
- B.E. Aeronautical Engineering
- M.Tech in Computer Network & Engineering
- M.Tech in Thermal Power Engineering
- M.Tech in Digital Communication & Networking
- M.Tech in Structural Engineering
- M.Tech in Machine Design

### 1.3.3 What are the strategies adopted for revision of the existing programmes? What percentage of courses underwent a major syllabus revision?

- The UG programs in Engineering subjects run by the college deal with the basic courses in science, basic engineering followed by discipline specific core/elective courses and invariably they are reviewed and revised once in 3 years.
- 25% to 30% courses underwent a major syllabus revision.

### 1.3.4 What are the value-added courses offered by the College and how does the College ensure that all students have access to them?

- During every summer, the Institute organizes value added Online courses /webinar offered by world class universities such as Purdue, Stanford, MIT, IITs etc. for students taking up advance research in specific areas/fields.
- College mandates every student to either take-up Internship Programs in well-known Industry/R&D Departments or to undergo summer/self-study courses or take up minor



projects in emerging areas.

- In addition to this, College conducts Training Program on Soft Skills & Numerical Aptitude to all the students.

**1.3.5 Has the College introduced any higher order skill development programmes in consonance with the national requirements as outlined by the National Skills Development Corporation and other agencies?**

A Master Trainers National Skills Development Center has been established in the college with facilities for providing higher order skills development in the area of Automotive Diagnostics Services supported by BOSCH India and Building Services supported by L&T which provides world class skills. The students of the college have opportunities to undergo training in this center.

## 1.4 Feedback System

### 1.4.1 Does the College have a formal mechanism to obtain feedback from students regarding the curriculum and how is it made use of?

- YES, we collect feedback from the students from every course (Course Exit Survey) and also collect program exit survey from graduating student.
- The relevant/valid feedbacks from the students are implemented in the curriculum revision.

### 1.4.2 Does the College elicit feedback on the curriculum from national and international faculty? If yes, specify a few methods adopted to do the same - (conducting webinar, workshop, online forum discussion etc.). Give details of the impact on such feedback.

- Yes, we are taking informal feedback from National faculty like professors from IISc, IITs, and NITs& R&D organizations.
- Institute has signed an MOU with North Dokoto State University, USA for Research
- The departments are advised periodically by experts from National Institutes like IISc, IITs, IIM, NID, NITs etc.
- Impact:
- Such interaction has resulted in the setting up of Interdisciplinary Centers such as Center for Nano materials and MEMS and Center for Design & Development of Vision Based Robotics. Center for Design & Development and Launching of Small Sattellite, Center for Design & Development of Vission Based Robots, Center for Nano Materials & MEMS, Center for Design & Process Simulation, Center for Computational Fluid Dynamics.

### 1.4.3 Specify the mechanism through which alumni, employers, industry experts and community give feedback on curriculum enrichment and the extent to which it is made use of.

- Meetings of BOS , Academic Council and Board of Goveners comprising of Faculty Representatives , distinguished Academicians, Administrators, Representatives of alumni & Experts drawn from Industry / Research Organizations/ National Level Academic Institutes like IISc, NITs etc.

### 1.4.4 What is the quality sustenance and quality enhancement measure undertaken by the institution in ensuring effective development of the curricula?

- The BOS & Academic council has senior faculty from renowned academic institutions, scientist from R&D organization and Experts from Industry in different disciplines who will review and validate the curriculum proposed by DUGC.
- While proposing the curriculum, the senior faculty of the department will go through the curriculum of the corresponding courses offered by the reputed national and international institutions to sustain and enhance the quality of the curriculum.

*Any additional information regarding Curricular Aspects, which the institution would like to include.*

## CRITERION II: TEACHING-LEARNING AND EVALUATION

### 2.1 Student Enrolment and Profile

#### 2.1.1 How does the College ensure publicity and transparency in the admission process?

- 75% of the UG seats are filled through common entrance tests conducted by KEA/COMED-K.
- 80% of M.Tech seats are filled through common entrance test conducted by KEA.
- 50% of the seats of MBA & MCA are filled through common entrance test conducted by KEA
- The remaining seats in the respective programs are filled by the managements by giving wide publicity through advertisements in print media, electronic media and through the college website.
- Allotment of the management seats is also based on performance of 12<sup>th</sup> standard examination in the relevant subjects for the UG program and in respect of PG programs based on the merit in the qualifying examinations as well as the ranking obtained in the Common Entrance tests conducted by the Government of Karnataka (KEA).

#### 2.1.2 Explain in detail the process of admission put in place for UG, PG and Ph.D. programmes by the College. Explain the criteria for admission (Ex. (i) merit, (ii) merit with entrance test, (iii) merit, entrance test and interview, (iv) common test conducted by state agencies and national agencies (v) others followed by the College?

<b>Under Graduate</b>	<b>BE</b>	45% of the Seats through Karnataka Govt. Common Entrance Test conducted by KEA	Seats will be allotted by KEA based on merit cum reservation for SC/ST/OBC
		30% of the seat through COMED-K Exam	Seats will be allotted by COMED-K Cell based on merit in the COMED-K
		25% of the seats to be filled under Management Quota	As per merit among the applicants.
<b>Post Graduate</b>	<b>M.Tech.</b>	80% of the seats through Karnataka Govt. PG Common Entrance Test/ GATE	Seats will be allotted by KEA based on merit cum reservation for SC/ST/OBC
		20% of the seats to be filled under Management Quota	As per merit (PGCET/GATE) among the

			applicants.
	<b>MBA</b>	Minimum 50% of the seats through Karnataka Govt. PG Common Entrance Test/ CAT/KMAT	Seats will be allotted by KEA based on merit
		Maximum 50% of the seats are filled under Management Quota	As per merit (PGCET /CAT/KMAT) among the applicants
	<b>MCA</b>	Minimum 50% of the seats through Karnataka Govt. PG Common Entrance Test	Seats will be allotted by KEA based on merit
		Maximum 50% of the seats are filled under Management Quota	As per merit (PGCET) among the applicants
<b>Ph.D.</b>	<b>Ph.D.</b>	100% of the seats through University Entrance test & Interview	Selection will be done by the University as per merit in Entrance test and personal Interviews.

**2.1.3 Does the College have a mechanism to review its admission process and student profiles annually? If yes, what is the outcome of such an analysis and how has it contributed to the improvement of the process?**

- Since the admission process and quotas for admissions under different categories is regulated by the State Government. There is no mechanism in place to review the admission process at the Institutional Level.

**2.1.4 What are the strategies adopted to increase / improve access to students belonging to the following categories**

- \* **SC/ST**
  - \* **OBC**
  - \* **Women**
  - \* **Different categories of persons with disabilities**
  - \* **Economically weaker sections**
  - \* **Outstanding achievers in sports and extracurricular activities**
- The admissions to professional colleges taking into account the different categories of students such as SC/ST/OBC/Disabled/Sports/NCC etc. are regulated by the respective Government order which also fixes the percentages for the different categories of students.

- Concessions in college fees, transportation fees and other fees for the deserving students in the category of SC/ST/Disabled/Sports/NCC/Economically Weaker.
- Remedial Classes are conducted regularly to weaker students of these categories
- Lifts/Ramps to assist physically disabled students.
- Hostels and transportation facilities being provided.

**2.1.5 Furnish the number of students admitted in the College in the last four academic years.**

Categories	2010-11		2011-12		2012-13		2013-14	
	Male	Female	Male	Female	Male	Female	Male	Female
SC	25	12	26	13	30	20	32	23
ST	06	02	06	03	05	06	08	02
OBC	53	34	56	26	63	43	83	47
General	299	99	342	115	462	136	443	171
NRI	14	02	11	00	21	01	35	08
GOI	00	01	01	00	01	00	00	00
Ex-servicemen	00	01	03	01	00	00	01	01
NCC	01	00	01	00	00	00	00	00
Sports	00	01	01	00	00	00	01	00
CET-SNQ	00	00	18	12	25	14	30	15

**2.1.6 Has the College conducted any analysis of demand ratio for the various programmes offered by the College? If so, indicate significant trends explaining the reasons for increase / decrease.**

The relevant information regarding the analysis of demand ratio is not readily available, however it is observed that admissions to UG programs in Engineering & Technology are in great demand in view of large existing employment potential. Since 75% of the seats are filled by KEA/COMED-K, and the data are not readily available for analysis. Further it may be mentioned all the sanction seats are filled every year.

Programmes	Number of applications	Number of students admitted	Demand Ratio
UG	NA	NA	NA
1.			
2.			
3.			
4.			

Programmes	Number of applications	Number of students admitted	Demand Ratio
<b>PG</b> 1. 2. 3. 4.	NA	NA	NA
<b>Integrated Masters</b> 1. 2.	NA	NA	NA
<b>M.Phil.</b> 1. 2.	NA	NA	NA
<b>Ph.D.</b> 1. 2.	NA	NA	NA
<b>Integrated Ph.D.</b> 1. 2.	NA	NA	NA
<b>Certificate</b> 1. 2. 3.	NA	NA	NA
<b>Diploma</b> 1. 2. 3.	NA	NA	NA
<b>PG Diploma</b> 1. 2. 3.	NA	NA	NA
<b>Any other (please Specify)</b>			

**2.1.7 Was there an instance of the College discontinuing a programme during last four years? If yes, indicate the reasons.**

No

## 2.2 Catering to Diverse Needs of Students

### 2.2.1 Does the College organize orientation / induction programme for freshers? If yes, give details of the duration of programme, issues covered, experts involved and mechanism for using the feedback in subsequent years.

College annually conducts a 3 day orientation program for the fresher (who get admitted to the college for first year) covering the following issues.

1. Vision, Mission and Quality policy of the college.
2. About Autonomous system and its advantages and importance - Add-on courses, Core Engg Courses, Electives-program and open, Certificate Courses and other academic programs.
3. Emphasis on Research and its inclusion at the UG level.
4. Examination Rules and regulations.
5. Facilities available within the campus such as Library, Labs, Language Lab, Canteen, Medical facility, Gym, Reprographic and Internet facilities.
6. N.C.C, N.S.S, Technical associations, Departmental associations, Clubs.
7. Availability of the services of the Student Counselor
8. Students' grievances cell, committees such as Anti-ragging, mal practice consideration, Anti-sexual harassment etc.
9. Placement cell.
10. Transportation

The details concerning the above are addressed in by Principal/ Dean-Academic/HODs etc.

### 2.2.2 Does the College have a mechanism through which the “differential requirements of student population” are analyzed after admission and before the commencement of classes? If so, how are the key issues identified and addressed?

- Once the students are admitted to the college, their English proficiency/Computer knowledge /Mathematics are assessed through one to one interaction.
- Based on the assessment the students are given extra coaching/bridge courses after the regular class hours.

### 2.2.3 Does the College provide bridge /Remedial /add - on courses? If yes, how are they structured into the time table? Give details of the courses offered, department-wise/faculty-wise? (Format –insert tables)

1. Bridge / Remedial / Add-on courses are offered at college level for 1st and 2nd semester



and at the departmental level from 3<sup>rd</sup> semester.

2. Bridge courses are conducted to the students to improve and strengthen the basic knowledge required for the coming semester during supplementary semester.

I year	Mathematics, EME, Elements of Civil Engg., CCP, Basic Electrical Engg., Basic Electronics Engg., CAED, Engineering Physics, Engineering Chemistry
Mechanical Engg	Fluid Mechanics, Mechanical Vibration, DME-2, Operation Research, Maths-3 & 4, TOM
Civil Engg	Fluid Mechanics, Geo Technical Engg 1 & 2, Environmental Impact Assessment, Structural Analysis 1 & 2, Maths-3 & 4
ISE	CO, ADA, Micro Processor, FLAT, Maths-3 & 4, GT
CSE	CO, ADA, Micro Processor, Maths-3 & 4, GT, Micro Processor Lab, OOPS Lab, OOPS, FLAT, AOS,ADBMS,FM,AA
ECE	C++, ASIC Design, MEMS, ARM Processor, Data Structures using c++, ADHOC wireless, Linear Integrated Circuits.
Aeronautical	Advanced Thermodynamics, Theory of Machines
EEE	Network Analysis, Linear Integrated Circuits, Signal & Systems, Digital Signal Processing, Maths-3 & 4

- **Time table Structure (Remedial classes)**

### Physics Cycle (Room 337, 346)

DAY	TIMINGS	SUBJECT
Monday	3.20-4.15	Physics
Tuesday	3.20-4.15	Electrical
Wednesday	3.20-4.15	Maths
Thursday	3.20-4.15	Civil
Friday	3.20-4.15	EME

The classes are compulsory for the students whose names are put up below. They need to maintain 85% of attendance in the special classes. Tutorials or surprise tests conducted during these classes are also considered for CIE.

### Chemistry Cycle (Room 334, 335)

DAY	TIMINGS	SUBJECT
Tuesday	4.15-5.15	CCP
Tuesday	4.15 – 5.15	ELN
Wednesday	1.30-2.45	CCP
Wednesday	2.45-4.15	CAD

Wednesday	4.15-5.15	CAD
Wednesday	1.30 -2.45	ELN
Wednesday	2.45 – 4.15	MAT
Wednesday	4.15 – 5.15	MAT

Sl. No	Special Training Program Domain	Faculty Members
1	Image and Video Processing, VC++6.0	1. Dr. Jharna Majumdar 2. Mr. Venkatesh G M 3. Mr. Srikanth A
2	Networking, NS-2	1. Dr. Sarojadevi H 2. Mr. Mohan B A,
3	Computer Graphics, OpenGL	1. Mrs Bhuvaneswari S Patil, 2. Mrs Nirmala
4	Cloud Computing	1. Dr. Sanjay H A, 2. Mrs Ashwini J P
5	Cryptography, Network Security and Wireless Sensor Networking	1. Dr. Nalini N

3. Based on the one to one interaction, feed-back system, outcomes of the Continuous Internal Evaluation (CIE) system, the students are coached by taking extra classes after the class hours.

4. Add-on courses are conducted by the departments during the supplementary semester
- Department of Computer science and Engg / Information science and Engg - **C++, Image Processing, Android.**
  - Department of Electronics and Communication-**Arm Processor,C++.**
  - Department of Mechanical Engg.-**Modeling and analysis**
  -

**2.2.4 Has the College conducted a study on the incremental academic growth of different categories of students; student from disadvantaged sections of society, economically disadvantaged, physically handicapped and slow learners etc.? If yes, give details on how the study has helped the College to improve the performance of these students.**

- Yes

- Academically weaker students are identified by their performance in the previous academic year and also in the I-mid-term test of the current academic year.
- Faculty advisor will do one-to-one interaction and counsel them.
- For such students extra coaching classes/Tutorials are conducted.
- Such efforts have improved the performance of academically weaker student.

### **2.2.5 How does the institution identify and respond to the learning needs of advanced learners?**

- The fast/advanced learners are identified through their consistent performance in Examination and feedback from the faculty.
- There is a provision for accelerated completion of the program for fast learners in autonomous system.
- Advanced learners are encouraged to take up Add-on courses to improve and gain the knowledge in their respective field of interest.
- Add-on-courses are offered during summer by most of the departments and additional credits are given to the students for add-on courses.
- Fast/Advanced learners are encouraged to take up Internship in Industry/R&D Institutions.
- Such students are encouraged to participate in the on-going institutional/sponsored research project.
- Students are encouraged to Present paper in National/International conferences, and also financially supported.
- Advanced learners are encouraged for higher studies and are coached for GATE.
- Leadership qualities are enhanced to these students by making them to organize and participate in the seminars, Conferences, workshops and techno-cultural fests.

### **2.2.6 How does the institution cater to the needs of differently-abled students and ensure adherence to government policies in this regard?**

- The college has provided lift and ramp in the college for the disabled students.
- Personal attention/coaching are provided to the disabled students
- Extra time is given during CIE/SEE
- The admission to the college for disabled students is according to Government and university policies

## 2.3 Teaching-Learning Process

### 2.3.1 How does the College plan and organize the teaching, learning and evaluation schedules? (Academic calendar, teaching plan and evaluation blue print, etc.)

- Academic calendar is prepared well in advance before the start of the semester and made available to all the students, teaching and non teaching staff and also made available in the college website. The academic calendar includes registration of the courses, CIE Schedule, Drop and withdrawal of courses, examination schedule, attendance and CIE submission, last working date, holidays and results announcement date etc.

#### Academic calendar



### Nitte Meenakshi Institute of Technology

(An Autonomous Institution affiliated to VTU, Belgaum & Accredited by National Board of Accreditation (AICTE), New Delhi)

P. B. No. 6429, Yelahanka, Bangalore - 560 064.



#### I Semester

#### ACADEMIC CALENDAR

Aug2013 - Jan2014

Week#	Sun	Mon	Tue	Wed	Thu	Fri	Sat	
Week01	04-Aug	05-Aug	06-Aug	07-Aug	08-Aug	09-Aug	10-Aug	Registration for Odd sem- 8 <sup>th</sup> Aug
Week02	11-Aug	12-Aug	13-Aug	14-Aug	15-Aug	16-Aug	17-Aug	
Week03	18-Aug	19-Aug	20-Aug	21-Aug	22-Aug	23-Aug	24-Aug	
Week04	25-Aug	26-Aug	27-Aug	28-Aug	29-Aug	30-Aug	31-Aug	
Week05	01-Sep	02-Sep	03-Sep	04-Sep	05-Sep	06-Sep	07-Sep	
Week06	08-Sep	09-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep	Assignment 1/ Surprise test 1 - 10 <sup>th</sup> Sept to 14 <sup>th</sup> Sept
Week07	15-Sep	16-Sep	17-Sep	18-Sep	19-Sep	20-Sep	21-Sep	
Week08	22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	
Week09	29-Sep	30-Sep	01-Oct	02-Oct	03-Oct	04-Oct	05-Oct	1 <sup>st</sup> Mid Sem Exam - from 30 <sup>th</sup> Sept to 3 <sup>rd</sup> Oct
Week10	06-Oct	07-Oct	08-Oct	09-Oct	10-Oct	11-Oct	12-Oct	Last date to drop a course-12 <sup>th</sup> Oct
Week11	13-Oct	14-Oct	15-Oct	16-Oct	17-Oct	18-Oct	19-Oct	
Week12	20-Oct	21-Oct	22-Oct	23-Oct	24-Oct	25-Oct	26-Oct	Assignment 2/ Surprise test 2 - 21 <sup>th</sup> Oct to 26 <sup>th</sup> Oct
Week13	27-Oct	28-Oct	29-Oct	30-Oct	31-Oct	01-Nov	02-Nov	
Week14	03-Nov	04-Nov	05-Nov	06-Nov	07-Nov	08-Nov	09-Nov	
Week15	10-Nov	11-Nov	12-Nov	13-Nov	14-Nov	15-Nov	16-Nov	2 <sup>nd</sup> Mid Sem Exam - from 13 <sup>th</sup> Nov to 16 <sup>th</sup> Nov
Week16	17-Nov	18-Nov	19-Nov	20-Nov	21-Nov	22-Nov	23-Nov	
Week17	24-Nov	25-Nov	26-Nov	27-Nov	28-Nov	29-Nov	30-Nov	
Week18	01-Dec	02-Dec	03-Dec	04-Dec	05-Dec	06-Dec	07-Dec	Final Attendance / CIE Submission -7 <sup>th</sup> Dec
Week19	08-Dec	09-Dec	10-Dec	11-Dec	12-Dec	13-Dec	14-Dec	Last Working Day 14 <sup>th</sup> Dec
Week20	15-Dec	16-Dec	17-Dec	18-Dec	19-Dec	20-Dec	21-Dec	SEE starts from 16 <sup>th</sup> Dec
Week21	22-Dec	23-Dec	24-Dec	25-Dec	26-Dec	27-Dec	28-Dec	
Week22	29-Dec	30-Dec	31-Dec	01-Jan	02-Jan	03-Jan	04-Jan	
Week23	05-Jan	06-Jan	07-Jan	08-Jan	09-Jan	10-Jan	11-Jan	
Week24	12-Jan	13-Jan	14-Jan	15-Jan	16-Jan	17-Jan	18-Jan	Registration for 4 <sup>th</sup> , 6 <sup>th</sup> & 8 <sup>th</sup> Sem- 13 <sup>th</sup> Jan 2014

**Note :** Results will be announced within One week of the last Examination, Students must apply within 3 days from the day of announcement of result for Photo copy of SEE Answer script, Revaluation and Retotatling


**3/5/7 Semester**
**ACADEMIC CALENDAR**
**Aug2013 - Jan2014**

Week#	Sun	Mon	Tue	Wed	Thu	Fri	Sat	
Week01	18-Aug	19-Aug	20-Aug	21-Aug	22-Aug	23-Aug	24-Aug	Registration for Odd sem- 19 <sup>th</sup> to 21 <sup>st</sup> Aug
Week02	25-Aug	26-Aug	27-Aug	28-Aug	29-Aug	30-Aug	31-Aug	
Week03	01-Sep	02-Sep	03-Sep	04-Sep	05-Sep	06-Sep	07-Sep	
Week04	08-Sep	09-Sep	10-Sep	11-Sep	12-Sep	13-Sep	14-Sep	Assignment 1/ Surprise test 1 - 10 <sup>th</sup> Sept to 14 <sup>th</sup> Sept
Week05	15-Sep	16-Sep	17-Sep	18-Sep	19-Sep	20-Sep	21-Sep	
Week06	22-Sep	23-Sep	24-Sep	25-Sep	26-Sep	27-Sep	28-Sep	
Week07	29-Sep	30-Sep	01-Oct	02-Oct	03-Oct	04-Oct	05-Oct	1 <sup>st</sup> Mid Sem Exam - from 30 <sup>th</sup> Sept to 3 <sup>rd</sup> Oct
Week08	06-Oct	07-Oct	08-Oct	09-Oct	10-Oct	11-Oct	12-Oct	Last date to drop a course-12 <sup>th</sup> Oct
Week09	13-Oct	14-Oct	15-Oct	16-Oct	17-Oct	18-Oct	19-Oct	
Week10	20-Oct	21-Oct	22-Oct	23-Oct	24-Oct	25-Oct	26-Oct	Assignment 2/ Surprise test 2 - 21 <sup>th</sup> Oct to 26 <sup>th</sup> Oct
Week11	27-Oct	28-Oct	29-Oct	30-Oct	31-Oct	01-Nov	02-Nov	
Week12	03-Nov	04-Nov	05-Nov	06-Nov	07-Nov	08-Nov	09-Nov	
Week13	10-Nov	11-Nov	12-Nov	13-Nov	14-Nov	15-Nov	16-Nov	2 <sup>nd</sup> Mid Sem Exam - from 13 <sup>th</sup> Nov to 16 <sup>th</sup> Nov
Week14	17-Nov	18-Nov	19-Nov	20-Nov	21-Nov	22-Nov	23-Nov	
Week15	24-Nov	25-Nov	26-Nov	27-Nov	28-Nov	29-Nov	30-Nov	
Week16	01-Dec	02-Dec	03-Dec	04-Dec	05-Dec	06-Dec	07-Dec	Final Attendance / CIE Submission -7 <sup>th</sup> Dec
Week17	08-Dec	09-Dec	10-Dec	11-Dec	12-Dec	13-Dec	14-Dec	Last Working Day 14 <sup>th</sup> Dec
Week18	15-Dec	16-Dec	17-Dec	18-Dec	19-Dec	20-Dec	21-Dec	SEE starts from 16 <sup>th</sup> Dec
Week19	22-Dec	23-Dec	24-Dec	25-Dec	26-Dec	27-Dec	28-Dec	
Week20	29-Dec	30-Dec	31-Dec	01-Jan	02-Jan	03-Jan	04-Jan	
Week21	05-Jan	06-Jan	07-Jan	08-Jan	09-Jan	10-Jan	11-Jan	
Week22	12-Jan	13-Jan	14-Jan	15-Jan	16-Jan	17-Jan	18-Jan	Registration for 4 <sup>th</sup> , 6 <sup>th</sup> & 8 <sup>th</sup> Sem- 13 <sup>th</sup> Jan 2014

**Note :** Results will be announced within One week of the last Examination, Students must apply within 3 days from the day of announcement of result for Photo copy of SEE Answer script, Revaluation and Retotatling

### Schedular Activities

Items in Academic Calendar	Schedule for Conduct of Academic activities.	Schedule for announcing Performance Feedback/Distribution of Scripts
Assignment Test I	3 <sup>rd</sup> week	4 <sup>th</sup> week
Assignment Test II	9 <sup>th</sup> week	10 <sup>th</sup> week
Surprise Test I	3 <sup>rd</sup> week	3 <sup>rd</sup> week
Surprise Test II	9 <sup>th</sup> week	9 <sup>th</sup> week
Sessional I	7 <sup>th</sup> week	8 <sup>th</sup> week
Sessional II	14 <sup>th</sup> week	15 <sup>th</sup> week
Semester End Exam	17 <sup>th</sup> -19 <sup>th</sup> week	20 <sup>th</sup> /21 <sup>st</sup> week
Other Activities (Seminars, Quiz)	Schedule as per Teacher discretion	Same week

- Faculty prepares the lesson plan/schedule of all CIE components/scheme of evaluation based on the Academic calendar and it is announced to students before the start of the semester.

**2.3.2 Does the College provide course outlines and course schedules prior to the commencement of the academic session? If yes, how is the effectiveness of the process ensured?**

- Yes
  - The syllabi of all the courses are made available to the students and also available in the college website
  - The syllabus also contains course outcomes.
  - The Departments will announce the electives offered and the teaching faculty assigned for each of the courses.
  - This process helps the students in identifying the electives of their choice.
  - HODs will ensure the implementation of the above.

**2.3.3 What are the courses, which predominantly follow the lecture method? Apart from classroom interactions, what are the other methods of learning experiences provided to students?**

- All theory courses comprise of lectures with teaching aids like blackboard teaching supplemented by PPTs, Audio Visual presentations etc.
- 25% of the total courses comprise of hands–on training in the laboratories.
- Other methods of learning experiences followed are
  - Tutorials, Seminars, Group Discussions
  - Mini Projects, Case studies, Assignments
  - Hands on training
  - Internships at Industry/ R&D labs.
- E-Learning facility. The college has subscribed to many E-Journals and digital databases, which can be accessed through Intranet. Learning materials of MIT, Stanford, Harward, NPTEL and VTU are also available for use as E-learning facility.
- Industrial & Educational tours are also organized regularly

**2.3.4 How ‘learning’ is made more student-centric? Give a list of participatory learning activities adopted by the faculty that contribute to holistic development and improved student learning, besides facilitating life-long learning and knowledge management.**

- To make learning more students centric the following points have been initiated
- 40% of the weightage in continuous internal assessment of theory courses is based on Assignment, Surprise test and Mini projects.
- 25% of the total courses comprises of hands –on training in the laboratories.
- Students are encouraged to participate in Inter and Intra college Technical competitions.

- Students are encouraged to present papers in National and International conferences.
- During every summer, Departments organize Courses on Current technologies/Skill Development which are open for all students.
- College mandates every student has to either take-up Internship Programs in well-known Industry/R&D Departments or he has to undergo summer courses and earn additional credits.
- The seminars and projects introduced in the curriculum have made the students to refer to the relevant literature in specific research areas.
- The students are motivated to associate with ongoing research projects and sponsored research projects in their respective departments.

### **2.3.5 What is the College policy on inviting experts / people of eminence to provide lectures / seminars for students?**

The gap between the Academic and Industry is taken care by:

- Inviting Experts from Industry, R&D Labs, and Reputed National institutions like IITs, IISc etc.
- Special workshops and seminars / conferences are periodically conducted to cater to the needs of the students for quality enhancement and skills upgradation.
- Hands on Training arranged to the students by experts from Industry.

The activities are organized through the Technical Associations of different Departments in collaboration with Professional societies. The college supports financially all these activities.

### **2.3.6 What are the latest technologies and facilities used by the faculty for effective teaching? Ex: Virtual laboratories, e-learning, open educational resources, mobile education, etc.**

- PPTs, Audio Visual instructions
- Web seminars/Edu-Sat
- E-Learning facility - MIT , Stanford, Horward, Purdue Online, NPTEL and VTU course materials
- Simulation –based tools in different programmes like Matlab, NS-2, Lab-view, Metrographics, Autocad, catia etc.

**2.3.7 Is there a provision for the services of counsellors / mentors/ advisors for each class or group of students for academic, personal and psycho-socio guidance? If yes, give details of the process and the number of students who have benefitted.**

- Yes, The Institute has appointed a full time qualified Lady Counselor to attend to personal and Psycho-socio requirements of the students.
- The college also has a scheme of academic mentoring.
- As per the scheme Group of students( 5 -15 ) are assigned a Faculty advisor
  - To identify the academically weak students and arrange remedial classes.
  - To monitor the CIE and attendance regularly and inform the same to their parents.
  - To help the students in registering a subject based on his capabilities
- About 40-50% of students are benefitted from the system

**2.3.8 Are there any innovative teaching approaches/methods/practices adopted/put to use by the faculty during the last four years? If yes, did they improve the learning? What methods were used to evaluate the impact of such practices? What are the efforts made by the institution in giving the faculty due recognition for innovation in teaching?**

Yes, college has encouraged the faculty to adopt innovative methods during teaching/learning process. Some of the methods are as follows:

- PPT's, Audio Visual instruction.
- Skits and Demonstration.
- Group discussions
- Webinars
- Seminars
- Hands-on training

Theoretical subjects are to be supplemented with Mini projects/Practical assignments/Case studies etc

The above methods adopted:

- Have made students to understand the subjects better.
- Resulted in increase in placement through the campus recruitment.

The Methods used for evaluating teaching/learning methods are:

- Analysis of Results
- Placement Records



- Publications by Students
- Participation in Conferences/Industrial Internships etc
- The Institution has made a sincere effort to recognize the efforts made by the faculty for their innovative approaches in teaching and teachers who have excelled by actively participating in above are identified for accelerated elevation.

### **2.3.9 How does the College create a culture of instilling and nurturing creativity and scientific temper among the learners?**

- The students once get admitted to the college are given a orientation course at the start and they are well informed about the research work, projects being carried out by the departments to inculcate the scientific temper and creativity among the students.
- Even at the UG level the students are motivated to participate in the research work.
- Students are encouraged to involve in the ongoing projects.
- Subjects like Innovative Product design, Software project management, Entrepreneurship management & IPR, etc. have been introduced to instill and nurture the creativity among the students.
- Every year 5 Innovative projects are supported by IEDC cell to evolve the culture of innovation.
- MOU with National Entrepreneurship Network (NEN) helped the college to arrange workshops/Seminars for the students by bringing successful entrepreneurs in the country.
- MOU with ISRO for satellite development.
- The college is having excellent Research & Development facilities like Clean Room for satellite project, Ground station to track satellites, Robotics lab, HPC lab, CFD lab etc.
- This has yielded better results and students are able to design and develop a PICO satellite, a Vision based robot which has been installed in Hyderabad museum, development of a hybrid car, adaptation of LPG to a two wheeler, etc.

### **2.3.10 Does the College consider student projects a mandatory part of the learning programme? If so, for how many programmes is it made mandatory?**

#### **\* Number of projects executed within the College**

- Yes, Projects are made a mandatory for all the final year students of all the programmes.
- The project work shall be on a topic in the area of specialization specified by the

guide/ opted by the candidate.

- The students have to appear for Viva-voce on the completion of the project
- Number of projects executed within the College
  - Nearly 50-60% of the projects are executed within the campus.

**\* Names of external institutions associated with the College for student project work**

- Indian Space Research Organization (ISRO)
- National Aerospace Laboratories (NAL)
- Indian Institute of Science (IISc)
- DRDO Labs
- BHEL, BEL, &HAL
- JNCASR
- NIAS
- CPRI, etc.
- 

**\* Role of the faculty in facilitating such projects**

- The project work shall be on a topic in the area of specialization specified by the guide/ opted by the candidate.
- The faculty will help the students in literature survey before defining a problem
- Faculty will define the problem statement on which students will work
- Faculty help the students to formulate the methodology
- The students shall seek the guidance of the internal guide on a continuous basis and also to prepare the final thesis/report.

**2.3.11 what efforts are made to facilitate the faculty in learning / handling computer-aided teaching/ learning materials? What are the facilities available in the College for such efforts?**

- Faculty is trained with recent technological developments by making/encouraging them to attend the seminars, workshops and conference.
- The faculty is provided with computers with internet & intranet facility
- The faculty can utilize the facilities after the working hours
- E-Learning facility - MIT , Stanford, Howard, NPTEL and VTU course materials
- Free printing/Xerox facility.

**2.3.12 Does the College have a mechanism for evaluation of teachers by the students / alumni? If yes, how is the evaluation used in achieving qualitative improvement in the teaching-learning process?**

- College has online feed-back system on teachers by the students wherein the students can login to the site from the house itself and give their views on teaching methodology adopted by the faculty.
- The feed-back is addressed at the appropriate level i.e, DUGC, HOD's Dean and Principal based on the kind of information received from the feed-back.
- The faculty is advised to improve the methodology of teaching by adopting new techniques, if needed he/she will be given mentoring/training by the senior faculty.

**2.3.13 Does the institution face any challenges in completing the curriculum within the planned time frame and calendar? If yes elaborate on the challenges encountered and the institutional approaches to overcome these.**

- Yes, because of holidays and calamities.
- In such cases college will make use of free hours, restricted holidays, Saturday as full working day & Sundays to complete the curriculum within the planned time.

**2.3.14 How are library resources used to augment the teaching-learning process?**

- The students & faculty will make use of books, DVDs, e-books, Digital Course-ware from NPTEL, MITOCW, VTU, Berkley, Stanford, e-Vidya which are available in the library.
- Students are provided with Book bank facility wherein they get extra books to study.
- Students and faculty are encouraged to refer Journals, e-books, technical magazines available at the library which makes them to cultivate the research culture
- Students & faculty use the reference facility and also barrow books from the library.

**2.3.15 How does the institution continuously monitor, evaluate and report on the quality of teaching, teaching methods used, classroom environments and the effect on student performance.**

- The Principal, Dean & HODs will monitor the conduction of classes as per the time-table

- DUGC monitors continuously, evaluates and reports to the higher authorities about the effective outcome through quality teaching. DUGC will monitor, suggest any changes if needed in the lesson plan, verifying the quality of CIE question papers ,etc.
- Audit committee of the IQAC will visit the departments to verify the teaching methodology, lesson plan, work done statement, CIE question papers and attendance register periodically.
- College authorities will also go through the students fee-back to cater the needs of the students in terms of quality teaching and teaching methodology.

## 2.4 Teacher Quality

### 2.4.1 What is the faculty strength of the College? How many positions are filled against the sanctioned strength? How many of them are from outside the state?

- Faculty Strength - 235
- Positions filled - All
- Faculty from outside the state - 30

### 2.4.2 How are the members of the faculty selected?

- Advertisement in the leading News Paper/Websites
- Short listing the applications based on Qualification/Specialization
- Interview Process
  - Shortlisted Candidates has to give a demo lecture in front of the Programme specific Interview Committee.
  - Appear before the selection committee.
  - Composition of Committee: The committee comprises of Nominee of the Governing body as Chairman, two subject experts from outside, head of the department and principal as member secretary

### 2.4.3 Furnish details of the faculty

Highest qualification	Professor		Associate Professor		Assistant Professor		Total
	Male	Female	Male	Female	Male	Female	
<b>Permanent teachers</b>							
<b>D.Sc./D.Litt.</b>							
<b>Ph.D.</b>	15	7	3	2	4	3	34
<b>M.Phil.</b>			1		6	1	8
<b>PG</b>	7		10	13	63	100	193
<b>Temporary teachers</b>							
<b>Ph.D.</b>							
<b>M.Phil.</b>							
<b>PG</b>							
<b>Part-time teachers</b>							
<b>Ph.D.</b>	01						
<b>M.Phil.</b>							
<b>PG</b>							

**2.4.4 What percentage of the teachers has completed UGC-CSIR-NET, UGC-NET, and SLET exams? In that what percentage of teachers are with PG as highest qualification?**

- NET/SLET: Not Applicable
- Percentage of teachers is with PG as highest qualification: 100%

**2.4.5 Does the College encourage diversity in its faculty recruitment? Provide the following departments-wise details.**

Department	% of faculty who are product of the same College	% of faculty from other Colleges within the State	% of faculty from other States	% of faculty from abroad
CSE	6%	85%	9%	-
ECE	5.5%	69.4%	25%	
ME	11.76%	67.66%	20.58%	-
ISE	22.2%	72.3%	5.5%	-
EEE	6.66%	80%	13.34%	
Civil	-	100%	-	-
Applied Sciences	-	91.17%	8.82%	-
MBA	7.1%	71.5%	21.4%	-
MCA	20%	60%	20%	-

**2.4.6 Does the College have the required number of qualified and competent teachers to handle all the courses for all departments? If not, how do you cope with the requirements? How many faculty members were appointed during the last four years?**

YES, College has the required number of qualified and competent teachers.

**2.4.7 How many visiting Professors are on the rolls of the College?**

NIL

**The following professors are visiting our Institute regularly whos names are not on the rolls**

- Prof Mohan S, IISc, Bangalore.
- Prof. L M Patnaik , IISc, Bangalore
- Prof Achutha Rao, National Institute of Design , Bangalore
- Mr. Vaidhyanathan, Cleentech Consultant & HMX Systems

- Dr. K S Naik Former GM of BFW, Bangalore
- Proff. Niranjana Murthy Asst director of Directorial of Technical Education (DTE), bangalore

**2.4.8 What policies/systems are in place to recharge teachers? (eg: providing research grants, study leave, nomination to national/international conferences/Seminars, in-service training, organizing national/international conferences etc.)**

- The institution encourages the Faculty to recharge themselves by attending orientation/refresher programmes conducted by AICTE/ UGC/VGST/IITs/IISc/IIM etc., participating and presenting papers in State, National and International Seminars, Symposia and Workshops by providing support for travel, recendeial and ntincidental expenses.
- The Institute mandates the departments to organize Faculty Development Programmes/Workshops regularly
- The Institute conducts Faculty Induction Programmes for the newly recruited faculty members in association with professional training Institutes.
- Since inception the Institute has the policy of sponsoring the faculty for qualification improvements (M.Tech/Ph.D) with full salary under QIP programs of AICTE/UGC/ISTE.
- Encourages the faculty to take up M.Tech/Ph.D programmes on part time basis.
- Institute gives all the support for the faculty in getting the sponsored research projects/consultancy assignments.

**2.4.9 Give the number of faculty who received awards / recognitions for excellence in teaching at the state, national and international level during the last four years.**

- Dr.P.B Shetty has been awarded with the “Cambridge International Certificate for Teachers” in Nov 2011 by Cambridge University London through Wipro Mission-10X
- Dr.Nalini N has been awarded Bharat Jyoti Award “IIFS” December 20,2012

**2.4.10 Provide the number of faculty who has undergone staff development programmes during the last four years. (Add any other programme if necessary)**

<b>Academic Staff Development Programmes</b>	<b>Number of faculty</b>
<b>Refresher courses</b>	41
<b>HRD programmes</b>	33

Academic Staff Development Programmes	Number of faculty
Orientation programmes	64
Staff training conducted by the College	96
Staff training conducted by University/other Colleges	95
Summer / winter schools, workshops, etc.	39
Any other (please Specify)	

#### 2.4.11 What percentage of the faculty have

- \* been invited as resource persons in Workshops / Seminars / Conferences organized by external professional agencies -5%
- \* participated in external Workshops / Seminars / Conferences recognized by national/ international professional bodies - 56%
- \* presented papers in Workshops / Seminars / Conferences conducted or recognized by professional agencies -28%
- \* teaching experience in other universities / national institutions and others -9%
- \* industrial engagement -20.5%
- \* international experience in teaching -2.7%

#### 2.4.12 How often does the College organize academic development programmes for its faculty, leading to enrichment of teaching-learning process?

- **Curricular Development**

- As an autonomous institution, Curriculum development is one of the major criteria as it defines the quality of education imparted to the students. To familiarize teachers with industrial needs, the college holds twice in a year meetings with personnel from reputed Industries/Research Organizations/ Professional bodies.(such as IISc, ADE, ADA, CAIR , ISRO, NIT, Texas Instruments, ARM, CDAC, NetApp, Wipro, NASSCOM, IEEE Chapter).
- Boards of studies (BOS) have representation from Industry, R&D labs and well known Institutions like IISc, IIT and NITs'which ensures updating of curriculum and the faculty are also benefited through interaction with the external experts.
- Orientation programmes are conducted yearly with external experts to finalize the curriculum highlighting the objectives and outcomes for each course and also mapping the course outcomes with the defined programme educational objectives (PEOs) & Programme Outcomes (POs)

- **Teaching-learning methods**

- The Institute conducts Faculty Induction Programmes every year for the newly recruited faculty members in association with professional training Institutes



- Institutes is also having MOUs with Wipro: Mission -10X , Infosys: Campus Connect and NASSCOM which will help the faculty in teaching methods and subject specific teaching.
- DUGC in each department makes sure that the faculty prepares the course file consisting of Lesson plan/notes, schedule of assessment components, other learning aids etc.
- Every semester academic audit is done by the IQAC committee to evaluate the teaching learning process and to give feedback/suggestions.

- **Examination reforms**

- Every semester the newly recruited faculty is given orientation about the examination process/scheme of evaluation.
- In view of equal weightage being given for both CIE and SEE, the faculty are encouraged to come out with innovative ways of evaluating the students especially in respect of CIE component
  - In addition to the conventional tests the students are evaluated through surprise tests, quiz, mini projects, seminars, group discussions, industry case studies etc.
  - In some courses the questions of quiz& surprise test components are also oriented to prepare the students for competitive examinations like GATE/GRE/ UPSC Exams.
- To improve the quality of the graduating students the faculty is trained to prepare the CIE & SEE question papers which reflect the programme outcomes.
- In the laboratory courses the faculty is oriented to design experiments which will improve the thinking ability & skills among the students and similar exercise is done in the semester end exams also.

- **Content / knowledge management**

- The institution encourages the Faculty to attend orientation programmes conducted by other Institutions, participation and presentation of papers in State/National/ International Seminars, Symposia and Workshops which will enrich them with the knowledge in the emerging areas.
- The Institute mandates the departments to organize Faculty Development Programmes/Workshops regularly in the emerging areas

By these activities the faculty will be able to design improved curriculum and teach the current trends in the subjects.

- **Any other (please specify)**

### **2.4.13 What are the teaching innovations made during the last five years? How are innovations rewarded?**

#### **Innovations:**

- ICT in education
- Multimedia teaching and learning
- Making lectures more interactive along with deliberations and discussions
- Case studies/Mini Projects
- Concept sketches
- Role playing
- Hands-on teaching
- Seminars
- Webinars
- Models
- Etc.

#### **Rewards:**

Additional weightage during promotion/ sponsoring faculty to attend National/International conferences.

### **2.4.14 Does the College have a mechanism to encourage**

- \* **Mobility of faculty between institutions for teaching?**
  - \* **Faculty exchange programmes with national and international bodies?**
- If yes, how have these schemes helped in enriching quality of the faculty?**

- College has a mechanism to depute teachers for higher studies in reputed Institutions with full salary.
- College has a scheme towards the mobility and faculty exchange to improve /enrich the knowledge among the teaching and non-teaching staff.
- College organizes lectures by experts from Industry/R&D organizations
- We are offering full length courses in collaboration with Institution like National Institute of Design etc.
- Short term courses are delivered by experts from Industries like ARM, CYPRESS, etc.
- The faculties from our college are encouraged to deliver lectures and share their knowledge and expertise in their fields to the other Institutions.
- NMIT has signed an MOU with North Dakota State University (NDSU), USA (One of the prestigious Land Grant Universities of USA).The MOU Provides for collaborative research by the faculty and provision for pursuing their

Doctoral work with one year stay in NDSU and doing the rest of the research in NMIT under the joint guidance of one Professor of NDSU and another identified Professor of NMIT.

- Faculty of Mechanical Engineering has been permitted to deliver specially designed courses to scientists of National Aeronautical Laboratory etc.

## 2.5 Evaluation Process and Reforms

### 2.5.1 How does the College ensure that all the stakeholders are aware of the evaluation processes that are operative?

- Detailed information regarding evaluation processes are being disseminated for all the I year students at the time of admission to the college
- Every semester the newly recruited faculty are given orientation about the examination process/schemes of evaluation
- Each and every student when he/she gets admitted to the college, a Hand Book is given which contains detailed information on the Evaluation processes and reforms.
- The Evaluation processes are also made available in the institute's website for the information of all the stakeholders.
- The Academic Calendar has all the information about the schedule of the Internal and external exams for the whole semester which will be announced before the start of the semester so that the staff / students can plan work / study well in advance. The Academic calendar will be given to all the departments as well as displayed on the notice boards before the commencement of the semester.
- Any changes in evaluation processes and regulations are informed to students from time to time through circulars by displaying the same on the notice boards/announcing in college website etc.
- Faculty will inform the students about teaching methodology, assessment methods & assessment schedules in the beginning of the semester.

### 2.5.2 What are the major evaluation reforms initiated by the College and to what extent have they been implemented in the College? Cite a few examples which have positively impacted the evaluation management system?

- Each course syllabus is divided into 5 Units. The Semester End Exam question paper has 5 units and the student has to answer questions of each unit which ensures that he/she studies the entire syllabus without leaving any portion of the syllabus.
- 50% of the weightage in each subject will be given to continuous evaluation during the term work in the form of tests, assignments, quizzes, surprise tests, projects, hands-on experiments, seminars, discussions etc.
- The college has introduced a scheme whereby 40% of CIE marks are allotted to Mini projects/seminars/assignments etc. which has helped in enhancing creativity and the innovativeness, thereby enhancing the employability of the students.
- Weightage will be given for taking up Internships during summer vacations.

- Though it is an Autonomous college, the SEE evaluation is made transparent by involving examiners from other institutions for Question paper setting, practical exams & evaluation of answer scripts.
- To maintain the consistency in the standard of question papers, SEE question papers are set by both internal and external examiners.

### 2.5.3 What measures have been taken by the institution for continuous evaluation of students and ensuring their progress and improved performance?

- Every subject gets 50% weightage for the Internal Assessment. The Internal assessment comprises of mid-term tests/weekly or fortnightly class tests/home work or assignments /seminars/problem solving/hands on training/group discussions, quiz/mini-project etc..
- Continuous feedback is given to the students on his/her performance in the above said components and faculty advisor/HOD will counsel them for improving the performance.
- Student's progress reports are sent to parents frequently and also made available in the college website.

### 2.5.4 What percentage of marks is earmarked for continuous internal assessment? Indicate the mechanisms strategized to ensure rigour of the internal assessment process?

- Both CIE and SEE shall have equal (50:50) weightage.
- A student's performance in a subject shall be judged by taking into account the results of CIE and SEE put together.
- A student will not be allowed to take up the SEE in a particular subject, if the CIE is less than 40% and he/she will be declared as fail in the subject.
- Midterm tests are conducted centrally similar to the semester end exam.
- Question papers of Midterm tests are validated & approved by DUGC.

<b>Theory</b>	
<u><i>Continuous Internal Evaluation(CIE)</i></u>	
<b>Mid Sem Exam (MSE) 1</b>	15 Marks
<b>Mid Sem Exam (MSE) 2</b>	15 Marks
<b>Assignment, Test Based on assignment, Surprise Test, Quiz, Seminar, Mini Projects, Case Studies, Lab components</b>	20 Marks
<u><i>Semester End Exam (SEE)</i></u>	50 Marks
<u><i>Grand Total</i></u>	100 Marks

<b>Practical</b>	
<u><i>Continuous Internal Evaluation(CIE)</i></u>	
<b>Mid Sem Exam</b>	15 Marks
<b>Records and Continuous assessment</b>	30 Marks
<b>Viva-Voce, Surprise Test, Quiz</b>	05 Marks
<u><i>Semester End Exam (SEE)</i></u>	50 Marks
<u><i>Grand Total</i></u>	100 Marks

**2.5.5 Does the College adhere to the declared examination schedules? If not, what measures have been taken to address the delay?**

- Yes,
- The academic calendar will be published at the beginning of the semester and schedule is strictly followed.

**2.5.6 What is the average time taken by the College for declaration of examination results? Indicate the mode / media adopted by the College for the publication of examination results e.g., website, SMS, email, etc.**

- Results will be announced within one week from the last examination.
- The results are announced on the College Notice Boards and in the college Website
- Subsequently parents are informed about the results through personal letters also.

**2.5.7 Does the college have an integrated examination platform for the following processes?**

- \* **Pre-examination processes – Time table generation, OMR, student list generation, invigilators, squads, attendance sheet, online payment gateway, etc.**
- \* **Examination process – Examination material management, logistics.**
- \* **Post examination process – attendance capture, OMR based exam result, auto processing, generic result processing and certification.**

- College has separate Examination section for conduction, processing and execution of examination.
- This section is automated with software which captures the attendance, CIE and SEE marks and generates the records according to the given format.
- The software generates the list of the eligible students for writing the exams based on the input of attendance and CIE considering all the criteria for the examination.

- The software generates an admit card for the student by considering all the eligibility criteria.
- The materials and logistics required for the conduction of examination and evaluation processes are indented and procured made ready well in advance before the start of the examination.
- Examination section is having a Strong room facility where the typing and storing of question papers take place.
- Examination section is having exclusive photo copying machine to print the SEE question papers.
- Examination is having separate room to store the blank answer booklets.
- The CIE and SEE are processed and verified, wherever applicable, grading of marks is carried out as per the norms.
- Software processes the Results, SGPA, CGPA & Reports are generated in the consolidated form for announcement on notice boards & website.
- The results are announced within one week of the last examination held.
- Software also automatically generates the grade cards, provisional degree certificate and transcripts.
- The software will keep track of credits earned by each student and prepares the nominal roll for the next academic year after considering criteria for vertical progression.

### **2.5.8 Has the College introduced any reforms in its Ph.D. evaluation process?**

- \* The evaluation process for PhD is carried out by the University
- \* However, the college has stipulated the doctoral committees should have atleast one member from Institutions like IISc/IITs/NITs

### **2.5.9 What efforts are made by the College to streamline the operations at the Office of the Controller of Examinations? Mention any significant efforts which have improved process and functioning of the examination division/section?**

- A senior academic of the rank of Professor has been appointed as Controller of Examinations.
- The entire examination process has been automated with dedicated software.
- The software has the following features
  - Registration of the students at the beginning of the Semester
  - Entry of components of CIE such as midterm tests, assignment and surprise tests.
  - Entry of Attendance
  - Generation of interim reports regarding the performance of the students

- Generating list of eligible students
- Generation of Admit cards
- Entry of SEE marks
- Processing Results and report generation.
- Printing of Grade cards
- Generation of Statistics
- There is provision for Re-valuation/Re-totaling/Getting photocopy of the answer booklets
- The Automation facilitates announcement of results within one week.

#### **2.5.10 What is the mechanism for redressal of grievances with reference to evaluation?**

- \* There is a provision for issue of photo copy of SEE answer booklets, to apply for re-totaling and revaluation within the stipulated date.



## 2.6. Student Performance and Learning Outcomes

### 2.6.1 Does the College have clearly stated learning outcomes for its programmes? If yes, give details on how the students and staff are made aware of these?

- \* Yes, College has defined set of Program Educational Objectives, Program Outcomes and Course Outcomes for all the programmes.
- \* All the stakeholders are involved in establishing PEOs & POs.
- \* PEOs and POs are published in website, printed in Syllabus books and Displayed in prominent places
- \* College conducts orientation programmes to all its faculty and students about the PEOs & POs.
- \* Faculty will also participate in defining the learning outcomes.

### 2.6.2 How does the institution monitor and ensure the achievement of learning outcomes?

- \* Institute has setup following committees to ensure and monitor the achievement of learning outcomes
  - DUGC
  - BOS
  - BOE
  - Academic Council
  - IQAC
- \* Faculty will ensure the achievement of learning outcomes by the students through the course delivery and appropriate interactions.
- \* Learning outcomes can be achieved through proper design of question papers/assignments/quizzes/Projects/Mini-Projects/Case studies etc.
- \* It is also being achieved by designing appropriate experiments in the laboratory courses.

### 2.6.3 How does the institution collect and analyse data on student learning outcomes and use it for overcoming barriers of learning?

#### Data Collection

- \* The institution is employing direct and indirect assessment methods to analyze the attainment of learning outcomes.
- \* It has a mechanism to collect the feedback from all the stake holders on the learning outcomes of the programmes for improvement.
- \* Feedback is collected from the Industry during the campus recruitment/ online or

offline feedback from alumni/ faculty /Senior students.

### Analyze

- The data will be analysed at different levels such as Departments, Institutes, Academic Council, and BOG etc.

### Use

- \* By analyzing the results of attainment level of PEOs , POs& Cos, the institute can decide on the following courses of action
  - Refining teaching & learning methods
  - Refining Assessment methods
  - Refining the curriculum contents
  - Refining COs & PEOs
  - Refining the Content Delivery methods

## 2.6.4 Give Programme-wise details of the pass percentage and completion rate of students.

Program	Year of Graduation	Total Number of Students	Number of students completed successfully	Pass Percentage
<b>BE-CSE</b>	2009-10	129	93	72%
	2010-11	132	121	91.66%
	2011-12	137	134	97.8%
	2012-13	116	106	91.3%
<b>BE-ECE</b>	2009-10	138	109	78.9%
	2010-11	135	125	92.5%
	2011-12	140	128	91.4%
	2012-13	134	121	90.2%
<b>BE-ISE</b>	2009-10	61	40	65.57%
	2010-11	70	69	98.5%
	2011-12	64	56	87.5%
	2012-13	53	50	94.33%
<b>BE- Mech</b>	2009-10	60	47	78.33%
	2010-11	69	68	98.55%
	2011-12	73	69	94.52%
	2012-13	128	127	99.21%
<b>BE-EEE</b>	2009-10	52	36	69.2%
	2010-11	65	63	96.92%
	2011-12	55	49	89.09%
	2012-13	56	55	97.95%

<b>BE-CIVIL</b>	2012-13	55	55	100%
<b>M.Tech- VLSI</b>	2009-10	6	4	66.66%
	2010-11	17	15	88.2%
	2011-12	18	16	88.88%
	2012-13	18	13	72.2%
<b>M.Tech.-CSE</b>	2009-10	18	18	100%
	2010-11	18	18	100%
	2011-12	18	18	100%
	2012-13	18	18	100%
<b>M.Tech.-Thermal</b>	2011-12	15	13	86.66%
	2012-13	14	13	92.85%
<b>M.Tech- Structural Engg</b>	NA	NA	NA	NA
<b>M.Tech-Machine Design</b>	NA	NA	NA	NA
<b>MBA</b>	2009-10	57	50	88%
	2010-11	57	45	79%
	2011-12	52	48	92%
	2012-13	112	99	93.39%
<b>MCA</b>	2009-10	60	54	90%
	2010-11	61	51	83.6%
	2011-12	61	56	91.8%
	2012-13	61	55	90.16%

## **CRITERION III: RESEARCH, CONSULTANCY AND EXTENSION**

### **3.1 Promotion of Research**

#### **3.1.1 Does the College have a research committee to monitor and address the issues of research? If yes, what is its composition? Mention a few recommendations which have been implemented and their impact.**

Yes, the college has a Research Council to monitor and address the issues of research. The composition of Research Council is as follows

1. Dr. N R Shetty, Director, NMIT
2. Dr. H C Nagaraj, Principal, NMIT
3. Prof. Ranganatha Setty, Dean (Academic)
4. Dr. Jharna Majumdar, Dean (R&D), Prof. & Head, Dept of CSE (PG)
5. Dr. Nalini N, Prof. & Head, Dept of CSE
6. Prof. Mahaviraswamy, Prof. & Head, Dept of ECE
7. Dr. Sanjay H A, Prof. & Head, Dept of ISE
8. Dr. P B Shetty, Prof. & Head, Dept of Mechanical Engg.
9. Dr. H M Ravikumar, Prof. & Head, Dept of EEE
10. Dr. S Sridhar, Prof. & Head, Dept of MBA
11. Dr. Prasad Hamsavanth, Prof. & Head, Dept of MCA
12. Dr. Dhananjaya, Prof. & Head, Dept of Civil Engg.
13. Dr. Indira R, Prof. & Head, Dept of Mathematics
14. Dr. Srilatha Rao, Prof. & Head, Dept of Chemistry
15. Dr. Sekhar Majumdar, Prof., Dept of Mechanical Engg.
16. Dr. Chirag Sharma, Professor, Dept of ECE
17. Dr. Mrinal Sarvagya, Professor, Dept of ECE
18. Dr. H Saroja Devi, Professor, Dept of CSE
19. Dr. V Krishnan, Professor, Dept of EEE
20. Dr. P G Mukunda, Professor, Dept of Mechanical Engg.
21. Dr. Kiran Aithal, Professor, Dept of Mechanical Engg.

#### **Few recommendations implemented are**

1. Taking up sponsored research projects from external funding agencies.
2. Stress on Interdisciplinary Research Activities
3. Motivating UG & PG students to involve in sponsored research projects and get additional credits.
4. Encouraging students for publishing their work in National/International Conferences/Journals.
5. To develop innovative products, leading to patents.

**Impacts**

1. The faculty are able to get funding from sponsoring agencies like DST, DIT, ADE, CAIR, NRB, VGST, VTU, IEEE etc for the proposed research projects.
2. Good amount of research projects are carried out & completed successfully.
3. The Institute has the multidisciplinary research in the areas like design, development of small satellites, vision based robotics and nano materials/ Technology.
4. Good numbers of UG & PG students are involved in implementation of research projects.
5. Both UG & PG Students have published their work in National/International Conferences/Journals

**3.1.2 What is the policy of the College to promote research culture in the College?**

- Faculty carrying out a Research Project, are given complete independence for execution of the Research Project.
- Faculty is encouraged to bring sponsored projects from external funding agencies.
- Faculty are provided complete support from the institution in terms of Infrastructure, Computational Facilities, and specially allotted time for carrying out research.
- Faculty carrying out a Research Project, have been given some reduction in the work load.
- Policy has been worked out for giving additional incentives.
- Financial support is given for faculty & student for publishing & patenting their work.
- The students undertaking research and development work are given recognition and other incentives.

**3.1.3 List details of prioritised research areas and the areas of expertise available with the College.**

Department	Research Areas
<b>R&amp;D NMIT</b>	Consortium of the Department of ME, ECE, EEE, CSE, ISE, Physics and Chemistry <ul style="list-style-type: none"> <li>• Robotics and Autonomous system</li> <li>• Small Satellite Program</li> <li>• Computer Vision based system for surveillance of Aerial and Ground vehicle</li> <li>• Image and Video Processing in Embedded Processor for Autonomous systems</li> <li>• MEMs Technology</li> </ul>
<b>CSE</b>	<ul style="list-style-type: none"> <li>• Image and Video Processing</li> <li>• Multisensor Fusion</li> <li>• Content Based Image and Video Retrieval</li> </ul>

	<ul style="list-style-type: none"> <li>• Underwater Imaging</li> <li>• Hyperspectral Imaging</li> <li>• Cryptography and Crypto analysis</li> <li>• Network Security</li> <li>• Wireless Sensor Networks</li> <li>• Performance analysis, compiler assisted parallel processing, image processing</li> <li>• Vehicular Adhoc Networks</li> <li>• Network on chip</li> </ul>
<b>ISE</b>	<ul style="list-style-type: none"> <li>• Parallel &amp; Grid Computing</li> <li>• Cloud Computing</li> <li>• Data Mining</li> <li>• Wireless Sensor Networks</li> <li>• Network Intrusion Detection</li> </ul>
<b>EEE</b>	<ul style="list-style-type: none"> <li>• Power System Operation &amp; Control</li> <li>• Power Quality</li> </ul>
<b>ECE</b>	<ul style="list-style-type: none"> <li>• MEMS</li> <li>• VLSI</li> <li>• Digital Signal Processing</li> <li>• Wireless Communication</li> <li>• Antenna &amp; Wave Propagation</li> <li>• Embedded processor Applications</li> </ul>
<b>Mech</b>	<ul style="list-style-type: none"> <li>• Advance Manufacturing</li> <li>• Computational Fluid Dynamics</li> <li>• MEMS</li> </ul>
<b>Civil</b>	<ul style="list-style-type: none"> <li>• Structures</li> <li>• Geo Technical Engineering</li> </ul>
<b>MBA</b>	<ul style="list-style-type: none"> <li>• Human Resource</li> <li>• Organization Behaviour</li> <li>• Economics</li> <li>• Marketing</li> <li>• Finance</li> <li>• International Business</li> </ul>
<b>MCA</b>	<ul style="list-style-type: none"> <li>• Mobile Adhoc Networks</li> </ul>
<b>Applied Sciences</b>	<ul style="list-style-type: none"> <li>• Fluid Mechanics</li> <li>• Graph Theory</li> <li>• Nano Composites</li> <li>• Spectroscopy</li> <li>• Organic Synthesis</li> <li>• Thin Film Technology</li> <li>• Corrosion inhibition studies</li> </ul>

### **3.1.4 What are the proactive mechanisms adopted by the College to facilitate smooth implementation of research schemes/projects?**

- **advancing funds for sanctioned projects**
  - Work on the project commences immediately once the sanction letter is received.
  - The college will fund in advance for the commencement of project
  - Infrastructure for Research (Laboratory and computational facilities) is provided by the college for smooth execution of the project.
  
- **providing seed money**
  - Additional research facilities are provided which are not covered under funded project.
  - Seed Money is provided through IEDC & TEQIP schemes.
  - Research associates are appointed and paid by the college
  
- **autonomy to the principal investigator/coordinator for utilizing overhead charges**
  - Principal Investigator is given the complete freedom and authority to execute project and utilize the funds associated with it.
  - Separate account /head is maintained in a bank for each project. There is complete autonomy given to Principal Investigator for utilizing overhead charges
  
- **timely release of grants**
  - Yes, Principal Investigator can use the funds as and when needed.
  
- **timely auditing**
  - Yes, College arranges for auditing accounts in time.
  
- **submission of utilization certificate to the funding authorities**
  - Yes, Utilization Certificates are submitted in time to the funding agencies

### 3.1.5 How is interdisciplinary research promoted?

- **between/among different departments of the College and**

The culture of interdisciplinary research among Faculty and Students of different disciplines has been initiated in this institute from 2008 onwards. A large number of sponsored projects in the areas of Micro Air Vehicle Technology, Robotics and Small Satellite granted to the institute from external sponsoring agencies such as ISRO, ADE, CAIR, DST, DIT, VGST, NRB, VTU etc. Faculty and Students drawn from different disciplines work together to execute these projects.

Two notable outcomes of the interdisciplinary research undertaken by the staff and students of the Institute are

1. Successful Development and launch of Student Sattelite of Pico category (less than 1kg)
2. Design and Development of Intelligent Robotic Systems

Faculty and Students are also working on following interdisciplinary research

1. Polymer Nano Composites
2. Network on Chip
3. MEMS
4. Diversity Management & Sustainable Development

- **Collaboration with national/international institutes / industries.**

- The Institute is carrying out Interdisciplinary Research in the areas of Nano Composites, MEMS, Robotics, Small Satellites etc in collaboration with
  - Indian Institute of Science
  - ISRO
  - Indo-Korean Institute of Science and Technology (IKIST)
  - Kritikal Solutions Private Limited , Noida
  - Hi-Tech Robotic Systemz Ltd, Gurgaon
  - Wittybot Technologies Pvt Ltd, Bangalore
  - Texas Instruments (India) Pvt. Ltd, Bangalore
  - Siemens Information Systems Ltd ,Bangalore
  - GE Global Research, Bangalore
  - Cypress Semi-conductors
  - Society for Automotive Engineers
  - Peenya Industries Association
  - Ministry for Small and Medium Enterprises (MSME)



### 3.1.6 Enumerate the efforts of the College in attracting researchers of eminence to visit the campus and interact with teachers and students?

The college invites eminent Researchers from within the country as well as from abroad to visit the campus and address students and staff. Some of the visits organised are

<b>Name of the Researcher</b>	<b>Organization</b>
<b>Dr V K Saraswat</b>	Scientific Advisor to Raksha Mantri, Director General, DRDO, Government of India.
<b>Mr Satheesh Reddy</b>	Distinguished Scientist, Director Agni Missile project Research Centre Imarat, DRDO, Hyderabad
<b>Mr V S Mahalingam</b>	Director Centre for Artificial Intelligence and Robotics, DRDO, Ministry of Defense, Government of India
<b>Dr. U R Rao</b>	Ex-Chairman ISRO, Bangalore
<b>Dr Mayilsamy Annadurai</b>	Project Director, Chandrayaan, Indian Space Research Organisation, Government of India
<b>Mr Raghava Murthy</b>	Project Director, Small Satellite Program, Indian Space Research Organisation, Government of India
<b>Dr. A Indra</b>	Scientist G ISTRAC, Bangalore
<b>Prof M Ravindran</b>	Chairman, Naval Research Board
<b>Prof. S M Deshpande</b>	Jawaharlal Nehru Centre of Advanced Scientific Research, Jakkur, Bangalore
<b>Dr. RMVGK Rao</b>	Former Head, CFD Division, NAL, Bangalore
<b>Dr. Venkatkrishnaiah</b>	Former Head, CFD Division, GTRE, Bangalore
<b>Dr. K P Singh</b>	Former Head, CFD Division, ADA, Bangalore
<b>Mr S K Shiva Kumar</b>	Director, ISRO Satellite Centre (ISAC), Indian Space Research Organisation, Government of India
<b>Prof. L M Patnaik</b>	IISc, Bangalore
<b>Prof. Kalidas Shetty</b>	North Dokota State University, USA
<b>Dr. K G Narayanan</b>	Former Director ADE, Chief Advisor, DRDO
<b>Dr. Arbind Kumar Gupta,</b>	Deputy General Manager, Siemens Technology and Services (STS) Pvt Ltd, Bangalore
<b>Mr. Kiran Rao,</b>	Siemens Technology and Services (STS) Pvt Ltd, Bangalore

<b>Mrs. Jayashree Varadhan,</b>	Scientist 'G', Additional Director, CVRD, Chennai
<b>Dr. Kumar Rajamani,</b>	Research Engineer, GE Global Research, Bangalore
<b>Dr. Easwar Subramanian,</b>	Scientist, TCS Innovation Labs, Hyderabad
<b>Dr. D S Guru,</b>	Professor, Dept. of Studies in Computer Science, University of Mysore
<b>Dr. Dinesh R,</b>	Technical Manager, HCL Technologies Ltd, Bangalore
<b>Dr. P. Nagabhushan</b>	Professor, Department of Studies in Computer Science Chief Nodal Officer: Credit based Choice Based Education University of Mysore
<b>Mrs. Lakshmi A</b>	Sc C, Centre for AI and Robotics(CAIR),DRDO Bangalore
<b>Dr. Malay Kumar Nema</b>	Sc E, Centre for AI and Robotics(CAIR),DRDO Bangalore
<b>Dr Pinaki Roychoudhary</b>	Sc E, Defence Terrain Research Laboratory, DTRL (DRDO),Delhi
<b>Dr. Prof. Justin Paul</b>	University of Washington
<b>Dr. Nagalingappa</b>	BOS Chairman VTU
<b>Dr. DS Murthy</b>	Sheshadripuram College, Bangalore.
<b>Dr K Chidananda Gowda</b>	Former Vice chancellor of kuvempu University
<b>Mr P Sharma</b>	Zombie Founder , Guru Prevails
<b>Mr P S Krishna</b>	Director, ADE (DRDO)
<b>Ms Neeta Trivedi</b>	Sc. G ADE (DRDO)
<b>Dr. Amit Apte</b>	TIFR, Bangalore
<b>Prof V Rajaraman</b>	SERC,IISC, Bangalore
<b>Mr Ganga Prasad</b>	CDAC, Bangalore
<b>Dr. Prasanna Ganapathy</b>	Director, Mcafee, Bangalore
<b>Mr. R. Sridharan</b>	Systems Software Development Group, CDAC, Bangalore
<b>Mr. Jigar Halani</b>	Technical Specialist-HPC, Wipro Infotech, Bangalore
<b>Mr. Hemanth Yamijala</b>	Technical Lead, Yahoo R&D, Bangalore
<b>Mr. Sachin Wasnik</b>	Autonomic Computing, IBM R&D, Bangalore
<b>Mr. Harish Kamath</b>	HP R&D, Bangalore
<b>Mr. Biju Uthup Scientist</b>	ADA, Bangalore
<b>Mr. Henry</b>	Program Coordinator, System Software Development Group, CDAC KP, Bangalore
<b>Mr. Prabhu.D</b>	Senior Engineer, EMC2, Bangalore

<b>Dr. Chandrashekharan</b>	NITk Suratkal
<b>Dr. V.S Prakash</b>	Director, Karnataka Natural Disaster Management
<b>Dr. Sadanand</b>	University Program Manager, ARM Embedded Technologies Pvt Ltd
<b>Dr.D.K subramanya</b>	IISc, Bangalore
<b>Dr. Rudra Prathap</b>	IISc, Bangalore
<b>Dr.N.S.Murthy</b>	Director, NXP
<b>Mr. Sriniramaswamy</b>	ABB
<b>Prof. Mohan</b>	IISc, Bangalore
<b>Prof. K.N Bhat</b>	IISc, Bangalore
<b>Prof. Narasimha Rao</b>	IISc, Bangalore
<b>Dr. A.R.Phani</b>	Nanoram Technologies
<b>Dr.C.P.Ravikumar</b>	Director of University, alliance TI
<b>Dr. Hari</b>	IISc, Bangalore
<b>Dr.Anand Mohan</b>	ECIL
<b>Dr Cyril Prasanna Raj</b>	Dean (R&D),MSRIT
<b>Prof Chaitra</b>	DRDO
<b>Prof. N.Rudraiah</b> <b>Dr.M.Venkatachalappa</b> <b>Dr.I.S.Shivakumara</b>	Bangalore university
<b>Mr. KP. Murthy</b>	BOSCH
<b>Mr Michal Donet</b>	GMBH
<b>Dr. Ram Thurag</b>	Bloom Energy Inc.
<b>Dr. Jayavanth. H. Arakeri</b>	Chairman, ME Deptt, IISc, Bangalore
<b>Dr. C Suryanarayana</b>	Head, Proprietor Division, NSTL (DRDO) Vizag
<b>Mr. Sunil Nandihalli</b>	Manager, GRID PRO Limited, Bangalore
<b>Mr. Arun Murthy</b>	Vice President (Technical)Transoft International, Bangalore
<b>Prof. P.C. Pandey</b>	IISc, Bangalore

### **3.1.7 What percentage of faculty have utilized sabbatical leave for research activities? How has the provision contributed to the research quality and culture of the College?**

- College has a scheme of deputing faculty to IISc, IITs, and NITs etc with salary and leave to pursue research degrees leading to Ph.D/M.Tech.
- A few Professors are permitted to carry out research in Industries during Vacations.

### **3.1.8 Provide details of national and international conferences organized by the College highlighting the names of eminent scientists/scholars who participated in these events.**

- The College conducted an International Conference on the topic “Emerging Research in Computing, Information, Communications and Applications” (ERCICA-2013) on 2<sup>nd</sup> & 3<sup>rd</sup> August 2013.
  - Dr. Sathish S Udpa, Dean & Executive Vice President, Michigan State University System, USA delivered the Key Note address.
  - Prof. R Natarajan, Former –Director, IIT Madras and Former Chairman AICTE, New Delhi was the Guest of Honor.
  - Prof. L M Patnaik, Professor, IISc was a special Invitee
  - The conference attracted many researchers both within the country as well as abroad
  - All the papers presented at the conference are published through Elsevier Publications.
  - The Pre- conference Tutorials were conducted in the area of Video & Image processing and Scientific Clouds.

### **3.1.9 Details on the College initiative in transferring/advocating the relative findings of research of the College and elsewhere to the students and the community (lab to land).**

- A Pick and Place Robot has been developed and installed in Birla Science Centre, Hyderabad. The project is sponsored by IEEE, USA & CAIR (DRDO)
- Optical Fiber Link for Multimedia communications has been developed and installed in Birla Science Centre, Hyderabad. The project is sponsored by IEEE, Hyderabad.
- NASTRAC – A state of the art Ground Station for Amateur Satellite Tracking has been established in the college. This facility has been taken advantage by Surry Univ- UK, IIT- Kanpur and SRM Univ, Chennai to track their student satellites.

- Student Satellite Program facilities like satellite Research Lab, Clean Room and Satellite Tracking Centre are established in the college are being used by students of different colleges of India.

**3.1.10 Give details on the faculty actively involved in research (Guiding student research, leading research projects, engaged in individual or collaborative research activity etc.)**

Department	Name of the faculty	Involved in Guiding Student research /leading research projects/engaged in individual / collaborative research activity (List the activity)	Area
<b>MECH</b>	Prof. Sekhar Majumdar	Involved in Guiding Student research and collaborative research activity	CFD
	Prof. P G Mukunda	Involved in Guiding Student research and collaborative research activity	Material science and Manufacturing
	Dr. P B Shetty	Involved in Guiding Student research	Aircraft materials
	Dr. Sudheer Reddy	Involved in Guiding Student research	Material science and Manufacturing
	Prof. Desai Gowda H S	Involved in Guiding Student research	Material science and Manufacturing
	Dr. Kiran Aithal S	Involved in Guiding Student research	Material science and Manufacturing, machine design
<b>ECE</b>	Dr. H.C.Nagaraj	Guiding Student research	Bio medical signal processing
	Dr. S.L. Pinjare	Guiding Student research , Leading research projects, ,Collaborative research projects (NPMASS)	MEMS
	Dr. Mrinal Sarvagya	Guiding Student research, Leading research projects	Digital communication
	Dr. Rukmini	Guiding Student research	Antenna wave and propagation
	Prof. Sankar Dasiga	Guiding Student research Leading research projects	Sattelite Program, Embedded

			Systems
	Dr. Srinivassappa	Individual Research	Power Electronics
	Ms. Veda Sandeep Ms. Madhu Patil Ms. Manjula B M Ms. Sowmya M Ms. Varsha P Mr. Prasanna Paga Mr. Rajesh N Mr. Girish G k Mr. Shashidhar K S Ms. Rekha Padke	Individual Research	MEMS, Fault Tolerance, Analog VLSI, Analog Electronics, Image Processing, DSP
<b>EEE</b>	Dr.H.M.Ravikumar	Guiding Student research	Power system operation & control
	Dr.V.Krishnan	Guiding Student research	Power Quality
	Mrs. Samanvita. N	Individual research	Robotics
	Mr. Vinayak. K.U	Individual research	Power quality
	Ms. Vasudha Hegde	Individual research	MEMS
<b>CSE</b>	Dr Jharna Majumdar,	Guiding UG, PG and Ph.D student research, leading research projects, engaged in individual, Interdisciplinary sponsored and collaborative research activity	Image and Video Processing, Vision Based Robotics
	Dr. Nalini	Guiding & leading research project, Guiding Individual research	cryptography and network security
	Dr. Sarojadevi	Guiding & leading research project, Guiding Individual research	Parallel computer architecture
	Kavitha S.	Individual research	Network
	Mrs. Bhuvaneshwari S Patil	Guiding Students (UG & PG) & Individual research	Digital Image Processing
	Mrs. Aparna Manikonda	Guiding Students (UG & PG) & Individual research	Digital Image Processing
	Mr. Santhosh Kumar K L	Guiding Students (UG & PG) & Individual research	Digital Image Processing
	Mrs. Pallavi M	Guiding Students (UG & PG)	Digital Image Processing
	Mrs. Laxmidevi Noolvi	Guiding Students (UG & PG)	Digital Image Processing

	Mohan B.A.	Individual research	Wireless sensor networks
	Nagaraj S.R	Individual research	Vehicular adhoc networks
	Prathibha Ballal	Individual research	Compiler assisted parallel processing
	Vijaya Shetty	Individual research	System performance
	Sanju	Individual research	Network Onchip
<b>ISE</b>	Dr. H.A Sanjay	Guiding student research, leading research project, engaged in research activity, guiding Ph.D, M.Tech student research.	Cloud, Grid, Parallel computing,
	Dr. Prasanta Gogoi	Engaged in research activity, guiding Ph.D, M.Tech student research	Network Security & Data Mining
	Mr. Srinivas D.B	M.Tech student research, Individual Research	Grid computing and cluster
	Mr. Adithya shastry.	M.Tech student research, Individual Research	Data mining, cloud computing
	Mrs. Ashwini. J.P	M.Tech student research, leading research project, Individual Research	Cloud computing, high performing computing
	Mr. Karunakara Rai	Individual Research	Fault Tolerant Systems
<b>Civil</b>	Dr. H.R Dhananjaya	Guiding students' research	Structural Engineering, FEM
	Mr. Jairaj. C	Individual research	Geotechnical engineering
<b>MBA</b>	Dr. Sridhar S.	Guiding PhD students, Guiding students' research, applying for research grants, individual research	Finance, HR
	Dr. Jayasmita Rath	Guiding PhD students, Peer reviewer for IBR, IJSSP (Indexed by Emerald Insight and Elsevier), GJBMR, Guiding students' research project, applying for research grants, individual research	HR, General Management, Marketing
	Prof. Senthil Kumar	Guiding students' research	Marketing and HR

		and individual research	
	Dr. Harish Babu	Guiding Ph.D students, guiding student's research, applying for research grants.	Finance and Marketing
	Prof. Kiran Kumar	Guiding students' research and individual research	Marketing
	Prof. Shilpa Ajay	Guiding students' research and individual research	HR and Marketing
	Prof. Sridhar N	Guiding students' research and individual research	HR and Marketing
	Prof. Deepali Kusanale	Guiding students' research and individual research	Finance
	Prof. Ashwath Reddy	Guiding students' research and individual research	Finance
	Prof. Nayana Desai	Guiding students' research and individual research	Marketing
<b>MCA</b>	Dr. Prasad NH	Guiding student research	Ad-hoc Networks
	Ms. Shruthi. B.V	Individual research	Wireless ad-hoc network
<b>Physics</b>	Dr. Jeevan Kumar	leading research projects	Nano Composites
<b>Chemistry</b>	Dr. Srilatha Rao	Guiding Student research	Organic Chemistry
	Dr. Aravinda T	Guiding Student research	Organic Chemistry
<b>Mathematics</b>	Dr. Indira R	Guiding Student research	Bio-Fluid Mechanics
	Mrs. Revathi B R	Individual Research	Computational fluid mechanics
	Mr.Dhananjaya Murthy B V	Individual Research	Graph theory
	Mrs. Chandra Kala S B	Individual Research	Graph theory
	Mrs. Padmavathi R	Individual Research	Fluid mechanics
	Mr. Jagadeesha S	Individual Research	Heat and Mass transfer, Bio-Fluid dynamics
	Ms. Sujataha N	Individual Research	Fluid Mechanics



## 3.2 Resource Mobilization for Research

### 3.2.1 What percentage of the total budget is earmarked for research? Give details of major heads of expenditure, financial allocation and actual utilization for last four years.

- \* College has made provision in the annual budget which is being used for creating research facilities in different departments
- \* Research Associates have been employed for successful execution of the sponsored research projects.
- \* Fully equipped Laboratories have been established.

Year	Major Head	Budget allocation (Rs in lakhs)	Utilization (Rs in lakhs)
2009-10	Equip	25.00	18.90
	Man power	3.00	1.86
	Cons, sem etc	2.00	0.75
2010-11	Equip	10.00	5.10
	Man power	8.00	5.35
	Travelling	0.25	0.10
	Furniture	0.50	0.37
2011-12	Equip	10.00	4.66
	Man power	9.00	6.20
	Travelling	1.00	0.88
2012-13	Equip	10.00	1.09
	Man power	10.00	8.11
	Seminar	1.00	0.31
	Travelling	0.50	0.28
2013-14	Equip	25.00	-
	Travelling	5.00	-
	Seminar	5.00	-
	Man Power	5.00	-

### 3.2.2 What are the financial provisions made in the College budget for supporting student research projects?

- The Research budget includes the funding for both faculty and student research projects
- Over and above the budget, the college funds the innovative students projects
- In addition under IEDC program every year 5 students' innovative projects are funded with Rs. 1 Lakh for each.

- Under TEQIP/GATE program, teaching assistant ship is given to PG students

**3.2.3 Is there a provision in the institution to provide seed money to faculty for research? If so, what percentage of the faculty has received seed money in the last four years?**

- Yes, 15-20% of the faculty have received seed money
- Additional research facilities are provided which are not covered under funded project.
- Seed Money is provided through IEDC & TEQIP schemes.
- The college has a scheme of appointing Research associates to support the faculty and their salary is paid by the college

**3.2.4 Are there any special efforts made by the College to encourage faculty to file for patents? If so, provide details of patents filed and enumerate the sanctioned patents.**

Yes, college has funded for filling and obtaining the patents certificate. The following are the list of patents filed and obtained

Sl. No	Title	Inventor	Year
1	Ground Station to Track Satellites in Low Earth Orbit – NASTRAC (Awarded Final Patent)	Dr. Jharna Majumdar, DEAN R & D, Prof. CSE & Team of Students, Nitte Meenakshi Institute of Technology, Bangalore	2011-13
2	System and Method for Horizon Detection on Aerial Vehicle (Awarded Final Patent)	Dr. Jharna Majumdar, DEAN R & D, Prof. CSE & Team of Students, Nitte Meenakshi Institute of Technology, Bangalore	2011-13
3	Priority datenatitle of invention network router using forward flow feasibility function for channel selection (Patent Filed-2010)	Ms. Kavitha soda	2010
4	Automatic Contrast Limited Adaptive Histogram Equalization Method (Patent Filed – 2013)	1. Dr. Jharna Majumdar, DEAN R & D, Prof. CSE Nitte Meenakshi Institute of Technology, Bangalore  2. Santhosh Kumar K L, Final Year M Tech Student Nitte Meenakshi Institute of	July 2013

	Technology, Bangalore	
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### 3.2.5 Provide the following details of ongoing research projects:

	Yearwise	Number	Name of the project	Name of the funding agency/Industry	Total grant received
<b>a. College funded</b>					
Minor projects					
Major projects	2011– 2014	1	STUDSAT- 2		
Along with Industry	2010-				
<b>b. Other agencies - national and international (specify)</b>					
Minor projects	2011-12	1	Low cost solution for Automated Irrigation System	VGST-TRIP	0.4 Lakh
	2012-13	5	E-pay, All-wheel Drive Bike, Kinetic Energy Recovery System, Modelling & Simulation of Transition Flow, Blind-NAV	IEDC	5 Lakhs
Major projects	2010-2011	1	STUDSAT- 2	Consortium of Colleges with NMIT as the Lead Centre	55 Lakhs
	2010 – 2011	1	STUDSAT - 2	VTU	45 Lakhs,
	2010-2012	1	Numerical simulation of complex flows with Laminar to Turbulent Transition	VTU	7.42Lakhs

		1	Effect of Urbanization on PACS,	ICSSR	3.37 Lakhs
	2011 – 2012	1	STUDSAT 2,	VTU,	45 Lakhs
		1	International Trade	NABARD	8.20 Lakhs
		1	Efficient Searching framework	VGST	4 Lakhs
		1	Edu-cloud	VTU	5.6 Lakh
		1	Generalized Mathematical Modelling	VTU	3 Lakhs
	2012-13	1	Enabling cloud for HPC application	DIT	15.26 Lakh
		1	Fiber Optics link	IEEE	6.7 Lakh
		1	Polymer MEMS	VGST	40 Lakhs
		1	Zero Padding OFDM signal	VGST	10 Lakh
		1	Design and Development of Robot Mechanisms,	DST	28 Lakhs
		1	Development of a Real Time Human Tracking Capability on a Mobile Platform	DRDO	9.9 Lakhs
		1	Development of Algorithms for Video Shot Detection and Video Summarization	DRDO	17.33 Lakhs
	2011-2014	1	Modelling and Simulation Transitional Flows	NRB	21.15 Lakhs

<b>c. Industry sponsored</b>					

**3.2.6 How many departments of the College have been recognized for their research activities by national / international agencies (UGC-SAP, CAS, DST-FIST; DBT, ICSSR, ICHR, ICPR, etc.) and what is the quantum of assistance received? Mention any two significant outcomes or breakthrough due to such recognition.**

Departments	Agencies	Amount Received (Rs)	Outcomes
<b>All departments</b>	NSTEDB (IEDC)	55 Lakhs	<ul style="list-style-type: none"> <li>• Every Year 5 students' Innovative projects are financially supported and successfully implemented</li> </ul>
<b>R &amp; D NMIT CSE (PG)</b>	DRDO	80.75 Lakhs	<ul style="list-style-type: none"> <li>• Micro Air Vehicle Technology, Image and Video Processing in Embedded Processor for Autonomous Vehicle</li> </ul>
<b>R &amp; D NMIT (Mech, ECE, EEE, CSE, ISE)</b>	DST & DRDO	37.9 Lakhs	<ul style="list-style-type: none"> <li>• Autonomous Mobile Robots for Human Tracking and Road Sign Identification</li> <li>• Intelligent fixed and Mobile Robots on Museum Exhibit</li> </ul>
<b>CSE</b>	AICTE	8.5 Lakhs	<ul style="list-style-type: none"> <li>• Optimization Techniques for Cryptanalysis</li> </ul>
<b>ISE</b>	DIT	15.26 Lakhs	<ul style="list-style-type: none"> <li>• Technology to Enable cloud for HPC applications</li> </ul>
<b>Mech</b>	NRB (DRDO)	21.15 Lakhs	<ul style="list-style-type: none"> <li>• CFD Technology</li> </ul>
<b>MBA</b>	ICSSR	3.37 Lakhs	<ul style="list-style-type: none"> <li>• Survey report will be useful for Govt. Agency</li> </ul>
	NABARD	8.20 Lakhs	<ul style="list-style-type: none"> <li>• Survey report will be useful for Govt. Agency</li> </ul>
<b>R &amp; D NMIT CSE (PG), Mech, ECE, EEE</b>	IEEE	15.7 Lakhs	<ul style="list-style-type: none"> <li>• Robotic Exhibit in Hyderabad Museum</li> <li>• Fibre Optics Link for Voice and Video data in Hyderabad Museum</li> </ul>
<b>ECE</b>	IEEE	6.7 Lakhs	<ul style="list-style-type: none"> <li>• Museum Exhibit</li> </ul>
<b>ECE, Physics, ISE</b>	VGST	54 Lakhs	<ul style="list-style-type: none"> <li>• Efficient Searching Technique</li> <li>• Polymer MEMS</li> <li>• Zero Padding OFDM Signal</li> </ul>

<b>CSE (PG) ISE, ECE, EEE, Mech, CSE, Maths</b>	VTU	53.6 Lakhs	<ul style="list-style-type: none"> <li>• Twin Satellites</li> <li>• Edu-Cloud</li> <li>• Generalized Mathematical Model</li> <li>• Transition Modelling</li> </ul>
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**3.2.7 List details of completed research projects undertaken by the College faculty in the last four years and mention the details of grants received for such projects (funded by Industry/National/International agencies)**

<b>Department</b>	<b>Project Title</b>	<b>Investigators</b>	<b>Agency</b>	<b>Amount Sanctioned</b>	<b>Year in which Project Sanctioned</b>	<b>Status (Ongoing /Completed)</b>
<b>EEE</b>	“Navigation gridlock system”	Mr.Parathasarthy	IEDC	30,000	2010	Completed
<b>ECE</b>	Luminance based lighting Control	Dr. S.L.Pinjare	IEDC,DST	01Lakh	2012	Completed
	Pico Hydro System	Dr. Chirag Sharma	IEDC,DST	01Lakh	2012	Completed
	Door Sensing Mobile Robot	Prof Shankar Dasiga	IEDC	1 Lakh	2011	Completed
<b>MECH</b>	Modeling & Analysis of Fluid Behavior in Centrifugal Casting	Dr.Shailesh Rao, Prof. P G Mukunda	VTU	8.62 Lakhs	2010	Completed
	Numerical simulation of	Prof. Sekhar Majumdar	VTU	7.42 Lakhs	2010	Completed

	complex flows with Laminar to Turbulent Transition					
	Modeling & Simulation of Transitional Flows	Prof. Sekhar Majumdar Mr. Y.J.Jagadeesh	NRB(DRD O)	21.15 Lakhs	2010	Completed
	All Wheel Drive Bike (AWD)	Mr. H.S. Desai Gowda	IEDC	1 Lakh	2011	Completed
	Kinetic Energy Recovery System (KERS) for two Wheelers	Mr.E. Balaraman	IEDC	1Lakh	2011	Completed
	Industrial Robot Automation	Prof. Jharna Majumdar Prof. P.G.Mukunda	CAIR(DRD O)	9.5 Lakhs	2010	Completed
	Harvesting energy from the vibrations of an automobile engine using Piezo – ceramic crystals	Prof. P.G.Mukunda	IEDC	1 lakh	2010	Completed
	Design and Modelling of VTOL	Dr. Kiran Aithal S	IEDC	1 lakh	2011	Completed

(Vertical Takeoff & Leading Vehicle)						
Performance test on four stroke Diesel engine using Biodiesel Methyl ester of used vegetable oil as fuel	Mr. Madhusudan	KSCST	Rs. 4500/-	2011	Completed	
To produce biodiesel from milk dairy wash water scum and to study its performance and properties as a blended fuel in IC engines	Mr. Raviprakash	KSCST	Rs. 8000/-	2011	Completed	
Diesel-Jatropa-Ethanol: Performance on C.I Engine	Mr. Manjunath HN	KSCST	Rs. 8000/-	2011	Completed	
Organic processing facility	Mr. Rudra Naik M	KSCST	Rs. 6000/-	2011	Completed	



	to generate high quality renewable fuel as biogas from the utilization of kitchen wastes					
CSE	Cryptanalysis of Stream and Block Ciphers Using Optimization Techniques	Dr. Nalini	AICTE-RPS	8.5lakh	2011	Completed
	Separation of Sky and Non-sky region from Micro Air Vehicle (MAV) Video by using Texture based Image classification	Dr. H. Sarojadevi and Dr. Jharna Majumdar	IEDC	1 lakh	2010-11	Completed
	3D Game for Android	Dr. H. Sarojadevi	FAER	Rs 5,000/-	2010-11	Completed

<b>MBA</b>	Effect of urbanization on PACS in Peri-urban areas	Dr. Ashwini Kr. BJ and Prof. Harish Babu	ICSSR	3,37,550	2010	Completed
	Solution for Backdoor Virus	Dr. Sanjay H A and Sreenivas D B	DST	1 Lakh	2011	Completed
<b>ISE</b>	NODU System	Dr. Sanjay H A and Ashwini J P	DST	1 Lakh		Completed
	Industrial Robot Automation	Dr. Jharna Majumdar	Centre for Artificial Intelligence and Robotics, CAIR, DRDO	Rs. 9.5 Lakhs	October 2009 – October 2010	Completed
<b>CSE (PG)</b>	Detection of Horizon in MAV Images	Dr. Jharna Majumdar	Aeronautical Development Establishment [ADE], DRDO	Rs 9.9 Lakhs	August 2008 – July 2009	Completed
	Computer Vision Based Horizon Detection from MAV Video and Estimation of Attitude from Horizon Vision	Dr. Jharna Majumdar	Aeronautical Development Establishment [ADE], DRDO	Rs 9.6 Lakhs	October 2009 – August 2010	Completed
	Developm	Dr. Jharna	Aeronautica	Rs 9.85	January	Complete

	ent of Video Processing Techniques for Removal of Image Perturbations	Majumdar	l Development Establishment [ADE], DRDO	Lakhs	2010 – July 2011	d
	Development of algorithms for fusion of multi sensor, multi spectral, multi focus imagery	Dr. Jharna Majumdar	VTU Research Fund	Rs 8.17 Lakhs	January 2011 – January 2012	Completed
<b>R&amp;D NMIT</b>	STUDSAT (STUDENT SATellite) To design, develop and Fabricate India's First Pico Satellite	Dr. Jharna Majumdar	Consortium of Seven Colleges with NMIT as the Lead Institution, Vision Group of Science and Technology, Karnataka	Rs55.00 Lakhs	July 2008 – July 2010	Completed
	Articulated 5 DOF Pick and Place Robot	Dr. Jharna Majumdar	IEEE- USA Centre for Artificial Intelligence and Robotics, DRDO	Rs 9.00 Lakhs	February 2011 – January 2012	Completed
	Segmentation and	Dr. Jharna Majumdar	Innovative Entrepreneur	Rs 1.00 Lakhs	July 2010 – June	Completed

	Classification of sky and non sky region using Texture and Neural Network Classifier		r Development Cell (IEDC), New Delhi		2011	
	Door Sensing Mobile Robot	Dr. Jharna Majumdar	Centre for Artificial Intelligence and Robotics (DRDO)	Rs 5.00 Lakhs	December 2010 – October 2011	Completed
	Door Sensing Mobile Robot	Dr. Jharna Majumdar	Innovative Entrepreneur Development Cell (IEDC), New Delhi	Rs 1.00 Lakhs	July 2010 – June 2011	Completed

### 3.3 Research Facilities

#### 3.3.1 What efforts are made by the College to keep pace with the infrastructure requirements to facilitate Research? How and what strategies are evolved to meet the needs of researchers?

- College research council will identify the research funding agency and support the researchers in getting funds.
- Provision is made in the budget for providing Infrastructure facility for the researchers.
- Laboratories have been setup in the thrust areas of research to facilitate Faculty and Researchers to execute their work.
- Fully furnished Air conditioned laboratories are provided with computational facilities and internet.

#### 3.3.2 Does the College have an information resource centre to cater to the needs of researchers? If yes, provide details on the facility.

- Library with books , journals, and E journals
- Researchers are provided with computing and internet facility.
- The Institute has a proposal of Setting up of a Data Center under TEQIP scheme.

#### 3.3.3 Does the College provide residential facilities (with computer and internet facilities) for research scholars and faculty?

Yes

- Research Scholars are provided with Hostel Facility having Wi-fi connectivity
- About 20% of the Faculty are provided with residential accommodation.

#### 3.3.4 Does the College have a specialized research centre/ workstation to address challenges of research programmes? If yes, give details.

Yes.

- Center for Design & Development and Launching of Small Sattellite
- Center for Design & Development of Vission Based Robots
- Center for Nano Materials & MEMS
- Center for Design & Process Simulation
- Center for Computational Fluid Dynamics
- NASTRAC (Nitte Amateur Satellite Center)
- Image and Video Processing Lab

- R&D Lab -CSE
- Advance Manufacturing Lab
- Advance Power Electronics Lab
- Parallel, Grid & Cloud Computing Research Lab
- MEMS Design Centre
- Cypress PSoC Lab
- IEDC Lab (Innovation Centre )
- Organic Synthesis Facility
- Wireless Networking Facility
- Polymer MEMS Applications Design Facility

**3.3.5 Does the College have research facilities (centre, etc.) of regional, national and international recognition/repute? Give a brief description of how these facilities are made use of by researchers from other laboratories.**

Name of the Facility	Recognition	Recognized/Used by	Description
Clean Room Facility for Satellite Program	National	ISRO, Engineering Institutes of India	Used to integrating Faculty and students of consortium of engineering colleges
NASTRAC (Nitte Amateur Satellite Center)	International	ISRO, Surry University-UK, IIT-Kanpur, SRM University, Chennai	Used to track satellites
Robotic Laboratory	National	Indo-Korean Institute of Science and Technology ,CAIR	Used for robotics research

### 3.4 Research Publications and Awards

#### 3.4.1 Highlight the major research achievements of the College through the following:

- major papers presented in regional, national and international conferences

PLEASE REFER ANNEXTURE A

- **Publication per faculty**

Publication per faculty: 2.47

Department	Name of faculty	No. of Publications per faculty
ECE	Dr H.C.Nagaraj	12
	Prof. M. Swamy	1
	Dr. Pinjare	14
	Dr. Mrinal	6
	Dr. Chirag Sharma	5
	Mr. Shashidhar	1
	Mr. Srinivasappa	6
	Ms.Veda N	11
	Ms.Varsha	3
	Ms.Sowmya	6
	Ms.Madhu	3
	Ms Manjula	2
	Dr Rukmini	5
	Prof Rajesh	5
	Prof Seema	1
	Prof Sankar Dasiga	2
	Prof Girish G.K	1
	Prof Prasanna Paga	1
	Prof Naina Karkal	1
Prof Loganathan	1	
MCA	Dr Prasad N H	6
	Ms Deepti Shetty	1
	Ms Uma R	2
	Ms Shruthi B V	1
	Lakshmi Narayan	2

<b>ISE</b>	Dr. Sanjay.H.A	16
	Prasanth Gogoi	05
	K. Aditya. S	03
	Ashwini.J.P	06
	Lakshmi.M	01
	Chandrashekhar.B.N	05
	Bini.Y.Baby	01
	Kshema Raphael	01
	Kavitha Kulkarni	01
	Deepika.K.M	02
	Rohit H P	01
	Manjunatha B A	01
<b>MBA</b>	Sambatur Sridhar	20
	Senthil Kumar	8
	Harish Babu S	18
	Jayasmita. Rath	5
	Shilpa Ajay	2
	Kiran Kumar	5
	Shreedar	1
<b>Chemistry</b>	Dr. Srilatha Rao	6
	Dr. Aravinda T	7
<b>Physics</b>	Dr. Jeevan Kumar P	8
<b>CSE</b>	Dr. Jharna Majumdar	95
	Mrs. Aparna Manikonda	10
	Mrs. Bhuvaneshwari Patil	4
	Pallavi M	1
	Santhosh Kumar K.L.	1
	Dr. Nalini	35
	Dr.H. Sarojadevi	34
	Vidyadevi Biradar	9
	Kavitha Sooda	13
	Prathibha Ballal	5
	Vijaya Shetty S.	6
	Mohan B.A.	4
	Nagaraj S R	2
Sanju	2	
<b>EEE</b>	Dr.H.M.RaviKumar	02
	Mrs.Vasudha Hedge	01
	Mr.V.M.Parthasarathy	03
	Mrs.Veena	03
	Mrs.Maya	01
	Mr.Sanjeev nayak	4



<b>MECH</b>	Dr. P G Mukunda	27
	Dr. Sekhar Majumdar	24
	Dr. P B Shetty	6
	Dr. Sudheer Reddy	4
	Mr. Desai Gowda H S	5
	Mr. Kiran Aithal S	9
	Mr. Madhusudhan	8
	Mr. Sriram Mukunda	2
	Mr. Manjunath H. N	2
	Mr. Rudra Naik. M	2
	Mr. Ramesh Babu. N	1
	Mr. Sunil Kumar H. S	1
<b>Aeronatical</b>	Mr. Santhosh	1
<b>Maths</b>	Dr. Indira	11
	Mr. Dhananjaya Murthy	02
	Sujatha N	06
	Chandrakala S B	01
	Padmavathi R	01
	Jagadish S	01

- **Faculty serving on the editorial boards of national and international journals**

<b>Department</b>	<b>Faculty Name</b>	<b>Journal Name</b>
<b>CSE</b>	Dr. Jharna Majumdar	Defence Science Journal, International Journal for Robotics
	Dr.Nalini	ANUSANDHANA-Journal of Science, Engineering and Management (ISSN-2231-4032), Research Journal of Information Technology, Maxwell Scientific Organization, <a href="http://www.maxwellsci.com">http://www.maxwellsci.com</a> .
<b>MECH</b>	Dr.Sekar Majumdar	Journal of Air craft sciences & technology, Defence science journal, Sadhana, Current science, Pramana, International journal of Thermal sciences, Numerical heat transfer, Journal of computational physics, Applied mathematical modeling

- **Faculty members on the organisation committees of international conferences, recognized by reputed organizations / societies.**

<b>Faculty Name</b>	<b>International Conference Name</b>	<b>Serving as a (Program me committee, organizing committee, etc)</b>
<b>Dr. Jharna Majumdar</b>	National Research Initiative on Micro air Vehicle Jan 2008-April 2009	Review Member, Expert Committee
<b>Dr. Jharna Majumdar</b>	NRI MICA V, a national project between DRDO and CSIR from July 2010	Member, Program Management Board
<b>Dr. Jharna Majumdar</b>	NRI MICA V From May 2012	Review Member 'Vision and Image Processing Cluster'
<b>Dr. Jharna Majumdar</b>	Digital Image Exploitation System for the Main Battle Tank Arjun, CVRDE(DRDO), Chennai 2005-07	Chairman, Review Committee
<b>Dr. Jharna Majumdar</b>	SATTV 'Development of sensor Mounted Autonomous Tracked Vehicle', CAIR(DRDO), Bangalore 2007-till date	Member, Review Committee
<b>Dr. Jharna Majumdar</b>	IVP-NCO 'image and Video technologies for Net Centric Operations', CAIR(DRDO), Bangalore 2007-Till date	Member, Project Management and Review Committee (PMRC)
<b>Dr. Jharna Majumdar</b>	Defense Science Journal from 2004	Reviewer
<b>Dr. Sanjay H A</b>	ICACCI-2013, ICACNS-11	Program Committee Member

	ICHMI-2004	Organizing Committee Member
<b>Dr. Mrinal S</b>	ERCICA-13	Organizing Committee Member
<b>Dr. Jayasmita Rath</b>	IBR, IJSSP (Indexed by Emerald Insight and Elsevier), GJBMR,	Program Committee Member
<b>Dr. Nalini N</b>	ERCICA-13	Organizing Committee Member
<b>Dr. Prasad M</b>	ERCICA-13	Organizing Committee Member
<b>Dr. P. G. Mukunda</b>	Materials Research	Reviewer of the Brazilian international journal

### 3.4.2 Does the College publish research journal(s)? If yes, indicate the composition of the editorial board, publication policies and whether it is listed in international database?

Yes, NMIT is publishing a biannual journal “Anusandhana” – Journal of Science, Engineering & Management with ISSN No-22314032

- Editorial Board: Professors from reputed Organizations like IISc, DRDO etc.
  - Dr. L.M. Patnaik, Former Vice Chancellor, DIAT, Pune.
  - Shri. V.S. Mahalingam, Director, CAIR, Bangalore.
  - Dr. P.V. Ananda Mohan, Senior Technical Expert, ECIL, Bangalore.
  - Dr. J.H. Arakeri, Professor and Chairman, Dept. of Mechanical Engineering, IISc, Bangalore.
  - Dr. C.P. Ravikumar, Texas Instruments, Bangalore.
  - Dr. Channakeshava, Director (Retd), CPRI, Bangalore.
  - Dr. K.R. Venugopal, Special Officer, DVG, Bangalore University, Principal, UVCE, Bangalore.
  - Dr. K. Ramachandra, Director (Retd), Gas Turbine Research Institute (GTRE), Bangalore
  - Dr. N. Rama Murthy, Additional Director, CAIR, DRDO, Bangalore.
  - Prof. Pradeep G. Siddheshwar, F.I.M.A (U.K), (F.N.A.Sc), Dept. of Mathematics, Bangalore University. Bangalore.
  - Prof. K. B. Akhilesh Dept. of Management Studies IISc, Bangalore.
  - Dr. H. C Nagaraj, NMIT Bangalore.
  - Dr. Nalini.N, Editor-in-Chief, NMIT Bangalore.
  - Prof. Ranganath Setty, NMIT, Bangalore.
  - Dr. Sekar Majumdar, NMIT, Bangalore.
  - Dr. Jharna Majumdar, NMIT Bangalore.
  - Dr. P.G. Mukunda, NMIT, Bangalore.
  - Dr. S.L. Pinjare NMIT, Bangalore.
  - Dr. Jayasmita Rath, NMIT, Bangalore.
  - Dr. R. Indira, NMIT, Bangalore.

- Publication Policy:
  - ANUSUDHANA will be published Bi-annually. Authors are invited to submit their original, unpublished research work for publication in the journal. All the submitted articles will be peer reviewed before publication.
- No. It is not listed in International database

### 3.4.3 Give details of publications by the faculty:

- **Number of papers published in peer reviewed journals (national / international):**  
170
- **Monographs :** Nil
- **Chapters in Books :** 2
- **Editing Books:** 4
- **Books with ISBN numbers with details of publishers :**
  - Processor Directed cache coherence mechanism: ISBN No: 978-3-659-11944-6, , Lambert Academic Publishing, Germany: Dr. Saroja Devi
  - Tool assisting cancer cell classification: ISBN No: 978-3-659-26095-7, Lap Publishing: Ms. Vidyadevi G Biradar
  - Internet and Web Technology: ISBN-10:8183712452, SciTech Publications (India) Pvt. Ltd., 2009
  - Internet and Web Technology ,second edition: ISBN-13:9788183712453, SciTech Publications (India) Pvt. Ltd., 2011
- **Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)**
  - 39
- **Citation Index – range / average**
  - 1 to 19
- **SNIP**  
Nil
- **SJR**  
Nil
- **Impact factor – range / average**
  - 0.52 to 2.85
- **h-index :** 3

**3.4.4 Indicate the average number of successful M.Phil. And Ph.D. scholars guided per faculty.**

Department	No of Ph.D Scholars Completed successfully
ECE	3
CSE	1
Maths	2

**3.4.5 What is the stated policy of the College to check malpractices and misconduct in research?**

- Research council oversees the research activities of students and faculty
- Advised to publish their research work in reputed Conferences/Journals
- Advised to have Professors from reputed National Institutes like IISc, IITs, NITs, etc in the Doctoral committees
- Research Supervisors are advised to get approval by the Research council for the Panel of Evaluators.

**3.4.6 Does the College promote interdisciplinary research? If yes, how many inter departmental / inter disciplinary research projects have been undertaken and mention the number of departments involved in such an endeavour.**

Yes, College promotes Inter disciplinary/Inter Department research

Inter disciplinary Research Projects	Name of the departments Involved
Student Satellite	Mech, ECE, EEE,CSE
Vision Based Robotics	Mech, ECE, EEE,CSE, ISE
Polymer MEMS Application	Mechanical, ECE,Physics, Chemistry

**3.4.7 Mention the research awards instituted by the College.**

Under Consideration

**3.4.8 Provide details of**

**\* research awards received by the faculty**

- Dr. Jharna Majumdar
  - Citation in VDI, Germany for developing a new Robot Vision System in 1989

- Certificate of Appreciation from the President, Stanford Research International, California, USA for developing a new Computer Vision Algorithms in 2002
  - Technology Breakthrough award from from Min of Defence India, 2002
  - Director's Commendation Certificate for the development of a new Technology of Aerial Surveillance from ADE (DRDO) in 2003
  - Performance Excellence Award from Prime Minister of India, 2004
  - Dr. VM Ghatage Award from Aeronautical Society of India, 2005
  - Suman Sharma Award for Women Engineers from National Design and Research Forum in 2006
  - Kalpana Chawla Memorial Lecture Award from Aeronautical Society of India, 2007
  - Best Paper Award in the National Conference on Conglomeration of Knowledge and Technology (Tantragnana), Mysore, 2008
- Dr. Sekhar Majumdar
    - Awarded fellowship of Indian National Academy of Engineers & Institute of Engineers of India in 2010 & 2011 Respectively
    - Awarded the Senior Visiting Fellowship at the centre for Turbulence Research, Standford University, USA from May 2001 to May 2002.
    - Dr. M.G.Deshpande memorial award for the best paper from academic institutes and national research laboratories, presented in the 23<sup>rd</sup> National conference on Fluid mechanics and Fluid power, Bopal, December 27<sup>th</sup> – 29<sup>th</sup>, 1996.
  - Dr. Sanjay H A
    - has been given the “Seed Money to Young Scientist for Research” award to pursue Scientific research by VGST, Govt of Karnataka
  - Dr. P G Mukunda awarded
    - Kamani Gold Medal for Best paper in I.I.M 1962.
    - Silver Medals for the best non ferrous paper 2004 – 06, 2006 – 08 and 2008 – 2010 of I.I.F
  - Dr. P.B.Shetty
    - Awarded with the “Cambridge Internaltional Certificate for teachers” in Nov 2011 by Cambridge University, London.
  - Dr. H R Dhananjaya listed in the Prestigious book “Who is Who in computational Science and Engineering(WWCSE)” Published by Saxe-Coburg Publications in 2005/2006 U.K
  - Dr. Nalini N received Best paper award for

- “Network Intrusion Detection via a Hybrid of Genetic Algorithms and Principal Component Analysis”, ADCOM-2006, The Fourteenth International Conference on Advanced Computing and Communications, December 20-23, 2006, Suratkal, India
- “Soft Computing and Dynamic Tunneling Paradigms in Network Security Attacks”, ICISIP-2006, The Fourth International Conference on Intelligent Sensing and Information Processing, December 15-18, 2006, Bangalore, India.
- “Cryptanalysis of Simplified Data Encryption Standard via Optimization Heuristics”, ICISIP-2005, The Third International Conference on Intelligent Sensing and Information Processing, December 14-17, 2005, Bangalore, India
- Dr. H.C. Nagaraj
  - Best Paper Award at the Karnataka State Level Seminar on “Introduction of Flexible System in Technical Education” under Visveswaraiah Technological University (V.T.U) held on Feb. 8, 1999 at P.E.S. Institute of Technology, Bangalore.
- Prof Varsha Prasad
  - Received Best Paper Award “Design of two stage op amp with improved CMRR and PSRR”, CISCON-2011, Manipal Institute of Technology, November-2011.
- Dr. Jeevan Kumar
  - Received Best Paper Award in the “Solid state physics symposia 2011” organized by department of Atomic energy at SRM University, Chennai, India.
- Aparna Manikonda
  - Awarded with the “ Mission 10x Certified Professional” by Wipro technology , India

**\* recognition received by the faculty from reputed professional bodies and agencies**

- Dr. Jharna Mujumdar
  - Award from German Industries
  - Award from DRDO, Ministry of Defence
  - Award from Prime Minister’s
  - Award from National Design and Research Forum
  - Award from Stanford Research International USA
  - Award from Aeronautical Society of India

- Awarded Fellow from Aeronautical Society of India
- Awarded fellow from Institution of Engineering
  
- Dr. Sekhar Mujumdar
  - Awarded fellowship of Indian National Academy of Engineers & Institute of Engineers of India in 2010 & 2011 Respectively
  - Awarded the Senior Visiting Fellowship at the centre for Turbulence Research, Standford University, USA from May 2001 to May 2002.
  - Dr. M.G.Deshpande memorial award for the best paper from academic institutes and national research laboratories, presented in the 23<sup>rd</sup> National conference on Fluid mechanics and Fluid power, Bopal, December 27<sup>th</sup> – 29<sup>th</sup>, 1996.
  
- Dr. H.C.Nagaraj
  - Awarded fellowship of the Institution of Electronics & Telecommunication Engineers, New Dehli, 2007

**3.4.9 State the incentives given to faculty for receiving state, national and international recognitions for research contributions.**

- Under Consideration



## 3.5 Consultancy

### 3.5.1 What is the stated policy of the College for structured consultancy? List a few important consultancy services undertaken by the College.

#### Policy for Testing and Consultancy

##### 1.0 PREAMBLE

In order to facilitate the coordination of Testing and Consultancy activities and its utilization, a proper administrative, documentation and accounting procedure need to be set up. A unified approach to all T&C assignments in which an individual or group of individual is involved in presented below.

##### 2.0 GENERAL

2.1. Individuals or departments may take up consultancy work only after taking approval from appropriate authority as given below

The party seeking T&C services has to submit the request letter along with a signed proposal addressed to:

- a) Head of the department, whenever the estimated charges of the T&C work is less than or equal to one lakh. At the department a committee consisting of one Professor, one associate professor and one assistant professor has to be constituted. This committee should scrutinize the proposal and recommend it for approval by HOD. The approved proposal has to be sent to Principal's office.
- b) Principal, whenever the estimated charges of the T&C work is greater than Rs. 1.0 lakh, the proposal has to recommend by the department committee and forwarded by HOD to the Principal. The proposal is to be scrutinized by a committee consists of Principal, Dean-Academics, Dean-R&D and Accounts In charge.

2.2. All payments in connection with Consultancy Project should be received in the name of the "The Principal, Nitte Meenakshi Institution of Technology, and Bangalore"

2.3. For Departmental Consultancy Projects, the Consultant In-charge will be decided by the Head of the Department in consultation with the faculty of the Department.

### **3.0 DEFINITIONS**

#### **3.1 Consultancy Works**

T&C works executed without the use of laboratory facilities of the Institute will be classified as consultancy works.

#### **3.2 Testing Works**

T&C works involving only the use of laboratory facilities of the Institute will be classified as testing works. Such works will cover field testing, and field measurements, calibration of equipment/instruments and testing of material/equipment in laboratory and development work using laboratory facilities.

### **4.0 DISTRIBUTION OF REVENUE GENERATED THROUGH TESTING & CONSULTANCY**

#### **4.1 General**

The Institute share in the T&C charges of every T&C activity will be 40%. After transferring the 40% to the Institute, the expenditure if any (with prior approval) will be deducted from the department share of 60% and the balance amount will be made available for distribution to consultants/department.

#### **4.2 Institute Research & Development Fund (IRDF)**

40% of the Testing & Consultancy Institute share will be credited to a fund called as Institute Research and Development Fund. 10% of the Institute Research and Development Fund will be transferred every year to a Core Fund, which will form the Corpus of the Institute. The IRDF will be operated by Principal of the Institute with the approval of the Governing Body. It will be utilized primarily for the Research & overall developmental activities of the institute.

#### **4.3 Professional Development Fund (PDF)**

There will be a professional development fund (5% of Institute share) for an individual faculty. The objective of this will be to help individual faculty member in his/her professional development. The account of PDF shall be maintained by accounts section and statement will be sent to the departments at the end of financial year. The departments concerned may submit expenditure bill to Principal's office for processing payment.

#### **A note on Professional Development Fund (PDF)**

This is an amount that can be utilized by the concerned individual faculty for expenditure under approved heads. These may include telephone charges, membership of professional bodies, travel charges and registration fees for attending conference/research interaction, etc. and such other purposes with due approval by the Principal. The PDF amount can be utilized by the individual even when there are no

on-going projects in his/her name. Accumulation of PDF is permitted without any upper limit.

#### **4.4 STAFF WELFARE FUND FUNDING**

5% of the Institute Share will be transferred to the staff welfare fund. This fund will be operated by the Principal for the general welfare activities of the staff. A committee comprising of Principal, Dean-Academics, Dean-R&D and Accounts-Incharge as members shall evaluate applications seeking funding from this fund and recommend to director for approval. The sanction will be made subject to approval by the Principal.

#### **4.5 DISTRIBUTION TO ADMINISTRATIVE OFFICERS & INSTITUTE STAFF**

15% of the Institute share shall be distributed to Administrative Officers & Institute staff as per the list. The list of the Institute staff shall be prepared and recommended by a committee.

### **5.0 EXPENDITURE NORMS**

#### **5.1 Job Work**

The consultant In-charge may get specific job work done on payment from outside. However, such payment may not exceed 5% of the total amount sanctioned for the project. While making such expenditure all the rules / regulations as applicable to Consultancy project should be followed. The expenditure higher than 5% Principal's prior permission will be necessary.

#### **5.2 Student Assistant**

Students are allowed to participate in consultancy projects in consultancy projects and are eligible to receive remuneration. The payment that can be made to the students shall be limited to a maximum of Rs.150/- per hour.

#### **5.3 Travel**

The most expeditious and convenient mode of travel should be used to minimize period of absence from the Institute. There will be no restriction placed by the Institute on the mode of Travel. Actual boarding and lodging expenses , in addition to DA, will be paid on production of receipt , subject to a maximum of twice the daily gross salary at the ceiling of the person's pay scale. All these expenses will be met out of the consultancy project funds.

## 6.0 REVIEW

Once in five years the T&C rules shall be reviewed by the committee under chairmanship of Principal. The recommendations of the committee are to be placed through the Principal for approval by BOG.

### 3.5.2 Does the College have College-industry cell? If yes, what is its scope and range of activities?

Yes

- Activities
  - Placement
  - Expert Lectures
  - Internship programs
  - Projects for the Students
  - Curriculum Development
  - Faculty Development Programs
  - Advisory committee for feedback on Outcome Based Education
  - Training program for Industry personnel

### 3.5.3 What is the mode of publicizing the expertise of the College for consultancy services? Mention the departments from whom consultancy was sought.

- College Publicizes the expertise of faculty & Department through College Website and Brochures
- ISRO
- Indo-Korean Institute of Technology

### 3.5.4 How does the College encourage the faculty to utilise the expertise for consultancy services?

- Faculty who are involved in consultancy services have been given flexible working environment

**3.5.5 List the broad areas of consultancy services provided by the College and the revenue generated during the last four years.**

	Name of the faculty	Area of consultancy	Name of the organization to which consultancy service is provided	Revenue generated
<b>MECH</b>	Dr. Sekhar Majumdar	CFD	M/s Fluidyn Software and Consultancies	The software is installed on NMIT facilities, free of cost
	Dr P G Mukunda	Materials	Assam Carbon Products-Carbon Brushes, Image processing	Collaborative work Rs 20000/-
	Dr P B Shetty	CAE	Flow Serve, CANADA-3D Modeling	Gained practical experience due to collaborative work
	Prof. Desai Gowda H S	Casting	Shantala Foundry-Shimoga	Gained practical experience due to collaborative work
<b>ECE</b>	Prof.Chirag Sharma	VLSI Design	Sonic chips India private limited	2.2lakh
	Prof. Mahaviraswamy	Optical fiber communication	Optical fiber communication	8lakh
<b>ISE</b>	Dr.Sanjay.H.A	Parallel computing	KPTCL	4lakh (F)unded by VGST
<b>R &amp; D NMIT</b>	Dr. Jharna Majumdar& Team	Articulated 5 DOF Pick and Place Robot	IEEE, USA	Rs. 8.5 Lakhs from IEEE USA DRDO

## **3.6 Extension Activities and Institutional Social Responsibility (ISR)**

### **3.6.1 How does the College sensitize the faculty and students on Institutional Social Responsibilities? List the social outreach programmes which have created an impact on students' campus experience.**

- The College has started and supported various clubs / associations to sensitize the faculty and students on Institutional Social Responsibilities. Some of the social outreach clubs which have created an impact on the students' campus experience are as follows:
  - i) National Cadet Corps
  - ii) National Service Scheme
  - iii) Rotaract Club of "NMIT – Bengaluru"
  - iv) Youth Wing of Red Cross Society
  - v) Literary Forum

**Some of the activities arranged through these clubs are**

- Awareness programs of social responsibilities
- Blood donation camps
- NSS & NCC Camps
- Organ Donation camps
- Distributions of School furniture, Text books & stationeries to Govt Schools in the neighbouring villages
- Literacy Programs

### **3.6.2 How does the College promote College-neighborhood network and student engagement, contributing to holistic development of students and sustained community development?**

- The NSS wing distributed fruits to the blind children's who underwent Cataract Surgery at Rotary Eye Hospital Bangalore.
- The NSS wing created awareness on organ donation at the NMIT Campus.
- The NSS wing created awareness on the importance of eye donation at NMIT Campus.
- The RCNMIT participated in community service project at Little Sisters (Home for the Aged) Richmond Road by visiting and by volunteering to help the NGO in their annual sales mela "Jumble Sale" a fund raising event organized by the NGO and recorded a round Rs. 2 lakhs in a day.
- Distributions of School furniture, Text books & stationeries for neighboring Govt Schools
- Computer Literacy programs in neighboring Schools

### **3.6.3 How does the College promote the participation of students and faculty in extension activities including participation in NSS, NCC, YRC and other National/ International agencies?**

One of the few engineering colleges in Karnataka which has Units likes NCC and NSS from Inception. The College promote the participation of students through

- Benefit of Attendance
- Flexibility in Internal Assessment Schedule
- Financial Support for Travel

(i) The RCNMIT and NSS conducted Blood donation camp in association with NSS and NCC of our college on 05th November, 2011 recorded 178 units of blood and on 09th October 2012 recorded 250 units of blood.

(ii) The Rotaract Club of “NMIT – Bengaluru” visited Sree Old Age Home, the home for the aged located in Rajaji Nagar, Behind City Hospital and West of Chord Road on 15th September, 2012 between 02:30 PM to 05:00 PM. Around 42 Rotaractors and 03 Non Rotaractors and the staff of NMIT visited to conduct the service Project. The RCNMIT – Bengaluru, Collected Rupees One Thousand Seven Hundred and Seventy only (Rs. 1770/-) from the students and staff of NMIT to purchase the daily requirements for the old age home which was requested by the authorities of the old age home. The following items were purchased: Bansi Sooji 05 Kgs, Cooking Oil 05 Liters, U Dhal, 2.5 Kgs, Green Dhal 2.5 Kgs, Lamp Oil 02 Liters, Coffee Powder 01 Kg and Ragi Flour 25 Kgs. These items were donated to the authorities of the Sree Old Age Home. The members had a nice time interacting with the inmates, further the Rotaractors and the staff members also entertained the inmates with the small skit just to bring laughter in the inmates of the Old Age Home.

(iii) As a part of the Community Service Activity of the Rotaract Club “NMIT – Bengaluru”, the Rotaract members of the club visited Little Sisters of the Poor to assist and render free volunteer service in organizing a Fashion Show for the Residents. The event was sponsored by GE India Private Limited Company, on 15th September 2012 between 11:00AM to 06:00 PM. This program was assisted by the Rotaract Club of “NMIT – Bengaluru”. It was a privilege for the Rotaract Club of “NMIT – Bengaluru” to participate and assist the organizers in making this event a grand success. Most of the Residents participated in the program carried memories and prizes and mementos

### **3.6.4 Give details on social surveys, research or extension work (if any) undertaken by the College to ensure social justice and empower the under-privileged and most vulnerable sections of society?**

- Survey has been conducted in neighborhood schools in villages and identified the

- lack of facilities.
- Impact of the survey resulted in
    - Providing Furniture , Text books and Stationeries to Government Schools
    - Arranging NSS camps in near by villages
    - Adult Literacy and Computer Literacy Programs
    - Skill Development Program like Plumbing, Carpentry etc for school dropouts
    - Blood/Eye donation camps
    - The NSS and RCNMIT participated in at many local project that serves the community by providing training on Spirituality, Vedic Mathematics and other Cultural Activities to the near by village school students at Gantiganahalli, Harohalli and Nagenahalli.
  - i) The Rotaract Club of “NMIT – Bengaluru” organized a one day Blood Donation Camp on 09<sup>th</sup> October, 2012 in the Room No.: 134 at the Nitte Meenakshi Institute of Technology, Yelahanka, and Bangalore Campus between 10:00 AM & 4:00 PM. The RCNMIT donated 262 Units of Blood to the Rastrohana Blood Bank, Chamarajpet, and Bengaluru.
  - ii) The Rotaract Club of “NMIT – Bengaluru” participated in the friendly Badminton match organized by the Rotaract District between Rotary International District 3190 and Rotaract Club District 3190 on 21<sup>st</sup> October, 2012 at Malleshwarm Club, Near Malleshwaram Ground, Opp. K C General Hospital, Malleshwaram, Bengaluru between 08:30 AM & 01:00 PM. The following Rotaractors of the Club participated in the Match: Rtr. Mallikarjuna, Rtr. Prithiviraj, Rtr. Sundeep. Rtr. Vijeeth, Rtr. Vineeth P Kotian, and Rtr. Vinayaka G.

### **3.6.5 Give details of awards / recognition received by the College for extension activities / community development work.**

- The RCNMIT was the first Youngest Rotaract Club to receive the “Change Maker Award” for the Rotary International District 3190 for the Year 2011-2012.
- Mr. Rajesh N., Department of ECE received Commendation by Chief Minister of Karnataka, for serving in the NCC organization.
- Dr. H.C. Nagaraj, principal received Jewel of India Award and Best Educationalist Award by Indian Solidarity Council, for outstanding achievements, 19<sup>th</sup> August 2008.
- Dr. H.C. Nagaraj received Eminent Citizen of India Award by National and International Compendium, 27<sup>th</sup> September 2008.
- Gopinath of 8<sup>th</sup> Sem ISE received the memento from his Excellence H.R.Bharadwaj, Governor of Karnataka for highest collection of funds, for the National Association for Blind (NAAB)



- Appreciation Letter from Indian Red Cross Society for arranging Blood Donation Camps

**3.6.6 Reflecting on objectives and expected outcomes of the extension activities organized by the College, comment on how they complement students' academic learning experience and specify the values and skills inculcated?**

- By participating in these activities, students have learnt the conditions of the under privileged and this has transformed the students' behavior towards under privileged in the society.
- It also results in improved discipline.
- Students have taken the academic projects to build applications/products for the sections like blinds, farmers etc. of the society

**3.6.7 How does the College ensure the involvement of the community in its outreach activities and contribute to the community development? Detail the initiatives of the College which have encouraged community participation in its activities.**

The college conducts several awareness programs to encourage community participations. Some of such programs are

- The NSS wing created awareness on organ donation at the NMIT Campus.
- Awareness programs about the ill effects of using Tobacco, Gutka, Drugs etc.
- The NSS wing distributed fruits to the blind children who underwent Cataract Surgery at Rotary Eye Hospital, Bangalore.

**3.6.8 Does the College have a mechanism to track the students' involvement in various social movements / activities which promote citizenship roles?**

- Yes! The College has appointed Coordinator for each individual club. These Coordinators are drawn from permanent full time teaching faculty who have passion, interest and concern towards the weaker sections of the society. Thus the College monitors the students' involvement in various social movements / activities resulting in improvement in the living conditions of the unprivileged sections of the society.

**3.6.9 Give details on the constructive relationships (if any) with other institutions in the nearby locality in working on various outreach and extension activities.**

- We are having constructive relationships with Red-cross society, Lions club, Rotary Club, Rastrohana Parishath etc. in organizing Blood Donation Camps periodically.
- Tree-plantation camps in association with Village Panchayath of Nagenalli, Harohalli, Gantiganahalli of Yelahanka and Virapura of Doddaballapura.
- The Rotract club of NMIT helped needy students of the two villages of Mandya district by distributing Note books to about 600 children of primary schools.
- The members of the Rotaract Club of “NMIT – Bengaluru” participated in the RYLA Program organized by Rotaract District 3190 in association with the Rotary Club of Kumara Park, Bengaluru on 03<sup>rd</sup> November, 2012 at Kolar Gold Fields (KGF).

**3.6.10 Give details of awards received by the institution for extension activities and/contributions to the social/community development during the last four years.**

- The Rotract club of NMIT was the first Rotaract Club to receive the “Change Maker Award” by the Rotary International District 3190 for the Year 2011-2012.
- Mr. Rajesh N., Department of ECE received Commendation by Chief Minister of Karnataka, for his meritorious service in the NCC organization.
- Dr. H.C. Nagaraj,principal received Jewel of India Award and Best Educationalist Award by Indian Solidarity Council, for out standing achievements, 19<sup>th</sup> August 2008.
- Gopinath of 8<sup>th</sup> Sem ISE received the memento from his Excellency H.R.Bharadwaj, Governor of Karnataka for highest collection of funds, for the National Association for Blind (NAAB)
- Appreciation Letter from Indian Red Cross Society for arranging Blood Donat

### 3.7 Collaboration

#### 3.7.1 How has the College's collaboration with other agencies impacted the visibility, identity and diversity of activities on the campus? To what extent has the College benefitted academically and financially because of collaborations?

- By active collaboration with ISRO in the area of Small Satellites, ISRO has approved NMIT as a “Centre for Research, Design & Development of Small Satellites” which is rare honour for any educational Institution.
- DRDO Labs have recognized NMIT as “ Centre for Design and Development of Vision and Robotics Research”
- DRDO Labs have recognized NMIT as “ Centre for Video and Image processing and Embedded Systems ”
- The collaboration with Industries and R&D organization has resulted in Research curriculum development as per current requirements.

Visibility:

- Increase of Involvement of students in Inter disciplinary projects
- Improvement in admission quality
- Able to get more sponsored research projects from different National agencies
- Drawn the attention of the Research & Academic organizations for tracking their satellites using our Satellite Tracking facility-NASTRAC

Department	Organization	Collaboration to promote (Curriculum development/ Internship/Faculty exchange and development/ Research/Publication/Consultancy/Student Placement)	If - financially benefited, mention the amount	Mention if any new lab/facility is established through collaboration
R & D NMIT	ISRO	Small Satellite Research	-	Clean Room Facility & NASTRAC
	North Dakota State University, USA	Faculty exchange, promotion of joint Research between NMIT & North Dakota State University in the emerging areas.	-	-
	Wipro-Mission 10	Faculty Development	-	-

	X			
	IEEE , USA	Research	Rs. 8.5 Lakhs	-
	Indo- Korean Institute of Science and Technology	Robotic Research	-	-
	DST, New Delhi	Research	Rs. 28.0 Lakhs	-
<b>CSE</b>	ARM, Bangalore	Training in ARM processors to students and faculty	NIL	-
	Texas Instruments , Bangalore	Training	NIL	-
	EMC2, WIPRO, INFOSYS	Internship, Faculty exchange and development	---	---
<b>MCA</b>	IBM	Internship	-	-
<b>ECE</b>	Texas Instrument	Faculty exchange and development		Microcontrol ler Lab
	NPMASS	Advance Facility for Research at IISc		
<b>CIVIL</b>	CAD Center	Curriculum development/ Internship		
<b>EEE</b>	Infosys	Curriculum Development	-	-
<b>ISE</b>	DELL – R&D	Information Exchange (Research)	-	Guidance for establishing Grid & Cloud Research Lab
	CDAC	Curriculum & Faculty Development	-	-
	Infosys, EMC <sup>2</sup>	Curriculum Development	-	-
<b>Mech</b>	NITK	Research work	-	-
	HAL	Faculty Exchange & Development		
	Fluidyne	Research work		

### 3.7.2 Mention specific examples of, how these linkages promote

**\* Curriculum development**

- Collaboration with Infosys, EMC<sup>2</sup> , IISc, CDAC, Texas, ARM , CPRI etc have

resulted in Updating curriculum as per industry requirements leading to introduction of new Electives in the emerging areas

\* **Internship, On-the-job training**

- Large number of students are allowed to do their Internships and projects in Industry

\* **Faculty exchange and development**

- Collaborative partners are helping the Faculty to update their backgrounds particularly in the emerging areas.

\* **Research, Publication**

- Increased faculty participation in research
- Resulted in good number of Research Publications including a few patents by the faculty and students
- Increased funding through collaborative exchanges
- Information Exchange

\* **Consultancy, Extension**

- Faculty is motivated to take up consultancy work
- Resulted in increased number of consultancy assignments.

\* **Student placement**

- Improvement in Campus Placement

\* **Any other, please specify**

**3.7.3 Does the College have MoUs nationally / internationally and with institutions of national importance/other universities/ industries/corporate houses etc.? If yes, explain how the MoUs have contributed in enhancing the quality and output of teaching-learning, research and development activities of the College?**

- NMIT has signed an MOU with North Dakota State University (NDSU), USA

(One of the prestigious Land Grant Universities) for collaborative research by the faculty and provision for pursuing their Doctoral work with only one year stay in NDSU and doing the rest of the research in NMIT under the joint guidance of one Professor of NDSU and another identified Professor of NMIT

- NMIT has Collaboration with Indo-Korean Institute of Science and Technology for Research in the areas of Robotics to develop Education Robots and Museum Exhibits in the country.
- Surrey Uni of UK which is a well-known small satellite research centre in the world requested NMIT to track for the first time their Nano satellite Strand-1 which was launched by ISRO through PSLV and NASTRAC has successfully completed the above task.
- The MOU with industries contributed in enhancing the quality and output of teaching-learning, research and development activities by introducing the topics which is related to real life industrial activities and its application.
- The faculty undergone training for Industry supported elective courses which resulted in improved teaching-learning process
- Participation of faculty in ongoing research projects resulted better teaching learning process
- Resulted New UG & PG Programs
- Resulted in more number of students and faculty have involved in research and further resulted into good publications
- More focus for Innovative Projects

**3.7.4 Have the College industry interactions resulted in the establishment / creation of highly specialized laboratories / facilities?**

Organization	New lab/facility is established through collaboration
ISRO, NMIT	<ul style="list-style-type: none"> <li>• Satellite Integration and Testing facility -Clean Room Laboratory</li> <li>• NASTRAC- First Small Satellite Tracking Centre</li> </ul>
DRDO Labs	<ul style="list-style-type: none"> <li>• Robotic Laboratory</li> <li>• Image and Video Processing Lab</li> <li>• Embedded Processor Lab</li> <li>• Computational Fluid Dynamics Lab</li> </ul>
NITK	Advance Manufacturing Lab
Cypress Semiconductor-	PSoC Lab
Cranes software	TI Lab
IISc, Bangalore	Polymer MEMS Applications Design Facility
Texas Instrument	Microcontroller Lab
DELL –R&D	Parallel , Grid & Cloud Research Lab

## **CRITERION IV: INFRASTRUCTURE AND LEARNING RESOURCES**

### **4.1 Physical Facilities**

#### **4.1.1 How does the College plan and ensure adequate availability of physical infrastructure and ensure its optimal utilization**

- The college has a master plan for the campus.
- Every year as per the physical infrastructure requirements of the next academic year an annual plan for construction of additional buildings and infrastructure is prepared and executed.
- Adequate budget is allotted each year to ensure that the planned infrastructure is in place before the start of the new academic year.

#### **4.1.2 Does the College have a policy for creation and enhancement of infrastructure in order to promote a good teaching-learning environment? If yes, mention a few recent initiatives.**

- To promote good teaching learning environment every department and each of the PG classrooms are provided with LCDs, Computing Facility & Internet connection.
- Every faculty is provided with a computer with Internet facility.

#### **4.1.3 Does the College provide all departments with facilities like office room, common room, and separate rest rooms for women students and staff?**

Yes

- Every department is provided with office facility
- The Institute has separate spacious rest room for women staff & students.

#### **4.1.4 How does the College ensure that the infrastructure facilities meet the requirements of students/staff with disabilities?**

- The college has been made disabled- friendly by providing ramps and lifts.
- Few washrooms are also designed for differently abled students.

#### **4.1.5 How does the College cater to the residential requirements of students? Mention**

- \* **Capacity of the hostels and occupancy (to be given separately for men and women)**
  - Boys : Capacity : 950  
Occupancy: 100%
  - Girls : Capacity : 520  
Occupancy: 100%
  
- \* **Recreational facilities in hostel/s like gymnasium, yoga center, etc.**
  - Institution has facilities like gymnasium, yogacenter, indoorgames etc.; each hostel has its own TV and reading room.
  
- \* **Broadband connectivity / Wi-Fi facility in hostel/s.**
  - All the hostels are provided with Wi-Fi connectivity through 25 mbps 1:1 leased line.

#### **4.1.6 How does the College cope with the health related support services for its students, faculty and non-teaching staff on the campus and beyond?**

- The college has a well equipped medical center with a well qualified doctor and a nurse and also a 24 hour ambulance facility is provided.
- Medical insurance facility is provided for all the students and staff to take care of the emergency requirements.
- The non teaching staffs are covered under ESI scheme for medical benefits.
- The college has tied –up with nearby multi-specialty hospitals such as Avaksha Hospital, K K hospital , Colombia Asia Multispecialty Hospital , M S Ramiah hospitaletc.for the needs beyond the college medical center.

#### **4.1.7 What special facilities are made available on the campus to promote interest in sports and cultural events?**

- The college has a full time qualified Physical Director. Adequate facilities including grounds for the following games are available
  - Multi Gym
  - Football
  - Basket ball



- Volley ball
- Hockey
- Cricket
- Badminton
- Ball Badminton
- Kabaddi
- Kho Kho
- Hand Ball
- Table Tennis
- Chess
- Carrom
- College has facilities like music club, literary forum, Hobby club, Amateur Radio Club etc
- College has an Open Air Theater for cultural events.
- College conducts annual techno-cultural inter collegiate fest ( Anaadyanta ) where students from different colleges within Karnataka as well as from other states of India actively participate.

## 4.2 Library as a Learning Resource

### 4.2.1 Does the Library have an advisory Committee? Specify the composition of such a committee. What significant initiatives have been implemented by the Committee to render the Library, Student/ User friendly?

Yes

Library Committee comprises of the following members.

Library Committee Chairman- Senior Professor/Dean

Members- All HOD's

Secretary- Librarian

The Library advisory committee takes decision in

- Allocation of the budgeted funds
- Formulating rules for procurement of Books/Journals/E-learning materials etc.,
- Taking decisions regarding fixation of working timings of the Library, fines to be collected from the students
- Identifying books, journals, E-learning materials for the library from time to time.
- Making proposals for strengthening the Library by procuring Books/Journals/E-materials and also other infrastructure required for the library.

### 4.2.2 Provide details of the following:

- \* **Total area of the Library (in Sq.Mtrs): 885**
- \* **Total Seating Capacity- 200**
- \* **Working hours (on working days, on holidays, before examination days, during examination days, during vacation)**

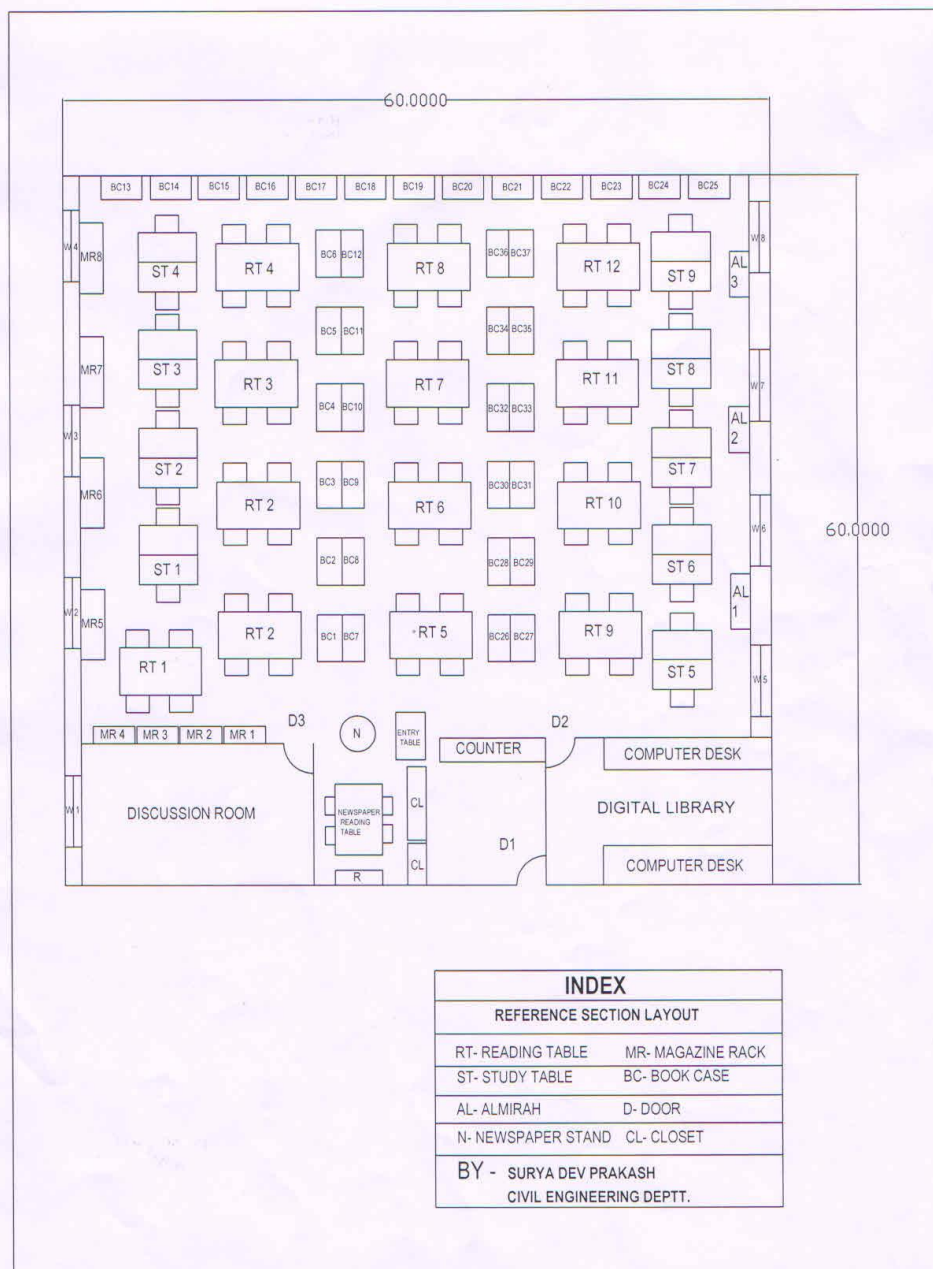
Working Hours:

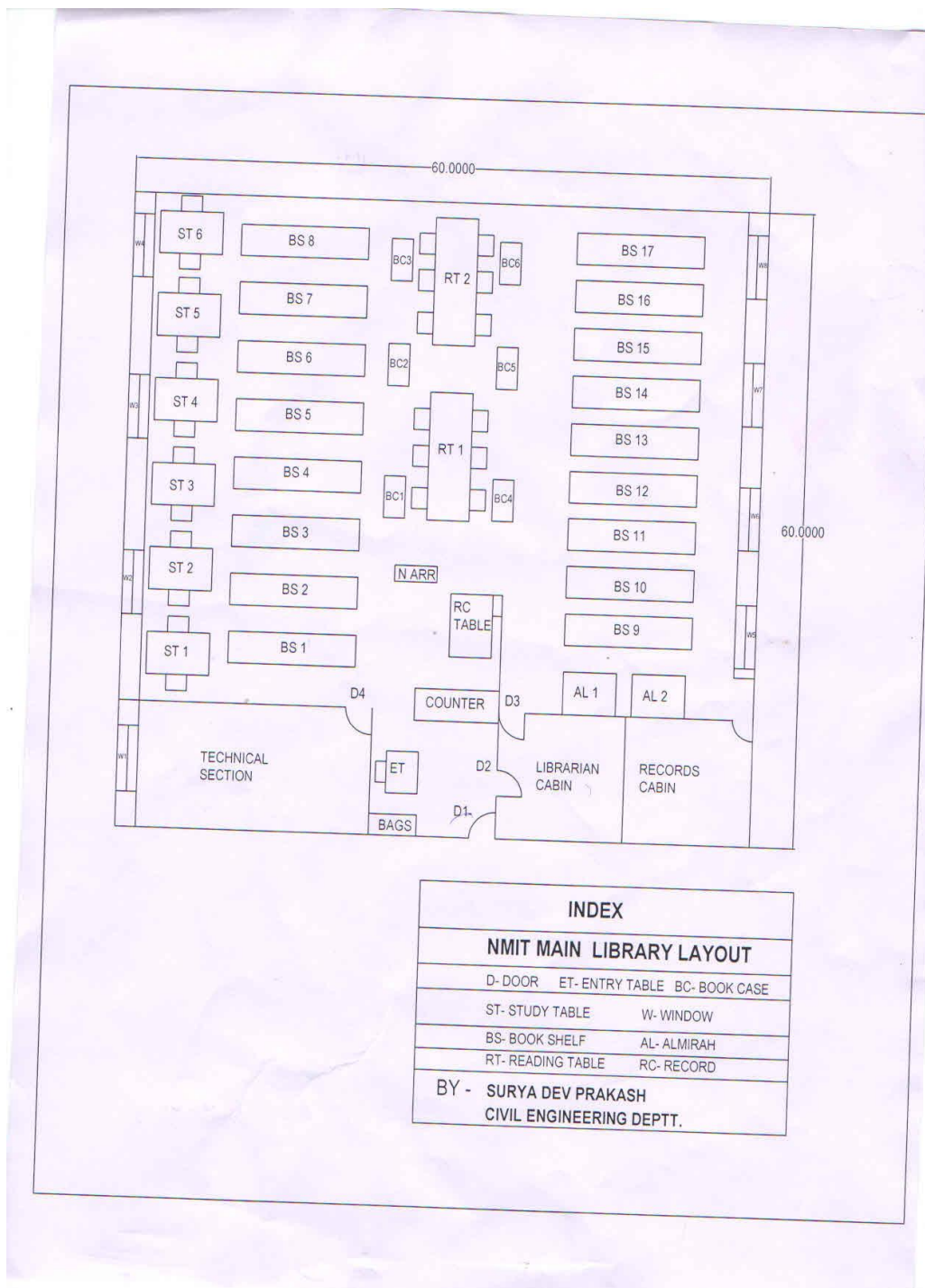
Monday to Friday: 8.30 AM-8.30 PM

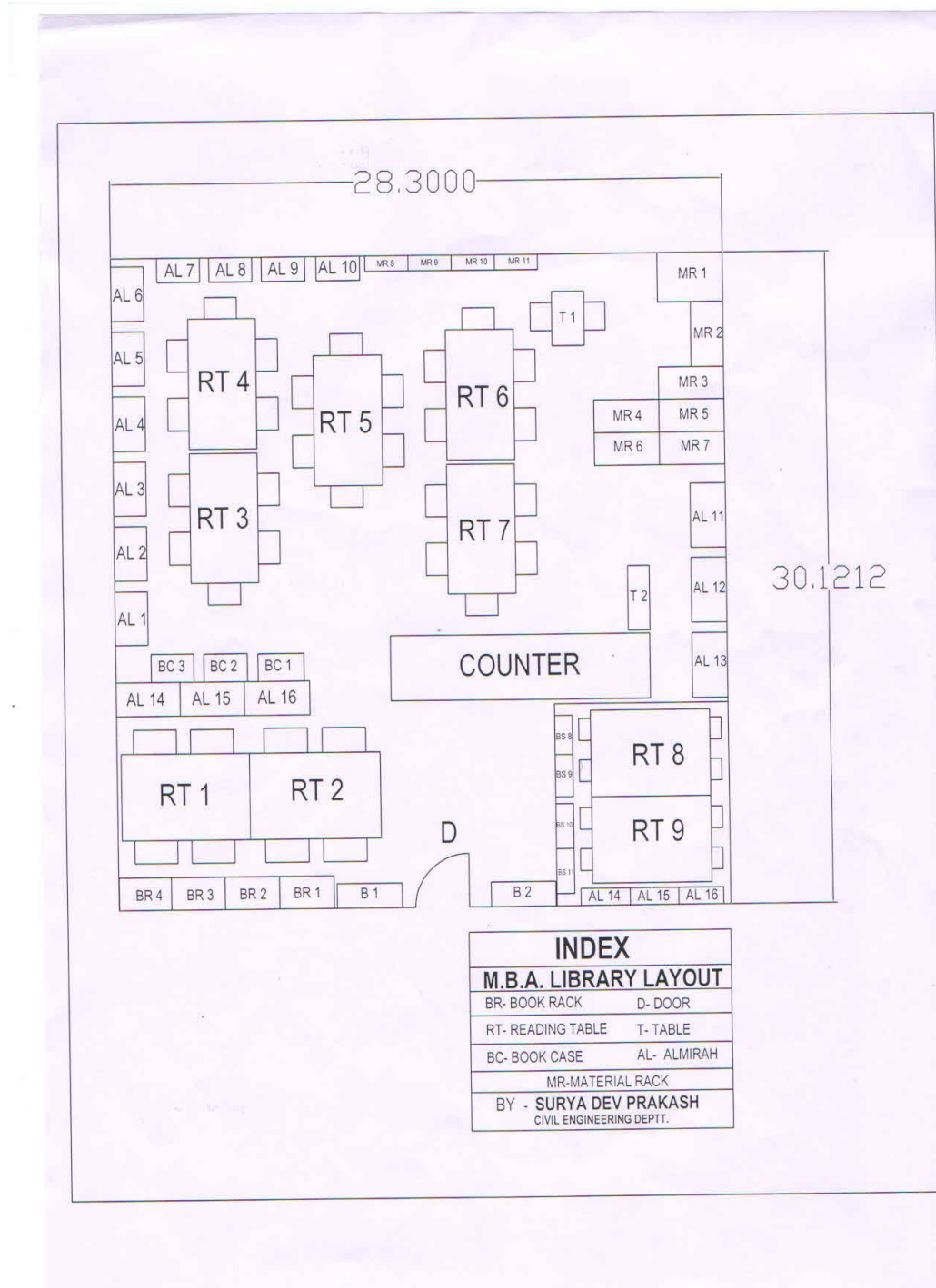
Saturdays: 8.30 AM-5.00 PM

Sundays & General Holidays: 10.00 AM- 02.00 PM

- \* **Layout of the Library (individual reading carrels, Lounge area for browsing and IT zone for accessing e-resources)**







- \* Access to the premises prominently display of clearly laid out floor plan;(Adequate signage; fire alarm; access to differently abled users and mode of access to collection)

**Ground Floor:** MBA Library

**1st Floor:** Main Library –Circulation Section & Library Office

**2nd Floor:** Reference Section, Newspaper Section, Journal Section and Digital Library.

Clear handouts are displayed in bold letters in all the sections.

Every rack has Display Guide about its contents.

Every Shelf has Display Guide about its holdings.

Same has been followed in case of Journals & Magazines.

Open Access Facility is followed in the Circulation Section.

To help handicaps Lift facility has been provided.

Library has **OPAC-Open Access Public Catalogue** facility to search the Library Collection

The library information can be accessed through **Easylib software**.

Library is equipped with fire extinguishers.

### 4.2.3 Give details on the Library Holdings

#### a) Print (Books, Back Volumes and Theses)

Books	-36713
Back Volumes	-700
Print Journals	- 104

#### b) Non Print (Microfiche, AV)

CDs	- 1500
Audio Cassettes	- 50
Video Cassettes	- 12

#### c) Electronic (E-books, E-Journals)

E-Books	- 500
E-Journals- Science Direct	-275

#### d) Special Collection

(Eg. Text books, Reference books, Standards, Patents)

References Books - 4545

Project Reports - 2000

### 4.2.4 What tools does the Library deploy to provide access to the collection?

#### \* OPAC

Online Public Access Catalogue facility has been provided to search the Library Collection

#### \* Electronic Resource Management package for E-journals

Science Direct Online -275

**\* Federated searching tools to search articles in multiple databases**

As we have subscribed to only one international online journal database **Science Direct**, we do not require Federated Search Tool.

**\* Library Website**

Library Website has been developed as a section of Institutes' website where it gives a Bird view of its Collection, Rules & Regulations, and Services  
Hyperlinks to available freely E-Journals & Subject Gateways are also given.

**\* In-house/Remote access to e-publications**

- **Science Direct** can be accessed throughout the campus as we have multiple access facility through IP authentication.
- E-publication like E-Books, E-Question Paper, and Courseware can be accessed within the Digital Library.

**4.2.5 To what extent is the ICT deployed in the library?**

**\* Library Automation:**

Details of entire collection of the Library have been fed into the EASYLIB Library Management Software.

1. EASYLIB Library Management Software has been deployed to automate the Library transactions.

2. Every user's ID card as well as every item of the Collection has been bar coded the transaction (Issue/Return) will be done in a few seconds.

**\* Total Number of Computers for Public Access**

1. Three Systems are kept for clients use to check the catalogue of the collection as well as they are able to check who has borrowed, when it is due, what are all the items borrowed by himself.

**\* Total Numbers of Printers for Public access**

One Printer has kept for public user

**\* Internet Band width Speed**

We have got 25 Mbps bandwidth 1:1 leased line internet connection.

**\* Institutional Repository**

DSpace-freely available software has been installed wherein E-Books, Soft copies of Question papers, Lecture Notes are indexed, preserved and made available to access. Newspaper clippings on Institution's achievements are archived

**\* Content Management System for E-Learning**

An INTEL Server has been installed and Courseware of National Programme for technology Enhanced Learning (NPTEL), University of MIT, Berkeley, and Stanford are indexed and preserved departmentwise.

E-vidya e-learning facility of V T U is also available.

**\* Participation in Resource sharing networks/consortia (like Inflibnet)**

We have taken the membership of Indian National Digital Library in Engineering, Science and Technology (INDEST) consortia and through INDEST we have subscribed to **Science Direct** at concessional rate where in our user multiple access facility to it has.

#### **4.2.6 Provide details**

- \* **Average number of walk-ins: 600**
- \* **Average number of books issued / returned: 500**
- \* **Ratio of Library Books to students enrolled: 10:1**
- \* **Average number of books added during last three years: 1600**
  - **2009 to 2010- 1826**
  - **2010 to 2011- 1597**
  - **2011 to 2012- 1763**
- \* **Average number of login to OPAC- 150**
- \* **Average number of login to E-resources- 180**
- \* **Average Number of E-resources download/printed per month- 135**
- \* **No of information literacy trainings organized**

- Beginning of the academic year, during the orientation programs for the freshers, the awareness about the usage of library resources will be given.
- The library conducts the awareness programs for the faculty yearly once about the usage of library resources.

#### **4.2.7 Give details of the specialized services provided by the Library**

**\* Manuscripts**



NOT APPLICABLE

**\* Reference:**

Here, we are assisting the students/research scholars' reference work which includes finding out their needs by using Library resources (Print/Online) to provide that information.

**\* Reprography:**

Three (3) Digital photocopying machines are installed to furnish requirements of students as well as faculty members.

**\* ILL (Inter Library Loan):**

We have got institutional membership with DELNET, National Aerospace Laboratory (NAL), Indian Institute of Science (IISc) and British Council Library to facilitate Inter-Library Loan (ILL) i.e. to borrow Books, get full-text articles from E-journal databases, to make reference study.

**\* Information deploy & notification (Information Development & Notification)**

Through LCD Monitors, important Information will be displayed

**\* OPACS** –Online Public Access Catalogue (OPAC) facility is provided.

**\* Internet Access:** 25 Mbps Bandwidth

**\* Downloads:** Science Direct Databases.

**\* Printouts:** Made available to the students.

**\* Reading list/Bibliography Compilation:**

Search for new arrivals can be done in Library Management Software.

**\* In-house/ remote access to e-resources:**

In-house e-resources provided for Science Direct database.

**\* User Orientation:**

In the beginning of every academic year, freshers will be introduced to each and every section of the Library and rules to be followed in the Library are explained. Same training will also be given to faculty members newly joined.

Instructions about the Collections as well as the rules and procedures are also hosted on the Institution's website.

Every year User orientation programmers on IEEE/ **Science Direct** will be arranged for final year UG / MTech students/ research scholars by IEEE/ **Science Direct publishers**. This year the same has been modified and webinar was arranged twice for our PG students.

**\* Assistance in searching Databases:**

Guidelines are displayed in Digital Library to search databases step by step and where ever required assistance will be provided by the Library staff.

**\* INFLIBNET/IUC facilities:**

Instead of INFLIBNET, we have subscribed to INDEST, where we can subscribe to access engineering resources at reasonable price.

**4.2.8 Provide details on the annual Library budget & amount spent for purchasing new books & Journal**

Rs 25 lakhs

- 5 lakhs for Print Journals
- 5 lakhs for E-Journals
- 15 lakhs for Text Books

**4.2.9 Does the Library get the feedback from users? If yes, how is it analyzed and used for improving the Library Services. (What strategies are deployed by the Library to collect feedback from users? How is the feedback analyzed & used for further improvement of the Library Services?)**

Feedback from users will be collected through Questionnaire method. Data obtained is analyzed & discussed in Library Committee meetings& decisions like increasing E-resources, extending Library opening hours etc. will be taken depending on the requirements.

**4.2.10 List the infrastructural development of the over the last four years?**

2012-13- Bar code Printer

2011-12-New Issue Counters, Newsletter Display Stand, additional journal racks

2010-11- New cabin for Digital Library, Newspaper Display Stand

2009-10- 10 PC's with Multimedia Set

2008-09- 5 PC's

- There is a proposal to have a separate Building for housing the Library at a cost of about Rs 1.00Crore.

**4.2.11 did the library organize workshop for students, teachers, and non-teaching staff by the Library for better library usage?**

Every year, Orientation Programs will be arranged for new students. All sections of the Library will be introduced and briefing about Rules and Regulations are made.

## 4.3 IT Infrastructure

### 4.3.1 Does the College have a comprehensive IT policy addressing standards on IT Service Management, Information Security, Network Security, Risk Management and Software Asset Management?

YES

The Central Computing Facility (CCF) forms an important component of the NMIT's infrastructure, providing a wide spectrum of services to the students as well as faculty and staff involved in research and other academic activities. All students have various computer science related subjects in their courses. The CCF provides support for them to have hands-on feel of what they learn in the classrooms and enhance their computer skills. The CCF also supports research activities undertaken in the Institute.

CCF have extensive academic computing & networking facilities of the NMIT, providing the College community with state-of-art computing facilities to cater to their computational needs and access to Internet resources as well as telecommunication needs. The college has BSNL leased line (1:1) connectivity of 25 Mbps. The Campus network is carefully planned, keeping options in mind for future expansions. Fiber-optic cabling is used to connect all the major buildings. CCF has strong IT security infrastructure (Cyberoam) that protects the NMIT network from outside hackers. Most of the servers are using Open Source platform.

The college follows standard IT policies for the following:

- Computer Hardware Purchase and Support
- Campus Wireless Network
- Network Security Zone
- Password Management
- Asset Management

### 4.3.2 Give details of the College's computing facilities (hardware and software).

- **Number of systems with configuration**

SI NO	Name of the Computer	RAM	HDD	Processor
1	SERVER ML150	4GB	160GB	XEON 1.8
2	HP ML150 SERVER	1 GB	160 GB	Dual core AMD 1.80 GHz
3	HP work Station	3 GB	702 GB	Intel Core 2.67 GHz

4	Lenova	2 GB	500 GB	Intel Core i3
5	HP Desktops	2 GB	500 GB	Intel Core i3
6	COOLER MASTER (workstation)	3GB	500GB	INTEL CORE i5
7	SUN SOLARIES	1GB	160 GB	Intel core 2 duo
8	HP SERVER INT	3GB	500GB	INTEL CORE DUO 2.83
9	Desktops	2GB	500GB	INTEL CORE 2DUO2.93Ghz
10	DELL	2 GB	320 GB	Intel core 2 2.93 GHz
11	HCL NEW	2 GB	320GB	Intel Dual Core 2.96 GHz
12	CP AMD SAMPRON	1 GB	40GB	AMD Sampron 1.81 Ghz
13	ACER	1 GB	40 GB	Intel P4 1.70 GHz
14	INTEL CP	1 GB	80 GB	Intel P4 3.06 GHz
15	LENOVA	1 GB	160 GB	Intel Core 2.53 GHz
16	HP	1 GB	160GB	Intel; Quad 2.67 GHz
17	HP COMPAQ	1GB	40GB	Intel P4 2.60 GHz
18	COMPAQ PRESARIO	1GB	40GB	INTEL P4 3.6GHZ
19	IBM	1GB	40GB	INTEL P4 3.6GHZ
20	ZENITH	1GB	500GB	PENTIUM CORE DUO 2.8
21	MERCURY	1GB	300GB	AMD ATHLON 2.8 GHZ
22	WIPRO NEW	512 MB	40GB	INTEL P4 2.5 GHZ
23	CP AMD ATHLON	512 MB	40GB	AMD Athelon 2.93 Ghz
24	WIPRO P4 NEW	512MB	80GB	Intel P4 1.60 GHz
25	MANIPAL	2GB	500GB	INTEL CORE DUO 2.81
26	Assembled	4 GB	500 GB	Intel i7 3 <sup>rd</sup> Generation
27	Zenith	2 GB	500 GB	Core i3

- Computer-student ratio**

- UG : 1:3
- PG : 1:2

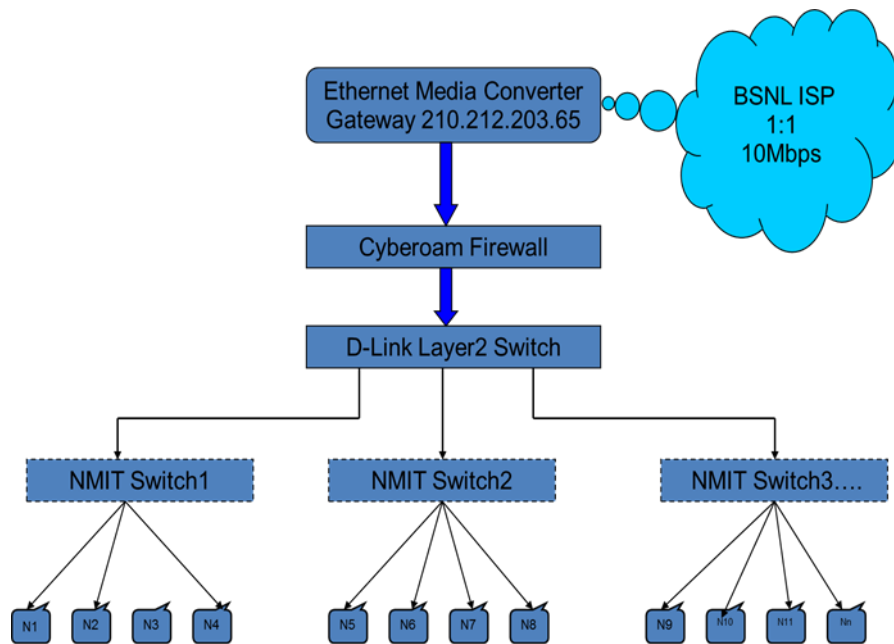
- Dedicated computing facility**

Sl no	Department	Total no of
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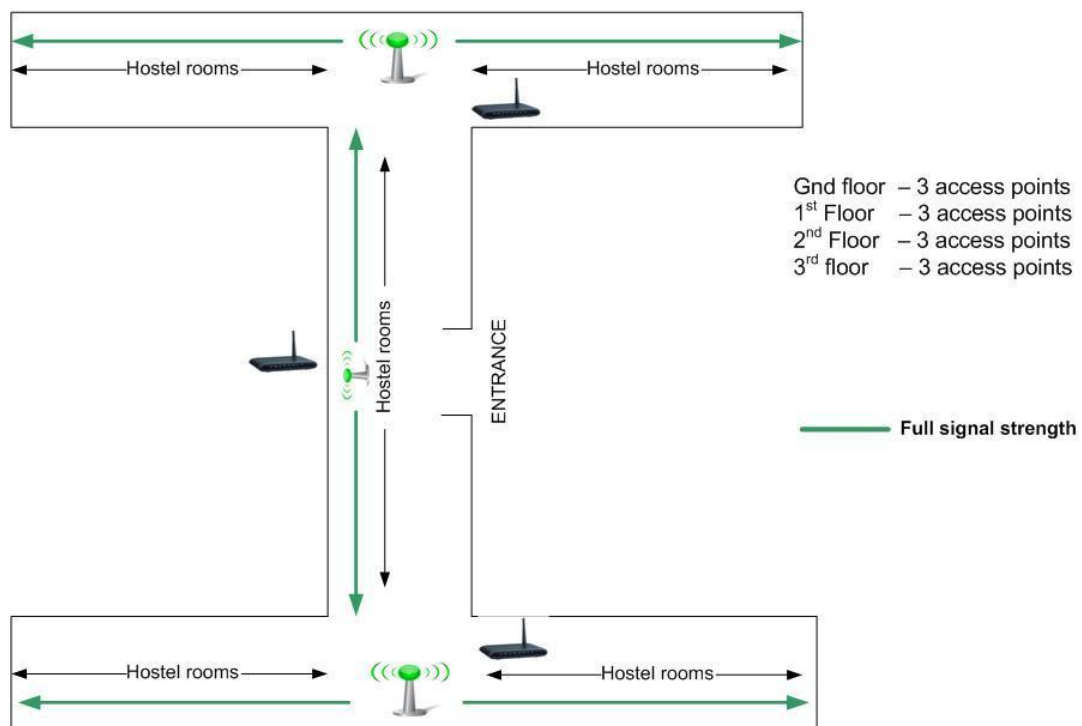
		computer
1	COMPUTER SCIENCE ENGG	272
2	CHEMISTRY/PHYSICS	03
3	MAIN LIBRARY	23
4	Electronics & communication engg	193
5	Electrical & electronics engg	46
6	Mechanical engg	205
7	Stores dept	05
8	MBA	68
9	MCA	127
10	CIVIL	45
11	AUTONOMOUS	17
12	INFORMATION SCIENCE &ENGG	140
13	R&D NMIT	82
14	PLACEMENT	02
15	ADMINISTRATIVE OFFICE	11
16	LADIES HOSTEL/BOYS HOSTEL	04
17	MATHS	04
18	LANGUAGE LAB (Centralized Facility)	30
19	Internet Lab (Centralized Facility)	30
20	TEQIP/Maintenance/Principal/Transport/Sports/Director/Hostel	12
21	Aeronautical Engg	03
22	IT Cell	14
23	Examination Office	02
Total Computers		1338

- **LAN facility**

- All the Building are connected through Fiber link
- All departmental Labs/Faculty rooms are connected through LAN
- Hostels are connected with Wi-Fi.



Hostel Wifi Network Layout



• **Propriety software / Open source softwares**

- Windows XP
- Windows Server 2000
- Windows Server 2003

- Office XP
- Borland C
- Oracle 9i
- MSDN software
- TCS ION Administrative Software
- Easy Lib
- Quick heal antivirus software
- E-learning packages
- Intel Compilers
- IBM Rational Rose
- Fedora / CENT OS
- MySql Data Base
- Apache Web Server
- Sybase Data Base
- NS 2
- Catia
- Auto Cad
  
- **Number of nodes/ computers with internet facility**
  - Number of Computers (College): 300
  - Number of Computers (Hostel): 750
  
- **Any other**

#### **4.3.6 How are the faculty facilitated to prepare computer aided teaching-learning materials? What are the facilities available in the College or affiliating University for such initiatives?**

- Every faculty room is provided with Computer, Internet connection & Anti-Virus software
- TCS campus management facility for uploading lecture notes/ Assignments/ Course Plan and functions as a discussion forum.
- Each dept has LCD Projectors, which will be used by the faculty for teaching
- Additional Self Learning facilities are provided using e-learning courseware of
  - NPTEL
  - MIT
  - BERKELY
  - STANFORD
  - Visvesvaraya Technological University
- Edusat program facility from Visvesvaraya Technological University.



**4.3.7 How are the computers and their accessories maintained? (AMC, etc.)**

- Dedicated System /Network administrators are in place to undertake maintenance of Computer Peripherals & Networks, respectively
- Tied up with CITO Infotech for computer related systems repairs and maintenance.
- Tied up with Hykon Ltd for servicing UPSs

**4.3.8 Does the College avail of the National Knowledge Network connectivity directly or through the affiliating University? If so, what are the services availed of?**

Yes

Institute is having VPNoBB connectivity under National Mission for Education. The objective of this connectivity is for delivery of e-content and collaboration between institution/academicians/experts/researchers of the University and colleges. High quality personalized and interactive knowledge modules over the internet/intranet for all the learners in higher education institutions in anytime and anywhere mode and also for enhancement of gross enrollment ration in higher education.

**4.3.9 Provide details on the provision made in the annual budget for update, deployment and maintenance of the computers in the College?**

<b>Sl. No</b>	<b>Particular</b>	<b>Budget (Rs)</b>
1	Purchase of Computer Peripherals	75 Lakhs
2	Software Purchase	25 Lakhs
3	Budget for Maintenance	15 Lakhs

## 4.4 Maintenance of Campus Facilities

**4.4.1 Does the College have an Estate Office / designated officer for overseeing maintenance of buildings, class-rooms and laboratories? If yes, mention a few campus specific initiatives undertaken to improve the physical ambience.**

The college has a full-fledged project cum maintenance cell headed by a senior army officer of the rank of Colonel(Engineers regiment) for construction and maintenance of all infrastructural facilities, The institute has created good ambience in the campus by creating lawns, gardens , temples, play grounds and good parking facilities etc .

**4.4.2 Does the College appoint staff for maintenance and repair? If not, how are the infrastructure facilities, services and equipment maintained? Give details.**

Yes.

The maintenance cell of the college is in charge of the maintenance/repair of the infrastructure facilities and equipments etc., the cell has necessary staff for the same. The department staffs are trained for repairs and maintenance work.

**4.4.3 Any other relevant information on infrastructure and learning resources that the college would like to include.**

- The well maintained gardens, fountains and parks in the campus provide a green environment which is appreciated by all those who visit the campus
- The college has setup a sewage treatment plant and the treated water is utilized for gardens and parks.
- Hostels are provided with solar water heaters.
- Campus Energy audit is carried out by electrical engineering dept.
- The campus has a back-up power provided by 320 KVA diesel generator.
- The faculty are provided with residential facilities in the campus
- The Open Air Theater for conducting extra- curricular activities
- Well equipped Library with reference section functions beyond the working hours for the benefit of the students & staff
- Internet Lab facility is available beyond the working hours.

## **CRITERION V: STUDENT SUPPORT AND PROGRESSION**

### **5.1 Student Mentoring and Support**

#### **5.1.1 Does the College have an independent system for student support and mentoring? If yes, what are its structural and functional characteristics?**

- College has a full time qualified student Counselor
- General and Emotional issues concerning the students are handled by the Counselor
- College has a mentoring system which provides help to the students to address academic and personal issues.

#### **5.1.2 What provisions exist for academic mentoring apart from class room work?**

- The college has a scheme, where every 12-15 students are allotted to one Faculty member who does the academic mentoring of the students under his/her charge
- The mentor has following duties:
  - Counseling for selection and registration of courses.
  - Monitoring and analyzing each student's academic performance and punctuality and counseling the students accordingly.
  - Interacting with the parents/guardians as and when required.

#### **5.1.3 Does the College provide personal enhancement and development schemes for students? If yes, describe techniques employed e.g., career counseling, soft skill development, etc.**

Yes,

The college has appointed a senior faculty of the rank of Professor as Prof & Head, Dept of Placement, Training and students' welfare.

The above department provides guidance and support in respect of career counseling, soft skills development etc. to all the students.

The activities of the above department in furtherance of its objectives are

- A customized English Language course with Language lab is offered to the students to enhance their communication skills as part of their curriculum.
- Every month, guest lectures from experts from Industry/R & D organisations are arranged.

- The department conducts intensive coaching from experts for logical reasoning ,numerical aptitude, soft skills, analytical thinking, technical aptitude and interview skills
- Career Counseling
  - Career counseling sessions are organized to guide the students in order to choose the best career option. Students are motivated to take up the following options based on their individual strengths
  - Higher studies (Both Technical & non Technical)
  - Appear for various competitive examinations like GATE/CAT/GRE/GMAT/JMAT/IELTS/TOEFL etc..
  - Appear for civil and engineering services examinations.
  - Appear for public sector job openings under both central and state governments like Defense services, DRDO, ISRO, NAL, BARC, KPSC etc.
  - An overview of the profiles of various jobs like teaching, product development, and services industry will be discussed
- Development Schemes
  - Entrepreneurship and Development Cell of the Institute creates an awareness of Entrepreneurship through various workshops /seminars. The Cell organizes Industry visits and also interactions with successful entrepreneurs. Every year the cell conducts a competition for identify students with best business Ideas.
  - Internship programs in Industry/R&D organization/IITs/IISc/NID/NITs etc are regularly organized.

**5.1.4 Does the College publish its updated prospectus and handbook annually? If yes, what are the activities / information included / provided to students through these documents? Is there a provision for online access?**

- Hand book: Rules and regulations of autonomous scheme
- Prospectus: Highlights of departments, R & D activities available in the department
- College magazine: Brings out the annual college magazine (*Ostium*) which contains the curricular, co-curricular and extracurricular activities held during the academic year. It also includes research activities, technical/general articles from students and faculty
- College Website provides following information about the college.
  - Highlights of the Institute
  - Academic calendar
  - Admission Policies
  - Academic Programs & Activities
  - Co-curricular & Extra-curricular activities
  - Facilities available
  - Placement
  - Research and Development

- Departmental Details
- Rules & Regulations of the Autonomous System

**5.1.5 Specify the type and number of scholarships / free ships given to students (UG/PG/M.Phil/Ph.D./Diploma/others in tabular form) by the College Management during the last four years. Indicate whether the financial aid was available on time.**

- Based on the economic condition of the students , tuition fee waiver or reduction and waiver of transportation/ other fee are given

**5.1.6 What percentage of students receives financial assistance from state government, central government and other national agencies? (e.g., Kishore Vaigyanik Protsahan Yojana (KVPY), SN Bose Fellow, etc.)**

- About 20% of the students receive financial assistance from the state, central and private agencies.
- Teaching assistant ships for PG Students under TEQIP & GATE
  - Financial aid available as per TEQIP/GATE policies
- Research assistant ships for full time Ph.D. students
  - Financial aid available as per TEQIP policies

**5.1.7 Does the College have an International Student Cell to cater to the needs of foreign students? If so, what measures have been taken to attract foreign students?**

YES,

- The college has set up an International Student Cell to cater the needs of the foreign students.
- The Institution has approval of AICTE for 15% Super numeracy quota for PIO/Foreign Nationals etc.
- Since last three years, the college has admitted a number of foreign students through EdCIL as well as direct admissions.
- A separate wing for the foreign student's with good facilities is provided in the hostels.
- Continuous special care has been given to cater to the needs of foreign students in respect of food, academics, medical facilities, etc.
- Foreign students are mentored by a senior faculty of the rank of the Professor.
- The college participates International Fairs conducted by EDCIL regularly

### **5.1.8 What types of support services are available for**

- **overseas students**
  - Advisor-Foreign Students at the level of Professor takes care of all the requirements of the foreign students round the clock.
  - Special care in Academic activities
  - Conducting Bridge courses as and when the need arises.
  - Assistance for FRRO work and travel arrangements.
  - Advisor-Foreign student will act as a Local Guardian of each and every Foreign National
  - Good hostel facilities.
  
- **physically challenged / differently abled students**
  - Lift
  - Ramps
  - Special Toilets for disabled
  
- **SC/ST, OBC and economically weaker sections**
  - Book Banks
  - State/Central Scholarships
  - Teaching assistantship under TEQIP
  - Partial waiver Tuition and Transportation fee
  
- **students to participate in various competitions/conferences in India and abroad**
  - Financial support for students attending competitions /conferences within the country and abroad in respect of travel, registration fees etc.
  
- **Health centre, health insurance etc.**
  - The college has a well equipped medical center with a well qualified doctor and a nurse and also a 24 hour ambulance facility is provided.
  - Medical insurance facility is provided for all the students and staff to take care of the emergency requirements.
  - The college has tied –up with nearby multi-specialty hospitals such as K K hospital , Colombia Asia Multispecialty hospital , M S Ramaiah hospital, Aveksha hospital for the needs beyond the college medical center.
  
- \* **skill development (spoken English, computer literacy, etc.,)**
  - Communicative English is integrated in the curriculum for all the students
  - Right from the 1<sup>st</sup> year students are exposed to the use of computers.

- Placement & Training department conducts intensive coaching from experts for logical reasoning ,numerical aptitude, soft skills, analytical thinking, technical aptitude and interview skills
- **performance enhancement for slow learners / students who are at risk of failure and dropouts**
  - Academically weak students are identified every semester and remedial classes are conducted.
  - Supplementary Semester is conducted for failed/dropout students in summer.
- **Exposure of students to other institutions of higher learning/ corporate/business houses, etc.**
- Career counseling sessions are organized to guide the students in order to choose the best career option. Students are motivated to take up the following options based on their individual strengths
  - Higher studies (Both Technical & non Technical)
  - Appear for various competitive examinations like GATE/CAT/GRE/GMAT/JMAT/IELTS etc..
  - Appear for civil and engineering services examinations.
  - Appear for public sector job openings under both central and state governments like Defense services, DRDO, ISRO, NAL, BAARC, KPSC etc.
  - An overview of the profiles of various jobs like teaching, product development, and services industry will be discussed
- Entrepreneurship and Development Cell of the Institute creates an awareness of Entrepreneurship through various workshops /seminars. The Cell organizes Industry visits and also interactions with successful entrepreneurs. Every year the cell conducts a competition for best business Ideas.
- Internships programs in Industry/R&D organization/IITs/IISc/NID/NITs etc
- **Publication of student magazines**
  - Students can publish their articles in departmental News Letters/College News letter/College Magazine

**5.1.9 Does the College provide guidance / coaching classes for Civil Services, Defense Services, NET/SLET and any other competitive examinations? If yes, what is the outcome?**

Yes

- Career counseling sessions are organized to guide the students in order to choose the best career option. Students are motivated to take up the following options based on their individual strengths
  - Higher studies (Both Technical & non Technical)
  - Appear for various competitive examinations like GATE/CAT/GRE/GMAT/JMAT/IELTS etc..
  - Appear for civil and engineering services examinations.
  - Appear for public sector job openings under both central and state governments like Defense services, DRDO, ISRO, NAL, BAARC, KPSC etc.
  - An overview of the profiles of various jobs like teaching, product development, and services industry will be discussed
- As a team, senior and experienced faculties of all the departments train the students for Civil Services, Defence Services and GATE examination. The classes are included in the time table from V semester onwards.

**Outcome:**

- Increase in the number of students appearing for GATE/GRE/SSB

**5.1.10 Mention the policies of the College for enhancing student participation in sports and extracurricular activities through strategies such as**

**\* additional academic support, flexibility in examinations**

- Special classes will be arranged to the students who miss the regular classes due to participation in sports/NCC/NSS/Cultural activities.
- Flexible schedule for taking Continuous Internal Evaluation components and Semester End Exams.

**\* special dietary requirements, sports uniform and materials**

- In consultation with the resident doctor of the Institute, the Department of sports confirms the diet requirements for each student based on his/her health conditions.
- The Institute supplies the dress materials for Uniforms and other items to each student.
- Students will be provided egg and milk during the coaching sessions and each team will be given the prescribed uniform and materials like shoes, studs, stockings, guards, protectors etc

**\* any other**

- The Institute encourages the students to take part in the sports and



extracurricular activities. A briefing and counseling session is being arranged on the Inaugural day of the 1<sup>st</sup> year BE classes in order to identify the preference of the students for various activities and to motivate them to register for the same.

- Achievers, class toppers and medal winners will be felicitated in the college annual day function with cash award and appreciation certificate by college and management.

### **5.1.11 Does the College have an institutionalized mechanism for placement of its students? What services are provided to help students identify job opportunities, prepare themselves for interview, and develop entrepreneurship skills?**

YES

NMIT, Bangalore has a focused Placement Cell. We strongly believe that placement of Students through campus recruitments has to be an essential component of the Instructional activities.

#### **Services**

- The Placement Cell of the Institute is responsible for arranging training of the undergraduate and postgraduate students in order to make them successful in the recruitment process by various organizations which include Public/Private/Defence sectors.
- The Placement Cell also arranges pre-placement orientation to the students prior to formal campus interviews by senior executives of major industries.
- Placement Cell regularly briefs the students about the requirements of various companies and prerequisites necessary for succeeding in their selection processes.
- The Institute takes care to train students for the campus recruitment. A structured Training programme for both IT and Non-IT students is put in place.
- NMIT regularly conducts training on topics such as Quantitative ability, Technical ability, Verbal ability, Logical ability, Group discussion, and personal interview and communication skills with the assistance of best trainers.
- NMIT encourages interdisciplinary approach and thus exposes Non IT students to software languages like C, C++ etc.
- Students of Mechanical Engineering discipline are trained in various software tools used by the industries as CAE tools like CATIA, Pro/Engineer, Fluent etc.
- NMIT has a close interaction with organizations such as DRDO, TCS, Infosys, Wipro, DELL, TATA Elxsi, EMC2, Cypress Semiconductors, FLUIDYN, CPRI etc. for research, academic and Training & Placement activities.
- The Placement Cell conducts extensive on-campus recruitment programmes, workshops, seminars and individual career and provides job search assistance.
- NMIT organizes Industrial tours to give students a feel of work culture in the Industries.

**5.1.12 Give the number of students selected during campus interviews by different employers (list the employers and the number of companies who visited the campus annually for the last four years).**

**NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY**  
**Department of Training & Placement**  
**Campus Recruitment Details (UG and PG)**

Sl. No.	Name of the Company	A.Y 2009-10	A.Y 2010-11	A.Y 2011-12	A.Y 2012-13	A.Y 2013-14
1	TCS	24	60	102	72	30
2	Dell		33	65	52	
3	Capgemini				24	56
4	Tech Mahindra	17	50	12		11
5	Accenture	57				
6	Aricent Group					14
7	Infosys	16				
8	H P	3	1		1	10
9	HCL	4	5			
10	Accord Software			1		4
11	Amazon				3	7
12	Bristlecon	1				
13	Blue Star Infotech		3			
14	CSC India Pvt Ltd			1		
15	Cognizant (CTS)	28				
16	Celstream Technologies			4	4	
17	Corp Scan				4	
18	Deloitte					4
19	DRDO	1				
20	FACE				5	
21	Genisys	1				
22	Global Edge Software					
23	Global Phone Networks			6		
24	Governance	2				
25	Hoerbiger	1				
26	Health Asyst			1		
27	JNN College	1				
28	JK Technosoft	1				

29	IBM	6	8	6	2	2
30	ISRO	2				
31	Indian Navy		1		1	
32	Indian Airforce		1	2		
33	Indian Army					1
34	L&T IES			4		
35	L&T Infotech	1				
36	Manthan Software Services	1				
37	Mphasis	4	27			
38	Microland	7				
39	Mindtree	1	14			
40	Nokia Siemens/Nokia	2				
41	NIIT	2				
42	One Source	1				
43	Open Stream Technology		1			
44	Oracle	6		3		
45	Paladion Networks Pvt Ltd				8	
46	Prestine Technology	1				
47	SAP Labs	6				
48	Sasken	1	6	1	1	
49	SEMINDIA	2				
50	SLK		17	8		
51	Sonata Software		4			
52	Sourcebits			2		
53	Span Infotech			8		
54	Subex		1		3	
55	Syntel		2	1		
56	Tata Elxsi		22	30		
57	TESCO	1	8		3	15
58	TOSHIBA	1				
59	Thomson Reuters	1	5			
60	Trix Tech	1				
61	Unisys			3		
62	Virtusa (India) Private Limited				1	
63	Vijaya Bank		12			
64	Yokogawa					5
65	Yahoo	1				

66	Diagnosys Electronics		4			
67	KPIT Cummins		4			
68	Ace Designers				3	
69	Ajax Fiori		1		4	
70	Amada India				1	
71	Atkins		2			
72	Bosch	2			4	
73	Coca-Cola			2	2	
74	Dynamatic Technologies		5		3	
75	Ericson				2	
76	Firepro Systems	2				
77	Infotech Enterprises				3	
78	Macurex Sensors	8	8			
79	Maiyas				4	
80	Mahindra Engg		5	11		
81	Moog India		2			
82	MRO Tech		1			
83	Neil Soft		4			
84	Purvankara Projects				8	
85	Saint - Gobain Grindwell Norton				4	
86	Sobha Developers				1	
87	Toyota Kirloskar		1			
88	Triveni Turbine Ltd				1	
89	Trigent				2	
90	Universal Power Transformer		2			
91	Victory Electricals		8			
92	Weir Minerals			1		
93	Weg India Pvt Ltd			4		
94	Analytics Quotient				1	
95	Apco Pharma	1				
96	ATS				7	
97	Axis Sales	9	4			
98	Career Net		1			
99	Common Floor				3	
100	Deutsche Bank	3				
101	Ernst & Young	2	3			
102	Fenesta				1	

103	HDFC	1				
104	J.P Morgan				1	
105	ICICI Securities				2	
106	itrust	3				
107	India Infoline	2				
108	Invensoft	1				
109	Karvy				1	
110	Kriatec Services				2	
111	KVP Business Solutions				1	
112	NIIT	2				
113	Ratna Packages	1				
114	RetailOn				4	
115	Reliance Money Solutions Pvt Ltd				3	
116	Rochester	2				
117	Soma	1				
118	Taj Hotel	1				
119	World Courier	1				
120	Xlpro				4	
121	Zenith Software	1				
	<b>Total</b>	<b>248</b>	<b>336</b>	<b>278</b>	<b>256</b>	<b>159**</b>

**\*\* In Progress**

**5.1.13 Does the College have a registered Alumni association? If yes, what are its activities and contributions to the development of the College?**

Yes

- We have an Alumni Association registered in the year 2006.
- Every year, Institute with the office bearers of Alumni Association conducts Alumni Meet.
- During Alumni Meet, Alumni share their Feedback and suggestions to improve curriculum, facilities, placement, training etc.
- Alumni will also participate in Board of Studies, Advisory committee; the institute utilizes their experience of the outside world while implementing the Outcome Based Educational activity.
- Alumni will assist the institute for getting Internship, Projects, Placements, and Training etc.

**5.1.14 Does the College have a student grievance redressal cell? Give details of the nature of grievances reported and how they were redressed.**

Yes, it is constituted as per AICTE norms. So far no one has approached the Grievance redressal cell, as the day to day student grievances are addressed by HODs/Principal.

**5.1.15 Does the College have a cell and mechanism to resolve issues of sexual harassment?**

Yes

**5.1.16 Is there an anti-ragging committee? How many instances (if any) have been reported during the last four years and what action has been taken on these?**

Yes, No major ragging incidence has occurred, since the Institution is taking every care to implement the policies of the Government to curb ragging in Educational Institutions

**5.1.17 How does the College elicit the cooperation from all stakeholders to ensure overall development of the students considering the curricular and co - curricular activities, research, community orientation, etc. ?**

- NMIT is one of the few Educational Institutes in the country where even UG students are participating in research projects. For example, Design, Development and Launch of Student Satellite with guidance of ISRO. In the implementation of this project, the Institute has taken the consortium approach through which along with NMIT as the lead Institution, six other Engineering colleges in the state are part of the consortium to implement the project. The outcome of the project includes UG students of different discipline and Faculty who are members of the consortium has been able to publish research papers in reputed Journals/International conferences. This is a good example of students from different Institutions working together and contributing, as a part a team.
- Design & Development of Vision Based Robots.
- The college has established a state of the art CFD Laboratory provided with 1 Dell workstation, 15 Dell and Lenovo Desktop machines, HP Printer/Scanner/Copier and 7.5 KVA UPS facilities. The facility is used round the clock for undergraduate and postgraduate (Thermal) research project. Most of the research work are published in Journals and Conferences
- The college has a student Council with representatives from different classes/sections.
- The Student Council is actively involved in organizing the curricular /co curricular/Extra curricular activities in the campus with the support, supervision and participation of the faculty.

- As an example, Nitte Hostels' Association (NHA) actively organizes several programmes like Festivals pertaining to various parts of the country, Hostel's Freshers' and Farewell Day, Inter Hostellite Sports and cultural programmes on a regular basis.
- Every Department has students' association which conducts various intra technical and extracurricular competitions.
- Students' council organizes annual
  - Intercollegiate Techno Cultural fest known as Ánaadyanta
  - Kannada Rajotsava day
  - Ethnic Day to showcase the culture of different States of the country
  - College day

### **5.1.18 What special schemes/mechanisms are in place to motivate students for participation in extracurricular activities such as sports, cultural events, etc?**

- Flexibility in Continuous Internal Evaluation schedule.
- Participants in College/State/National level sports/cultural competitions will be given the benefit of attendance, travel and other expenses.
- Students are provided with decent allowances to cover their expenses towards boarding, lodging, travel, registration etc.
- Students are encouraged to participate in National events like Republic day parades etc. and those participants are given the benefit of attendance, travel and other expenses.

### **5.1.19 How does the College ensure participation of women in 'intra' and 'inter' institutional sports competitions and cultural activities? Provides details of sports and cultural activities in which such efforts were made?**

The college encourages and gives all the support for women for participation in intra and inters institutional sports competitions and cultural activities.

Following are a few recent events participated and won by our girl students

- Ms. Sinchana K.R. of 5<sup>th</sup> Sem E&C had won Silver and Bronze medals in single zone inter collegiate swimming competition and also represented VTU in inter university swimming competition held at Kolkata.
- Girls' basket ball team had participated in VTU single Zone Basket Ball Tournament was organized by SIT Tumkur and reached quarter finals
- Girls' basket ball team had participated in VTU Inter collegiate Throw Ball Tournament at APS college of Engineering Bangalore on 24<sup>th</sup> and 25<sup>th</sup> Aug 2012 and reached the quarter finals
- Girls' Kho Kho Team had participated in VTU –Single zone tournament during 8-10 April 2013 at Acharya IT, Bangalore

- Girls' Table Tennis team had participated in VTU tournament during 6-7 March 2013 at Nagrjuna College of Engg, Bangalore
- Girls' Volley Ball team participated in VTU tournament during 21-23 March 2013 at KSIT Bangalore
- Girls' Badminton Team had participated in VTU tournament during 30-31 March 2013 at BMSIT, Bangalore
- Ms. Lakshmi of I year ISE had participated in VTU Single Zone Archery Completions was held at RLJIT Doddaballpur during 3<sup>rd</sup> 4 Oct 2012



## 5.2 Student Progression

**5.2.1 Provide details of programme-wise success rate of the College for the last four years. How does the College compare itself with the performance of other autonomous Colleges / universities (if available?)**

Program	Year of Graduation	Total Number of Students	Number of students completed successfully	Pass Percentage
<b>BE-CSE</b>	2009-10	129	93	72%
	2010-11	132	121	91.66%
	2011-12	137	134	97.8%
	2012-13	116	106	91.3%
<b>BE-ECE</b>	2009-10	132	109	82.57%
	2010-11	139	125	89.2%
	2011-12	139	128	92.19%
	2012-13	135	121	89.62%
<b>BE-ISE</b>	2009-10	61	40	65.57%
	2010-11	70	69	98.5%
	2011-12	64	56	87.5%
	2012-13	53	50	94.33%
<b>BE- Mech</b>	2009-10	60	47	78.33%
	2010-11	69	68	98.55%
	2011-12	73	69	94.52%
	2012-13	128	127	99.21%
<b>BE-EEE</b>	2009-10	52	36	69.2%
	2010-11	65	63	96.92%
	2011-12	55	49	89.09%
	2012-13	56	55	97.95%
<b>BE-CIVIL</b>	2012-13	55	55	100%
<b>M.Tech- VLSI</b>	2009-10	6	4	66.66%
	2010-11	17	15	88.2%
	2011-12	18	16	88.88%
	2012-13	18	13	72.2%
<b>M.Tech.-CSE</b>	2009-10	18	18	100%
	2010-11	18	18	100%
	2011-12	18	18	100%
	2012-13	18	18	100%
<b>M.Tech.-Thermal</b>	2011-12	15	13	86.66%
	2012-13	14	13	92.85%
<b>M.Tech- Structural</b>	NA	NA	NA	NA

<b>Engg</b>				
<b>M.Tech-Machine Design</b>	NA	NA	NA	NA
<b>MBA</b>	2009-10	57	50	88%
	2010-11	57	45	79%
	2011-12	52	48	92%
	2012-13	112	99	93.39%
<b>MCA</b>	2009-10	60	54	90%
	2010-11	61	51	83.6%
	2011-12	61	56	91.8%
	2012-13	61	55	90.16%

**5.2.2 Providing the percentage of students progressing to higher education or employment (for the last four batches) highlights the observed trends.**

Academic year	No of students (UG to PG)	No of students (PG to Ph.D)	No of students placed		No of students who appeared for GATE/GRE/TOEFL/GMAT/Defense/IAS/IPS etc
			On-Campus	Other than campus	
<b>2009-10</b>	30	Nil	181	126	31
<b>2010-11</b>	30	Nil	318	121	33
<b>2011-12</b>	29	Nil	293	115	41
<b>2012-13</b>	20 (Still in Progress)	Nil	171	81	110

Student progression	Percentage
UG to PG	15
PG to M.Phil.	-
PG to Ph.D.	5
Employed	
• Campus selection	70
• Other than campus recruitment	20

**5.2.3 What is the Programme-wise completion rate/dropout rate within the time span as stipulated by the College/University?**

<b>Name of the programme</b>	<b>UG/PG</b>	<b>Drop Rate</b>
Computer science and Engineering	UG	1.1%
Information and Science Engineering	UG	1.66%
Mechanical Engineering	UG	0%
Electrical and Electronics Engineering	UG	2.5%
Electronics and Communication Engineering	UG	0%
Civil Engg.	UG	0%
Masters Of Business Administration	PG	2%
Masters Of Computer Application	PG	1.8%
M.Tech (VLSI design and Embedded Systems)	PG	5.5%
M.Tech Thermal Power Engineering	PG	6.6%
M.Tech. – Computer Sc. & Engg	PG	1.1%

**5.2.4 What is the number and percentage of students who appeared/qualified in examinations like UGC-CSIR-NET, UGC-NET, SLET, ATE / CAT / GRE / TOFEL / GMAT / Central / State services, Defense, Civil Services, etc.**

<b>2009-10</b>	10%
<b>2010-11</b>	7.6%
<b>2011-12</b>	9.2%

**5.2.5 Provide details regarding the number of Ph.D/D.Sc./D.Litt. theses submitted, accepted, resubmitted and rejected in the last four years.**

Accepted - 6

## 5.3 Student Participation and Activities

### 5.3.1 List the range of sports and games, cultural and extracurricular activities available to students. Provide details of participation and program calendar.

#### Department of sports - 2012-2013

#### Details of participation and results

#### CRICKET

Sl. No	Tournament	Date	Organised college	Result
1	Dr. M.S.Ramaiah memorial state level Tournament 2012	10-09-2012 To 16-09-2012	MSRIT, Bangalore	Reached Semi Finals
2	VTU Bangalore North Zone	06-03-2013 TO 14-03-2013	REVA ITM, Bangalore	Reached Quarter Finals
3	Chamaraja Memorial State Level Tournament 2013	30-04-2013 To 04-05-2013	RVCE, Bangalore	Runner-Up

#### FOOT BALL

Sl.No	Tournament	Date	Organised College	Result
1	VTU Bangalore North Zone	26-02-2013 TO 03-03-2013	REVA ITM, Bangalore	Reached Semi Final
2	VTU Inter Zone	01-03-2013	REVA ITM, Bangalore	Reached Per Quarter

Note: Mr. Abhishek Kumar Singh 8<sup>th</sup> Sem CSE & Mr. Avinesh 6<sup>th</sup> Sem Mech was represented VTU Foot Ball Team

#### TABLE TENNIS

Sl.No	Tournament	Date	Organised college	Result
1	VTU North Zone	06-03-2013 TO 07-03-2013	NHCE Bangalore	Reached Quarter Finals

### VOLLEY BALL MEN

Sl. No	Tournament	Date	Organised College	Result
1	VTU Bangalore North Zone	13-03-2013 TO 14-03-2013	KIT, Tiptur	Reached 2 <sup>nd</sup> Round

### VOLLEY BALL WOMEN

Sl.No	Tournament	Date	Organised College	Result
1	VTU Bangalore North Zone	21-03-2013 TO 23-03-2013	KSIT Bangalore	Participated

### BADMINTON

Sl.No	Tournament	Date	Organised College	Result
1	VTU Single Zone	30-03-2013 TO 31-03-2013	BMSIT, Bangalore	Reached Semi Finals

### KHO- KHO MEN

Sl.No	Tournament	Date	Organised College	Result
1	VTU Bangalore North Zone	05-04-2013 TO 06-04-2013	NADGIR IT Bangalore	Reached 2 <sup>nd</sup> Round

### KHO – KHO WOMEN

Sl.No	Tournament	Date	Organised College	Result
1	VTU Single Zone	08-04-2013 TO 10-04-2013	ACHARYA IT Bangalore	Participated

### BASKET BALL WOMEN

Sl.No	Tournament	Date	Organised College	Result
1	VTU Single Zone	12-04-2013 TO 14-04-2013	SVIT, Bangalore	Participated

### BASKET BALL MEN

Sl.no	Tournament	Date	Organised college	Result
1	VTU Bangalore North Zone	22-04-2013 TO 23-03-2013	NHCE Bangalore	Reached Semi Finals
Note	Qualified For Vtu Inter Zonal Competition			

### TENNIS

Sl.No	Tournament	Date	Organised College	Result
1	VTU Single Zone	29-04-2013 TO 02-05-2013	MSRIT Bangalore	Participated

### BEST PHYSIQUE

Sl.No	Tournament	Date	Organised College	Result
1	VTU Single Zone	18-10-2012 TO 20-10-2012	SDMIT, UJIRE.	One Silver Medal
2	Nitte University Inter Collegiate	22-03-2013 TO 23-03-2013	NMAMIT, NITTE	One Silver Medal

### SWIMMING

Sl.No	Tournament	Date	Organised College	Result
1	VTU Single Zone	31-08-2012	BIT, Bangalore	One Bronze Medal

### THROW BALL

Sl.No	Tournament	Date	Organised College	Result
1	Bangalore Zone	25-09-2012 TO 26-09-2012	APSCE, Bangalore	Reached Quarter Finals

**5.3.2 Provide details of the previous four years regarding the achievements of students in co-curricular, extracurricular activities and cultural activities at different levels: University / State / Zonal / National / International, etc.**

**Participation and achievements: 2008-09 to 2012-13**

Sl. No	Name Of The Player	Tournament	Organized College &Year	Achivement
1	Hockey	VTU Inter Collegiate Hockey Tournament	2008 CIT Ponnampet	Runners-Up
2	Ms. Hari Priya	VTU Athletic Meet	2008 REVA ITM Bangalore	Bronze Modals 1) 100 Meters 2) 200 Meters
3	Foot Ball	State Level Foot Ball Tournament	BTLIT Bangalore 2008	Winners
4	Hockey	State Level Hockey Tournament	2009 SIT Tumkur	Runner-Up
5	Hockey	State Level Hockey Tournament	MIT Manipal 2009	Runner-Up
6	Mr.Shamanth D.	Reperesented VTU Foot Ball Team	PESIT Mandya 2009	
7	Mr. Ashish J.G.	VTU Athletic Meet 2009	SDMCEDharwarad 2009	Bronze Medal
8	Foot Ball	VTU North Zone Foot Ball Tournament	Dr TTIT KGF 2009-10	Winners
9	Mr. Ashish J.G	VTU Athletic Meet 2010	AIT Chikkamagalore 2010	Gold Medal
10	Mr. Ashish J.G.	VTU Athletic Meet 2010	Sir MVIT, BANGALORE	Silver Medal
11	Mr. Shamanth D.	Reperesented VTU Foot Ball Team	VIT, Vellur (TN) 2010	
12	Mr.Arijeet Mukherjee	Reperesented VTU Hockey Team	BangaloreUniversity 2010	
13	Foot Ball	State level Inter Collegiate Foot Ball	8 <sup>th</sup> to 10 <sup>th</sup> Apr 2011-12 NHCE Bengaluru	Winners
14	Mr.Vikram M Sidharth	Represented Vtu In South Zone In Inter University	Kerala University Thiruvananthapur 2011-12	

		Tournaments		
15	Ms.Sinchana .K.A	VTU Inter Collegiate Single Swimming 2011-12	21 <sup>st</sup> to 22 <sup>nd</sup> Sept 2011-12 RVCE Bengaluru	One Silver Medal, One bronze Medal
16	Ms.Sinchana .K.A	Represented VTU in All India Inter University Swimming competition 2011	Calcutta, University kolkata, 17 <sup>th</sup> to 21 <sup>st</sup> Oct 2011.	
17	Cricket	NMIT enters the league in M.S.Ramaiah Inter collegiate Tournament 2012	MSRIT, Bengaluru,10 <sup>th</sup> to 13 <sup>th</sup> Oct 2012	Semi finals
18	Mr.Hamsaraj	represented VTU in Inter University Ball Badminton	Mangalore University Mangalore,28 <sup>th</sup> Jan to 1 <sup>st</sup> Feb 2012	
19	Mr.Abhishek Kumar Singh	represented VTU in Inter University Foot Ball Tournament 2012-13	Annamalai university Chidambaram, 6 <sup>th</sup> to 13 <sup>th</sup> Oct 2012	
20	Mr.Avinash	represented VTU in Inter University Foot Ball Tournament 2012-13	Annamalai university Chidambaram, 6 <sup>th</sup> to 13 <sup>th</sup> Oct 2012	
21	Ms. Sinchana .K.A	VTU Inter Collegiate Single Swimming 2012-13	Bangalore Institute of Technology Bengaluru,31 <sup>st</sup> Aug 2012	One Bronze Medal
22	Mr.Lohith B R	VTU Inter Collegiate Single Zone Best Physique 2012-13	S.D.M.I.T Ujire, Dharmastala,18 <sup>th</sup> to 20 <sup>th</sup> Oct 2012	One Silver Medal

### Participation in cultural activities

<b>5.5.2010</b>	Group dance (EEE) Deepthi. D (EC) Preetham (ME)	SJBIT fest SJBIT fest PESCE, BIT, JSSATE fest
<b>10.2.2011</b>	Preetham (ME)	SJCIT fest
<b>9.3.2011</b>	Suhas (MCA)	Inter college fest (Abhiviyakthi)
<b>21.3.2011</b>	Manjula	NMAMIT fest
<b>29.3.2011</b>	RintoRaju	KrishthJayanti fest



8.12.2011	Bhakthi	Fashion show
27.3.2012	Janaki	KristhuJayanti fest
18.4.2012	Deepthi. D (EC)	Inter college fest
18.4.2012	Ujjwala	St. Alloysys college fest
21.4.2012	Shobha	Inter college fest
24.4.2012	Ganesh Shetty	Reva ITM fest
30.10.2012	Karthi Raj	Warangal tech fest
24.1.2013	Dhanish (CS)	JyothiNivas college fest

### **5.3.3 How often does the College collect feedback from students for improving the support services? How is the feedback used?**

- All the stakeholders are free to give feedback to the HODs, Principal, and Management representatives.
- At the first level, if the feedback is about the faculty, departmental issues, it is solved at the level of the HODs.
- If the stake holders are not satisfied, they go to Principal and then management for redressal. If the issues are general in nature, it will be handled by the Principal, if needed the management's support is taken for redressal.
- This year we have introduced an online feedback system about the faculty by the students.
- The principal and management will go through the feedback for corrective actions.

### **5.3.4 Does the College have a mechanism to seek and use data and feedback from its graduates and employers, to improve the growth and development of the College?**

- Every Department collects feedback and takes necessary steps for correction.
- College arranges Alumni meet for feedback and corrective actions.
- Alumni are part of BOS and participate in the development of curriculum.
- Departments send questionnaires to alumni and the employers on the curriculum / program educational objectives / learning outcomes to improve the curriculum.
- During Employers' visit to the campus for recruitment, suggestions and feedback are collected from them for improving the relevance of the curriculum etc.

### **5.3.5 How does the College involve and encourage students to publish materials like catalogues, wall magazines, College magazine, and other material? List the major publications/ materials brought out by the students during the previous academic session.**

NMIT encourages the students to publish their articles in Dept newsletters/college newsletters/magazine. The students are part of the literary forum which takes care of the

publications of newsletters and magazines. The different departments have departmental associations which organize technical talks and also publish Newsletters.

Publishers	Title of publication
College Literary Forum	Ostium
The mechanical engineering students association - Yantra	Mechzine.
The Computer science dept - Cryptic	Aretha
The Information Science dept –Sanghyartham	Inforium
The Electrical & Electronics dept –kalatrishna	Zenith
The Electronics and Communication - Iris	Nil
The Civil dept –Sarvekshan	Nil
M.C.A-Aprameya	Arohi
MBA-Adhiveshana	Nil

### 5.3.6 Does the College have a Student Council or any similar body? Give details on its constitution, major activities and funding.

The college has a student council to organize and conduct co-curricular and extracurricular activities. The student council is constituted by nominating two students one girl and one boy from each class/ section and the meetings are held under the guidance of the faculty advisor, Dean (Students welfare) and Dean (Academic). The student council actively participates in planning and conducting the annual techno-cultural festival ANAADYANTA, Independence Day, Republic Day and Kannada Rajotsava day, Ethnic Day to showcase the culture of all the parts of the country in a grand way every year. The college funds entirely for all the activities every year.

### 5.3.7 Give details of various academic and administrative bodies that have student representatives on them. Provide details of their activities.

The students have representation in the following academic and administration bodies:

Committee	Activities
<b>Student council</b>	Responsible for all co- Curricular and Extra-curricular Activities
<b>Literary Forum</b>	Publishing college magazine Ostium and NMIT news letter.
<b>Departmental Association</b>	Arranging Technical fest and Expert talks, Publishing Departmental News Letters
<b>Library Committee</b>	Identifying the Library resources for procurement
<b>Hostel Committee</b>	Takes care of running the Mess, conducting Extra-curricular activities for hostel students.

<b>NSS</b>	Conducting Blood Donation Camps, Community services and arranging Lectures.
<b>NCC</b>	Organizing NCC camps, blood donation camps and participating Republic/Independence Day celebrations
<b>Youth Wing of Red Cross Society</b>	Motivating and conducting Blood donation camps
<b>Sports Committee</b>	Organizing Sports meets, Coaching camps and oversee the requirements of sports activities.
<b>Rotaract Club(Students wing)</b>	Promoting community services
<b>Board of studies</b>	Curriculum Revision/Assessment methods.
<b>Advisory Committee</b>	Activities of Outcome based education
<b>The National Entrepreneurship Network</b>	Activities to become an Entrepreneur, patenting etc
<b>Amateur Radio Club</b>	Activities related to tracking satellites, RF signals etc
<b>IEEE, ISTE, IETE, SAE and CSI chapters</b>	Arranging technical lectures, visits, competitions etc

Any additional information regarding Student Support and Progression, which the institution would like to include.

## **CRITERION VI: GOVERNANCE, LEADERSHIP AND MANAGEMENT**

### **6.1 Institutional Vision and Leadership**

#### **6.1.1 State the vision and mission of the College.**

Vision of the College

- To develop Nitte Meenakshi Institute of Technology through quality, innovative and state of art educational initiatives into a centre of academic excellence that will turn out youth with well balanced personality and commitment to rich cultural heritage of India and who will successfully face the scientific and technological challenges in the fast evolving global scenario with a high degree of credibility, integrity and ethical standards.

Mission of the College

- To provide India and World, technical man power of highest academic excellence by shaping our youth through holistic and integrated education of the highest quality.

#### **6.1.2 Does the mission statement define the College's distinctive characteristics in terms of addressing the needs of the society, the students it seeks to serve, College's traditions and value orientations, vision for the future, etc.?**

Yes

Nitte Meenakshi Institute of Technology is a unit of Nitte Education Trust, Mangalore. Nitte Education Trust was established by the visionary Justice K. S. Hegde former Supreme Court Judge and former Speaker of Lok Sabha with a vision to provide quality education addressing the requirements of the society which is changing from time to time, with human values.

Accordingly, the vision and mission students of Nitte Meenakshi Institute of Technology, has the following activities,

- To provide India and the world, technical manpower of the high quality.
- To create an innovation and state of the art educational facilities to turn out youth with academic excellence.
- To produce technical manpower who can successfully face the scientific and technological challenges in the fast changing global scenario.

- To inculcate human values along with the professional educations to make the graduate of discharging his duties with high degree of credibility, integrity and ethical standards.

### **6.1.3 How is the leadership involved in?**

- **ensuring the organization's management system development, implementation and continuous improvement**

- The highest governing body of the institution is its Governing Council. The Governing council has eminent educationalists, industrialists and researchers who meet regularly and make policy decisions and give guidelines and suggestions to implement policies successfully.
- The principal who is the member secretary of the governing body takes steps for implementations of the governing council decisions, through the HODs and members of several committees.
- Internal Quality Assurance Cell (IQAC) is responsible for overseeing the activities of various departments to review and improve the quality of teaching and learning processes.
- Academic council will ensure quality in academic activities such as design & framing curriculum, proper evaluation system etc.

- **interaction with stakeholders**

- Stake holders are represented in BOS,BOE,DUGC,AC,IQAC, Advisory Committee and Governing Council
- Each program is having a program coordinator who will interact with all the stake holders

- **reinforcing culture of excellence**

- Large numbers of UG & PG students are involved in Research in areas of multidisciplinary nature like Satellites, Robotics, CFD, Materials, MEMS, Cloud computing etc. Research Council promotes research culture among faculty and students.
- In addition to courses in the engineering and science domain, we have introduced courses on Environmental studies, Constitution of India and professional ethics, which make the graduates will equipped with societal issues which inturn help them in their professional careers.
- The students are trained in soft skills, communication skills, technical skills and thus meeting the requirements of employers as well as the global challenges.

- The college has established from the inception Units of NSS/NCC/Youth wing of Red Cross Society/ Rotract club, etc. to enable large number of students participatemultifarious activities conducted by these units which in turn will inculcate among them values like discipline, team work, leadership etc.
- **Identifying needs and championing organizational development (OD)?**
  - The purpose of OD is to address perennial evolution needs of successful organizations. It is for readiness to meet change and challenges in the global market.
  - The Governing Council comprises of persons of eminence in the field of Higher Education/Industries/Research Organizations/Former heads of National Educational Institutes besides representatives of the faculty. With their rich experience and background they are guiding the destiny of the Institution so as to occupy a place of eminence in the field of Higher/Technical Education which is evidenced by the fact that the college is already obtained the status of an Autonomous Institution and is only unaided Institution in Karnataka which has been selected for support under TEQIP (World bank) project.

**6.1.4 Were any of the senior leadership positions of the College vacant for more than a year? If so, indicate the reasons.**

NO

**6.1.5 Does the College ensure that all positions in its various statutory bodies are filled and conduct of meetings at the stipulated intervals?**

Yes,

- All positions in various statutory bodies like Governing Council, Academic Council, Board of Studies, and Board of Examiners are filled as per norms.
- The meetings are regularly held.

**6.1.6 Does the College promote a culture of participative management? If yes, indicate the levels of participative management.**

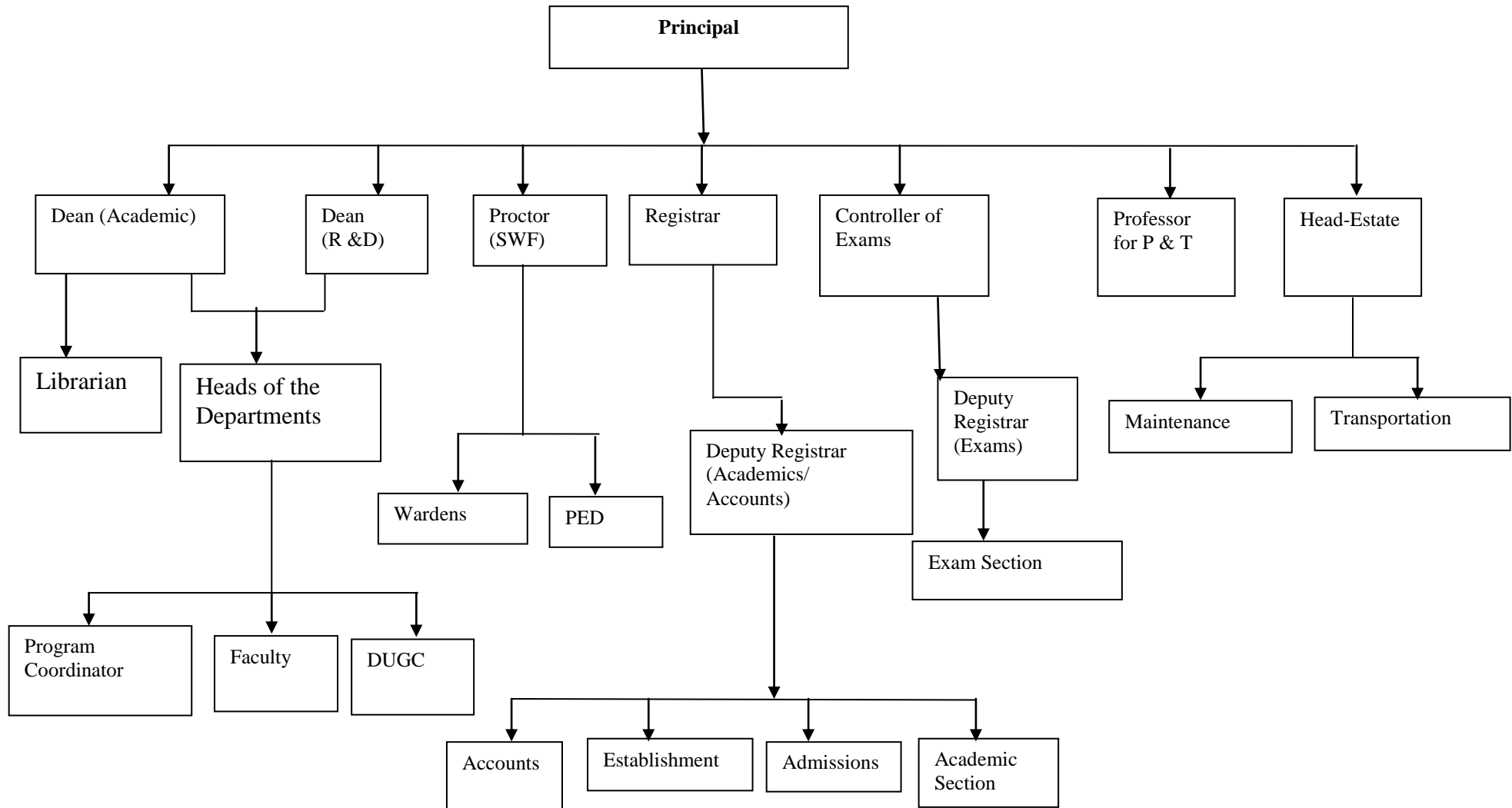
- Yes, we have a culture of participative management in the institution.
- Thelevels of participative management are
  - Institutional Level
  - Departmental levels
  - Purchase & Procurement
  - Construction
  - Planning & Development
  - Enforcement of Discipline

### **6.1.7 Give details of the academic and administrative leadership provided by the University to the College?**

- University has given guidelines for undertaking academic activities as an Autonomous college.
- University nominates representatives in Governing Council, Academic Council, Board of Studies, Board of Examiners, etc.
- University supports Faculty Development Programs, workshops, seminars, Research activities & projects.
- Although an Autonomous all the students are getting their degree certificates issued by the university indicating clearly the college from which the student has graduated

### **6.1.8 How does the College groom the leadership at various levels?**

- The college has well-defined hierarchy. The HODs & Senior Professors are members of the various Committees of the Institution such as
  - Governing Council
  - Academic Council
  - BOS
  - BOE
  - IQAC
  - DUGC
  - Advisory Committee
  - Research Council
  - Purchase Committee
  - Hostel
  - Disciplinary
  - NCC/NSS/Rotract
  - Library
  - Malpractice consideration committee
  - Anti-Sexual Harrasement
  - Anti-Ragging committee
  - Grievances Redressal Cell
  - Literary Forum
- Participation in these commities enable them to aquire the required leadership skills
- The senior faculty are regularly deputed to attend workshops on leadership, improvement in management and administrative skills, etc.





### **6.1.9 Has the College evolved any strategy for knowledge management? If yes, give details.**

Yes,

- From the inception of the college, certain initiatives have been put in place so that NMIT can become an Institution of difference. For example, while recruiting the faculty in the initial stages when availability of Post graduates in engineering was scarce, young graduates in engineering with high academic background were recruited and were deputed to higher studies in reputed Institutions like IITs, NITs, IISc etc. and thereby the Institute was able to have a strong band of young faculty from the very beginning and who have become the core group of teachers and are contributing in a good measure to provide quality engineering education to the students. In continuation of the above action, some of them have been given opportunity to pursue Doctoral studies in reputed Universities/Institutions. Added to this effort the policy followed in the Institution resulted in the recruitment of Teachers with Ph.D. qualifications in open recruitment.
- Policy of appointment of senior faculty from among those who have retired from National Level Institutions/Laboratories such as NAL, DRDO, ISRO, ITI, IITs, NITs etc as well as senior experts from reputed Industries
- Encourage the faculty to take-up research activities
- Support for research publications, patents and projects.
- Good library resources including the E-learning facility, Digital library
- Providing State of art research facility.
- MOUs with many reputed organizations like North Dakota State University, USA, Infosys, Wipro, DELL, SAE, PIA, MSME, Texas Instruments, IISc and Cypress Semiconductors, USA.

The above initiatives have resulted in the following outcomes

- Student Satellite projects
- Vision based Robotics
- Several funded research projects from DRDO, DST, DIT, VGST, VTU, IEEE, NRB, AICTE etc
- Several International Publications & patents
- Good number of Research scholars pursuing Doctoral programs.
- Organization of several International Conferences in the Institute.

### **6.1.10 How are the following values reflected in various functions of the College?**

- **Contributing to national development**
  - National development requires infrastructure like transportation/communication/power/ irrigation systems etc. to implement and manage

all these systems we need a large pool of highly talented, skilled, motivated engineers at various levels. From the very beginning, the college has started courses in the core engineering subjects like Mechanical, Electrical, Computer Science and Electronics & Communications. Later the college has started under graduate programs in Civil, Information Science and Aeronautical Engineering. Taking into account the acute shortage of post graduate engineering manpower, the college has started Post Graduate programs in seven engineering disciplines. To overcome the acute shortage of Ph.Ds, the college has established ten research centers under VTU/Mysore University. Thus contributing to manpower needs for the National projects.

- **Fostering global competencies among students**

- Motivating and supporting the students to take up Innovative Projects which have resulted in successful implementation of the following
  - Student Satellite project
  - Vision Based Robotics
  - Formula one car and other Automotive projects
- Support for participation in Global Competitions like SAE, Go-Green in the City etc.

- **Inculcating a value system among students**

- The college encourages Students to be aware of societal issues and concerns for the society through participation in NCC/NSS/Youth Wing of Red Cross Society/Rotract club etc.
- The curriculum of the Institute includes courses like Constitution of India, Professional Ethics, and Environmental Studies etc.
- The college arranges regularly Character Building Workshops through Organisations such as Art of Living, Hare Rama Hare Krishna (ISKCON), Rama Krishna Mutt, Vivekananda Kendra to motivate students to inculcate ethics and values.

- **Promoting use of technology**

ICT (Information and communication Technology) is the buzzword in our country. ICT is extensively used in all walks of life. At the institute level ICT is promoted by the following activities:

- Integrated MIS in the campus
- Use of LCD projectors in lecture classes
- Facilities for EDUSAT learning, contents supported by VTU

- Providing e-learning contents from NPTEL, Howard, MIT, Stanford University
- Digital library
- Wi-fi facilities
- Online feedback system

- **Quest for excellence**

The management is constantly striving for excellence. The college within a short span of 11 years has achieved the following which are indicators for our quest for excellence

- Seven UG Programs, seven PG Programs, eight Ph.D Programs recognized by VTU.
- Four Ph.D programs recognized by University of Mysore
- Upgraded as an Autonomous Institute from the academic year 2007-08 by the UGC
- Accredited by NBA
- Selected under TEQIP-Phase II subcomponent 1.1, only one unaided engineering college in Karnataka state.
- Launched India's first Pico Satellite on 12 July 2010, from Sriharikota in collaboration with ISRO.
- Designed and developed a pick and place robot, which is kept as a permanent exhibit in Birla Science Center, Hyberabad.
- Large number of sponsored research projects from DRDO, AICTE, VTU, VGST, DST, DIT, NRB, etc amounting to 4.5 Crores.
- Involving UG students in the ongoing research projects as well as Internship Programs in Industries/IITs/IISc/NITs/R&D Organizations.

#### **6.1.11 Give details of the UGC autonomous review committee's recommendations and its compliance.**

- UGC committee visited the college during 2009 and the committee has recommended Autonomy for the Institute. (Letter Attached)
- UGC committee has again visited the college during 2012 and has recommended the Autonomous status for a period of six years w.e.f 2012-13 to 2017-18 and the same has been implemented.

अशोक कुमार डोगरा  
Ashok K. Dogra

वित्तीय सलाहकार एवं  
संयुक्त सचिव  
Financial Adviser &  
Joint Secretary



मानविकीय विभाग

दूरभाष PHONE : कार्यालय OFF : 23232055  
फैक्स FAX : 23219716

विश्वविद्यालय अनुदान आयोग  
बहादुर शाह ज़फर मार्ग, नई दिल्ली - 110 002  
UNIVERSITY GRANTS COMMISSION  
Bahadur Shah Zafar Marg, New Delhi-110 002  
E-mail : akdogra@ugc.ac.in

BY SPEED POST

No.F. 22-1/2012(AC)

Aug, 2012

The Registrar,  
Visvesvaraya Technological University,  
Belgaum,  
Karnatak

17 AUG 2012

Sub:- Conferment of fresh Autonomous Status to Nitte Meenakshi Institute of Technology, Govindapura Gollahalli, P.B. No. 6429, Yalahanka, Bangalore affiliated to Visvesvaraya Technological University, Belgaum, Karnatak.

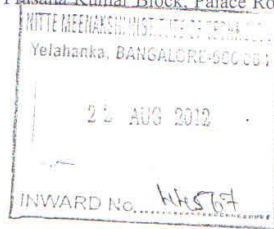
Sir,

This has reference to the proposal dated 29/06/2007 submitted by Nitte Meenakshi Institute of Technology, Govindapura Gollahalli, P.B. No. 6429, Yalahanka, Bangalore under the UGC scheme for conferment of fresh autonomous status and subsequent visit of the UGC Expert committee to consider the proposal on 8<sup>th</sup> and 9<sup>th</sup> Feb 2012.

The report of the aforesaid Joint UGC Expert Committee was placed before the Standing Committee constituted for the purpose by the Commission to look into the Expert Committee reports for conferment of fresh autonomous status and extension of autonomy to colleges before its recommendations are placed before the Commission for its final approval.

The recommendations of the Standing Committee were placed before the Commission at its meeting held on 18<sup>th</sup> & 19<sup>th</sup> July, 2012. The Commission, after taking due consideration of the recommendations of the Standing Committee, agreed to grant autonomous status to Nitte Meenakshi Institute of Technology, Govindapura Gollahalli, P.B. No. 6429, Yalahanka, Bangalore under the UGC autonomous colleges scheme for a period of six year w.e.f. the academic year i.e. 2012-2013 to 2017-2018.

The Visvesvaraya Technological University, Belgaum, Karnatak may now go ahead and issue necessary orders in this regard by endorsing a copy of the same to this office for our records. The admissible grant under this scheme will be released to the College as per its eligibility, according to the norms as laid down in the XIth Plan Guidelines for Autonomous Colleges by the Deputy Secretary, UGC, South Western Regional Office, Prasanna Kumar Block, Palace Road, Gandhi Nagar, Bangalore - 560009 (Karnataka).



Yours faithfully,

(A.K. Dogra)

Contd..

: 2 :

Copy to:-

1. The Principal Secretary, Department of Higher Education, Karnataka Government Secretariat, 5<sup>th</sup> Floor, M.S. Building, Dr. B.R. Ambedkar Road, Bangalore – 560 001.
2. The Dean, Visvesvaraya Technological University, Belgaum, Karnatak
3. The Deputy Secretary, UGC, South Western Regional Office, Prasanna Kumar Block, Palace Road, Gandhi Nagar, Bangalore – 560009 (Karnataka).
4. The Principal, Nitte Meenakshi Institute of Technology, Govindapura Gollahalli, P.B. No. 6429, Yalahanka, Bangalore.  
(A copy of the Expert Committee report is also enclosed for your information and guidance.)
5. The Under Secretary, BSR Section, UGC, New Delhi.
6. Meeting Cell.
7. Concerned file
8. Guard File.

(Lalitha Ganesan)  
Under Secretary

20/2/2012 Encd. 11 1079  
3



UNIVERSITY GRANTS COMMISSION  
BAHADUR SHAH ZAPAR MARG  
NEW DELHI

REPORT OF THE EXPERTS REVIEW / INDUCTION COMMITTEE FOR THE CONFERMENT OF AUTONOMOUS STATUS TO:

NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY  
P B NO. 6429, Govindapura, Gollahalli  
Yelahanka,  
Bangalore-560 064  
Karnataka

DATE OF VISIT TO THE COLLEGE: 8th and 9th February 2012

Name of the College/Address/Pin code/Fax	Date of the visit	Venue	Review for the Grant/Extension of the Autonomous status
NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY P B NO. 6429, Govindapura, Gollahalli Yelahanka, Bangalore-560 064 Karnataka Phone Nos.: 080 - 22167800 / 22167803 Mobile No. : 9845275240 Fax. no.: 080-22167805/901 Email ID: <a href="mailto:principal@nmit.ac.in">principal@nmit.ac.in</a>	8 <sup>th</sup> & 9 <sup>th</sup> February 2012	NMIT college Campus	Review for the Grant of the Autonomous status

Name of the affiliating University to which the college concerned is affiliated to:

VISVESVARAYA TECHNOLOGICAL UNIVERSITY  
"JnanaSangama"  
Machhe,  
Belgaum- 590 018  
Karnataka

*[Handwritten signatures]*

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Names of the Expert Visiting Committee Members and UGC Officers present

Sl. No.	Name	Address	Telephone/Fax
1.	Prof. K P SINGH Chairman	Director Institute of Technology BHU, Varanasi	0542-2316333 (R) 09838772196 (M)
2.	Prof. P H SAWANT Member	Principal Sardar Patel College of Engineering (Autonomous) Andheri (West), Mumbai - 400 058	022-26289777-41451 (o) 26289777 Ext:201 09322213065
3.	Dr V ABHAIKUMAR Member	Principal Thiagarajar College of engineering (Autonomous) Madurai-625 015	0452-2482430 (O) 09952423335 (M)
4.	Prof R K KHITOLIYA* Member	Director Harcourt Butler Technological Institute (Autonomous) Nawabganj, Kanpur-208 002	0512-2534000
5.	Prof. HIMANSHU BHUSHAN PRASAD SINHA Member	Retd. Professor Patna University Res: Jagadish Niketan, North of Bhattacharya Clinic, Road No. 15 Patel Nagar Patna-800 023	0612-2291098 (R) 09431456612 (M)
6.	Dr N GOPUKUMAR Member secretary	Deputy Secretary UGC, South Western Regional Office Prasanna Kumar Block Palace Road Bangalore -560009	09980824269

\*Prof. R. K. Khitoliya, Director, Harcourt Butler Technological Institute, Kanpur, could not participate in the visit.

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1. Name of the Principal : Dr H C NAGARAJ

2. a. Year in which the college was established : 9.8.2001 (Annexure I) ?

b. Date when the college was declared fit under section 2(f) and 12(B) of UGC Act 1956 (attach a copy of UGC letter in this regard). : The College is listed Act, 25-04-2009 F.8-367/2007 (CPP-I) (Annexure - II)

3. College applied for  
Fresh Autonomous status

4. Category under which the college falls as per X<sup>th</sup> plan guidelines

(a) Men

(b) Women

(c) Co-education ✓

(d) UG/PG/Both/ Single faculty/ Multi faculty:- UG / PG Both/Multifaculty ✓

(e) Self-financing (Number of years standing with proof 10 years of the X<sup>th</sup> plan guidelines) : Self Financing, Established in the year 2001 (Annexure -I)

5. Type of College

(a) Arts/Science/Commerce

(b) Engineering : Engineering & Management

(c) Education

(d) Others(Law, Physical education etc.)

*[Signatures]*



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F) Infrastructure facilities available with appropriate covered areas in sq. feet		
	No.	Area in sq. ft
a) Class room	55	48003
b) Laboratories	40	133481
c) Library	3	10510
d) Hostels (Men and Women separately)	BOYS-3 ✓	88000
	GIRLS-2 ✓	
e) Others like: Administrative block/ Principals office/ staff room/ Common room/ Canteen/ sports facilities (indoor)/ auditorium etc.	Central facilities	198169
g) Total (buildings) covered		478163
h) Total land area owned by the college in its name	23 acres	

II) Academic activities (wherever required, annexure extended be annexed for giving details)									
Sl. No.	Name of the University / College	Total no. of teaching strength				Total no. of research publications / project during the last 5 years		Total no. of Conferences / seminars / Symposium during the last 5 years	NAAC
		Ph D	M. Tech / M Phil	Others	Total	Research publications	Project		
	Nitte Meenakshi Institute of Technology	23	129	30	182	161	21	33	NA

List of research publications and projects are enclosed as Annexure III and IV respectively

*[Handwritten signatures]*

Annexure -C

6. Whether the committee is satisfied with the present mode of the teaching method adopted by the college, Yes/No (Specific comments in details may be given as to the short comings observed if any)

Yes, the Committee is satisfied with the present mode of the teaching method adopted by the College which involves Lecture/Tutorial/Practical components, keeping diverse learners in view. Modern technologies like over head projector, LCD projector, internet are found to be put to optimum use. Besides, EDUSAT facility from VTU, many online facilities like NPTEL courses, MIT learning materials, Stanford University learning materials, e-Vidya are made accessible to students.

However, the Committee would like to suggest the following:

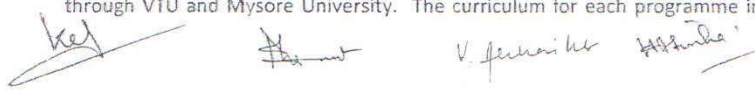
As the College is located well outside city limits and nearly 70% of the students are day scholars, usage of library by majority students remain limited irrespective of the fact that library timings is from 10 am to 8.30 pm. Therefore, the College administration should take some initiative so that students can access e-learning materials from their place of stay and make up for the loss of library facility.

7. Academic achievements of the students during the last 5 years in details such as various ranks obtained by its students in the university's exams.

Academic achievements of students are enclosed as Annexure V.

8. Whether the committee is satisfied with the type of courses being offered by the college Yes/No (Specific comments in details with regard to any particulars course may be given/withdrawn as the case may be)

Yes, the Committee is satisfied with the type of courses being offered by the College. The College is running 7 UG programmes viz. Computer Science Engineering, Electronics Communications Engineering, Electrical and Electronics Engineering, Mechanical Engineering, Information Science Engineering, Civil Engineering and Aeronautical Engineering, and five PG programmes viz Master of Business Administration, Master of Computer Application, Master of Technology in VLSI design and Master of Technology in Embedded Systems, Master of Technology in Computer Science and Engineering, and Master of Technology in Thermal power Engineering. Besides, the College is also running M.Sc by research and Ph.D programmes through VTU and Mysore University. The curriculum for each programme in UG Engineering



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encompasses several components including Basic Science, Core Engineering, Humanities, Branch Electives, Open Electives, Projects, and mandatory courses like constitution of India, Professional Ethics, Environmental Science, soft skills etc. Especially, electives in new and emerging areas are included and taught as electives to students in collaboration with industries such as INFOSYS, WIPRO, NAL, DRDO, CPRI, CDAC, ITI. List of electives offered in the College is enclosed as Annexure VI. The Committee is also pleased to note that NMIT has revised and updated its UG, PG programmes during 2007-08 when it's affiliating University (VTU) and the Karnataka State Government granted it autonomous status subject to UGC concurrence. Further, the Committee would like to suggest categorically that the departmental labs be upgraded periodically to commensurate with requirement of the curriculum.

9. Whether all the Teachers are in favour of getting autonomous status to the college Yes/No (give reasons in detail as to whether the committee interacted with the teachers separately so as to ascertain their views for and against, if any)

Yes, all the Teachers are in favour of getting autonomous status to the College. Details of discussion with the teachers are given separately.

10. Any other information which the committee feels helps UGC in taking decision to grant autonomy of continuation of autonomous status to this college.

The Committee appreciates the College:

- ❖ For having been selected by the Govt. of India for world bank funding under TEQIP phase II, 1.1
- ❖ For introducing value added course and Internships and providing additional credits for same.
- ❖ For introducing the concept of supplementary semester
- ❖ For involving students in the PICO satellite project and for being part of the consortium of seven colleges with the active support of ISRO

Hence, <sup>confirmation</sup> confirmation of autonomous status to NMIT by UGC would encourage the college.

### III) Examination Reforms

A. Whether the committee is satisfied with the present mode of the examination being conducted by the college? Any specific method of evaluation which the committee would like to suggest to them may be indicated.

Yes, the Committee is satisfied with the present mode of the examination being conducted by the College. Having got autonomy from the Visvesvaraya Technological University and Government of Karnataka, for the year 2007-08, subject to the concurrence of UGC, Nitte

*Kel*

*[Signature]*

*V. G. Srinivas*

*[Signature]*

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Meenakshi Institute of Technology started exercising autonomy w.e.f 2007-08. Accordingly, the College has established a separate examination cell with controller of examination. Reforms introduced in the examination system since 2007-08 include semester system with internal and external exams having equal weightage of 50:50, Continuous Internal Assessment (CIA), Students' feedback, grading, and vertical progression. The performance of the students are graded by Semester Grade Point Average (SGPA) and Cumulative Grade Point Average (CGPA) as detailed in as Annexure. VII. All these reforms closely follow the practices prescribed in the guidelines of the "Scheme of Autonomous Colleges". The Committee appreciates the conduct of supplementary semester every year after the even semester for failed candidates.

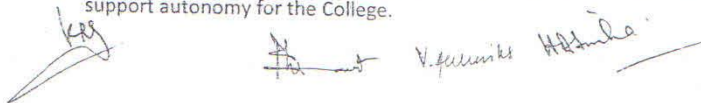
**B. Interaction with students/teachers/Non teaching staff, give specific comments in detail for such interaction undertaken.**

**Teachers:** The teachers found to be largely in support of the College getting autonomy. They shared with the Committee that the freedom that the academic autonomy provides like revising syllabi in tune with the requirement of industries enhances the students' employability. During the discussion some teachers also suggested that strength of supporting staff in the departments need to be increased, HODs should have a full-fledged office along with departmental committee room and adequate support staff with computer knowledge.

**Students:** The students supported autonomy to the College unanimously. They highlighted many benefits they experienced after the College became autonomous like in-house mini projects, internships, value added courses, new examination practices etc. They also put forward a few suggestions before the Committee, as below:

- Teaching learning process should be supported adequately with latest softwares.
- Internship for all students.
- Sufficient copies of standard text books in the library
- Wi fi connectivity in the hostel
- Emergency medical assistance in the campus
- Sports facility with open fields for outdoor games and sufficient infrastructure for indoor games
- Gymkhana to accommodate co-curricular, extra-curricular and gymnasium activities
- Gym in hostels, for both girls and boys, too should be provided
- Better transport facility

**Non-teaching staff:** It is observed from the interaction with non-teaching staff that they all support autonomy for the College.



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**IV) Administrative Activities (for review of autonomous status college only)**

Whether the Governing Body, Academic Council, Board of Studies, and Finance Committee meeting are being conducted by the College periodically or not. Specific comments in detail with regard to resolution passed by the above bodies in the recent past may be given.

Yes, the College has constituted Governing Body, Academic Council, and Board of Studies, as required for autonomous colleges. These bodies are regularly meeting since 2009 (Annexure VIII) and guiding the College in the conduct of autonomy.

**A. Comments regarding the self financing courses being offered**

The College is a self financing College. As per the policy of the Government of Karnataka, the quota and fees are fixed.

**B. Comments regarding the fee structure being in force**

The fee structure is fixed by the State Government. Reproduced below is the fee structure in the College.

	Quota	Fee
CET of Karnataka	50%	Rs. 30000/- per Annum
COMED-K	25%	Rs 1.25 lakh per Annum
Management	25%	Fixed by management upto equivalent INR of USD5000/-PA

**C. NAAC rating awarded, if not comments thereof:-**

The validity of accreditation for BE (Mechanical Engineering), BE (Electrical & Electronics Engineering), and BE (Electronics Communication Engineering) by National Board of Accreditation, AICTE, ending in 9.2.2012. It is also observed that the college has applied for re-accreditation to NBA on 28.12.2011 (Annexure IX). BE, Information Science and Engineering is not accredited. BE, Computer Science & Engineering accredited by NBA and is valid up to 20.6.2013 (Annexure 'X').

**D. Recommendations of the UGC nominee for the governing bodies, (other than from the state whose college situated) Not more than two names with full address be indicated.**

1. Prof. R. R. Das  
Department of Electronics Engineering  
IT, BHU, Varanasi 221 005

2. Prof. P. Chakraborty  
Director  
MNNIT, Tejiarganj, Allahabad

*kes* *V. Jeyaraj* *H. H. H.*

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V) Financial utilization of UGC funds: specific comments be given:-

(give details of Autonomy Grant/ general development grant, if any received by the college for the last five years separately.)

As the College is a self financing Engineering College and not listed under 12(B) of UGC Act, it is not availing any grant from UGC

Vi) Recommendation of the committee

A. Tenure conferred/ extended by the VISVESVARAYA TECHNOLOGICAL UNIVERSITY, Belgaum, Karnataka as autonomous college.

Visvesvaraya Technological University conferred provisional autonomy to Nitte Meenakshi Institute of Technology, Bangalore, for the year 2007-08, subject to the concurrence of UGC (Annexure XI).

B. Tenure conferred/ extended by the KARNATAKA State Government.

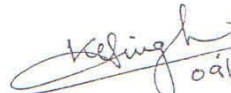
As per the information given by the College the Karnataka State Government approved autonomy vide letter no. ED 107 UNE 2007 dated 3.7.2007. However, supporting document not given.


C. In case the college required ex-post-facto approval for an earlier period (already gone by) the same may be specifically mentioned (only applicable for existing Autonomous college enjoying/Autonomous college status)

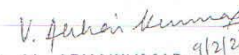
NA


D. Tenure recommended by the present committee with six years time period be indicated


The committee recommends Nitte Meenakshi Institute of Technology, Govindapura, Gollahalli, Yelahanka, Bangalore-560 064, Karnataka for the grant of Autonomous status for a period of SIX years from 2011-12 to 2016-17

  
09/02/2012  
Prof. K P SINGH  
Chairman

  
Prof. P H SAWANT  
Member

  
Dr V ABHAIKUMAR 9/2/2012  
Member

  
Prof. HIMANSHU BHUSHAN PRASAD SINHA  
Member

  
Dr N GOPUKUMAR 7/2/12  
Member secretary

## 6.2 Strategy Development and Deployment

### 6.2.1 Does the College have a Perspective Plan for development? If so, give the aspects considered in development of policy and strategy.

Yes. The institution has a perspective plan, which is made by the combined participation of senior faculty members, heads of the departments, Deans, Principal and Management. The plan is vetted by the governing body. All the departmental activities are streamlined according to the perspective plans. It is being formulated by looking into down the line over a period of minimum five years. The goals and objectives are being set according to the perspective plan. These are made known to each and every member of the institute through various meetings and platforms.

**The following are the achievements of strategic planning and developing over the last 5 yrs.**

- **Teaching and learning**

Implementing the methodologies for world class education by modernizing teaching-learning process.

- Implementation of Out come based Education
- To make teaching learning to move from teacher centric to student centric
- New faculty are trained with pedagogy and other faculty are trained in advanced pedagogy
- Curriculum is designed with focus on student learning outcome
- Many faculty are trained under WIPRO 10X PROGRAM to make learning more effective
- Faculties are encouraged to use ICT in teaching process.
- Library is provided with e-learning facilities of courses of NPTEL, HARWARD, MIT, STANFORD etc.
- Digital library resources are provided.
- Mini projects are introduced in several courses to get an experience apart from the regular lab courses.
- Choice based credit system is introduced
- Though the college started in 2001, it gained autonomous status in the academic year 2007-08 which gives academic freedom to modify the syllabus as often as needed to meet the industry requirements.

- **Research and development**

- The college focuses on research in the emerging areas of technology

- The Departments of ECE, CSE, ME,EEE, ISE, Management studies , Chemistry and Mathematics are recognized as research centers offering Ph.D and M.Sc (Engg) by research programs under VTU.
- The Departments of ECE, CSE, Management studies and Mathematics are recognized as research centers of Mysore University
- The college has large number of sponsored research projects form agencies like DRDO, DST, AICTE, VTU, VGST, DIT,NRB etc
- The faculty, PG and UG students are involved in several ongoing research projects.
- The NMIT as a lead college of consortium of 7 colleges and with the help of ISRO has successfully launched the India's first PICO SATELLITE on 12 July 2010
- It has a unique ground station to monitor the satellite- NASTRAC

- **Community engagement**

The college through units like NSS, NCC, and Youth Wing of Red Cross society and Rotaract club conducts community and extension activities

- Regular blood/eye donation camps
- Helping the nearby Govt. schools by donating desks, computers, books etc.
- Conducting regular vocational training in trades like carpentry, plumbing etc for the school dropouts for gainful employment.

- **Human resource planning and development**

- The institution has been very active over the years in deputing faculty members for improving their qualifications in the areas of specialization needed by the departments.
- Encourages the faculty to register for Ph.D program in the institutions by giving some facilities
- Orientation programs on pedagogy are arranged regularly for the newly recruited faculty
- Departments are conducting faculty development programs in the emerging areas of technology
- Institution deposes faculty for faculty development program / short term courses/ workshops conducted by the university and other institutions
- Technical supporting staff are also encouraged to take up courses relating to skills up gradation.
- Computer awareness programs are organized to the general staffs to become conversant with computer operations



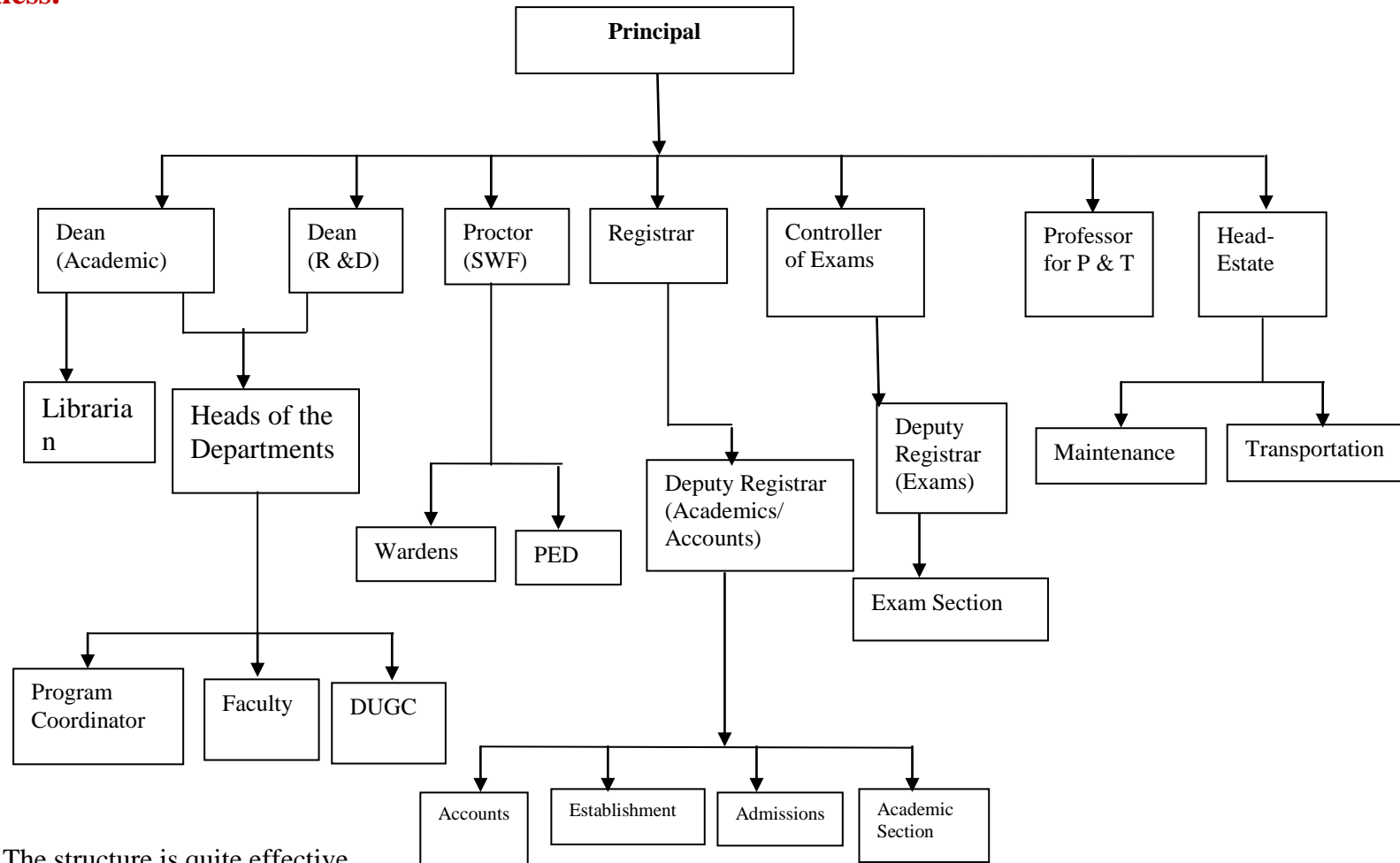
- **Industry interaction**

- The college has taken several initiatives to closely interact with Industries such as deputation of Students to carry Internship Programs/ Post Graduate students for doing their projects/Inviting Experts from Industries to teach Industry specific courses, etc.
- The college has students' chapters of professional societies such as IEEE, ISTE, IETE, CSI and SAE etc. which interact with the Industry and enable students to undertake collaborative projects.
- Being an autonomous institute, industry experts and the alumni are involved in the design of curriculum and the syllabus.
- The placement cell arranges lectures and training programs for students in subject area as well as soft skills from industry personnel.
- Large number of students undergo internship in industries during summer vacation
- College has an IEDC cell which arranges lectures on entrepreneurship, patenting from industry personnel, NEN.
- College has MOUs with several industries like Texas Instruments, Infosys, Wipro, Cypress Semiconductors, DELL, and EMC2
- College has MOUs with PIA, SAE, and MSME.

- **Internationalisation**

- NMIT has signed MOU with North Dakota State University (NDSU) (One of the prestigious Land Grant Universities of USA) for collaborative research by the faculty with provision for pursuing their Doctoral work with only one year stay in NDSU and doing the rest of the research in NMIT under the joint guidance of one Professor of NDSU and another identified Professor of NMIT
- NMIT has Collaboration with Indo-Korean Institute of Science and Technology for Research in the areas of Robotics to develop Education Robots and Museum Exhibits in the country.
- Surrey University of UK which is a well-known small satellite research centre in the world had requested NMIT to track for the first time their Nano satellite Strand-1 which was launched by ISRO through PSLV and NASTRAC has successfully completed the above task.

**6.2.2 Enunciate the internal organizational structure of the College for decision making processes and their effectiveness.**



- \* The structure is quite effective
- \* Decision taken fast and put in place immediately

**6.2.3 Specify how many planned proposals were initiated / implemented, during the last four years. Give details.**

<b>2007-08</b>	Got autonomous status by VTU and Government of Karnataka. Started M.Tech program in VLSI Design and Embedded Systems
<b>2008-09</b>	Started M.Tech Program in CSE Recognition of research centre in ME by VTU
<b>2009</b>	Concurrence of autonomous status by UGC, New Delhi
<b>2009-10</b>	UG Programs accredited by NBA Started UG program in Civil Engg Recognition of research center in CSE by VTU
<b>2010-11</b>	Started PG Program in Thermal Power Engg Selected for TEQIP-II under sub-component 1.1 Recognition of Research Centre by Mysore Univ. in Departments ofECE, CSE, Maths and Management Studies Launched India's first PICO-SATELLITE STUDSAT-I
<b>2011-12</b>	B.E program in Aeronautical Engg ISE Dept recognized as research centre by VTU EEE Dept recognized as research centre by VTU
<b>2012-13</b>	Continuation of Autonomous status by UGC for a period of 6 years from 2012-13 to 2017-18 Increase in intake of CSE, Mech &ECE Started M.Tech Program in ISE and ECE Sponsored research projects from AICTE, DRDO, VGST, DST, DIT, NRB etc
<b>2013-14</b>	Started M.Tech Program in Civil and Mechanical Dept. Increase in intake of ISE and Civil.

**6.2.4 Does the College have a formally stated quality policy? How is it designed, driven, deployed and reviewed?**

Yes

Quality policy:

To bring about constant and continuous improvement in the quality of Education imparted and turning out high quality professionals with balance and globally competitive personality through regular monitoring of the academic / administrative activities of the institution and implementing corrective action in the best transparent traditions.

- It is designed in such a way that it can be continuously measured ,monitored and corrective actions can be taken to maintain quality of education imparted

Steps in driving, deploying and reviving the quality

- Internal quality assurance cell

- Departmental UG Committee
- Academic audit
- Research Council
- Faculty advisor
- Class teacher
- Faculty mentor
- Student counselor
- Deans
- Parents' meeting
- Feedback mechanism / online
- Grievance committee
- Self-appraisal of faculty
- Appraisal of faculty by HOD/principal
- Involving external examiners in Question Paper Setting , assessment in theory and lab exams
- QP Scrutiny by BOE consisting of external members
- VTU mid-term revision
- AccreditationProcess

**6.2.5 How does the College ensure that grievances / complaints are promptly attended to and resolved effectively? Is there a mechanism to analyze the nature of grievances for promoting better stakeholder-relationship?**

- All the stakeholders can present their grievances to HODs/ Heads of Sections / Principal / Director.
- The college has introduced online feedback mechanism for students and teachers.
- At the first level, HODs in their faculty meeting / DUGC will analyze and solve the grievances pertaining to the dept. if the stakeholders are not satisfied they are free to approach the principal for redressal of their grievances.
- If the problems are pertaining to the college level, the principal and HODs will decide in the HODs meeting and give solutions to the grievances.
- If the stakeholders are not satisfied, they approach the management representatives for redressal who generally give solutions to the grievances.

**6.2.6 Does the College have a mechanism for analyzing student feedback on institutional performance? If yes, what was the institutional response?**

- All the stakeholders are free to give feedback to the HODs, principal, management representatives.

- At the first level if the feedback is about the faculty, department issues, it is solved at the level of the HODs. If the stake holders are not satisfied they go to principal and management for redressal.
- If the issues are general in nature, it will be handled by the principal, if needed the management's support is taken for redressal.
- This year we have introduced an online feedback system about the institution for students and faculty
- The principal and management will go through the feedback for corrective actions.

### **6.2.7 In what way the affiliating University helped the College to identify the developmental needs of the College?**

- There is no formal mechanism by the affiliating Visvesvaraya Technological University to help the college to identify the development needs of the college
- Sometimes the University Local Inquiry Committee guides in developmental activities during their annual visits to identify the developmental needs of the college
- University frequently conducts Faculty Development Programs.
- University has Provides funds for Research & Innovation.

### **6.2.8 Does the affiliating university have a functional College Development Council (CDC) or Board of College and University Development (BCUD)? If yes, in what Way College is benefitted.**

- The affiliating Visvesvaraya Technological University does not have CDC or BCUD

### **6.2.9 How does the College get feedback from non-teaching, teaching, parents and alumni on its functioning and how it is utilized?**

- All the stakeholders are free to give their feedback. College has mechanism to get feedback from teaching, non-teaching, parents and alumni.
- Faculty is free to give feedback in a informal way to HODs/Principal/Management.
- Institute conducts the parents' meet, alumni meet and collects feedback and take necessary steps for correction.
- Parents / Alumni are part of BOS in discussing and framing the curriculum.
- Departments send questionnaires to parents / alumni on the curriculum / program educational objectives / learning outcomes to improve the curriculum to give outcome based educations, which is the prime focus of NBA's accreditation process for autonomous colleges.

### **6.2.10 Does the College encourage autonomy to its academic departments and how does it ensure accountability?**

- The college being an autonomous institution has extended academic autonomy to its academic departments. Each department has its BOS, BOE, DUGC, and DAAB. Enough accountability is built in the autonomous system. In addition, academic audit of the department is done every semester.
- Departmental undergraduate committee under the chairmanship of HOD with senior faculty as members regularly monitor the teaching learning process , coverage of syllabus, quality of question paper, quality of assessment etc.
- In BOS, University Nominee, industry expert, alumni will ensure updated content for the curriculum.
- On the BOE, external members will scrutinize the question papers and maintain its quality.
- In the semester end examinations, external examiners also participate in QP setting, evaluations etc. to have transparency and fair evaluation.
- As per the requirement of outcome based accreditation of NBA, we are updating the curriculum, based on the performance and feedback on learning outcomes from alumni and members from industry/R&D organisations.

### **6.2.11 Does the College conduct performance auditing of its various departments?**

- Currently, a team of senior professors and the Dean (Academic) conduct the academic audit of the department. Matrix is being developed for the performance audit of every faculty of the department and the performance of the department as a whole. Self appraisal, appraisal by HOD for faculty is in the place. The feedback from students about faculty are periodically taken and assessed.

## 6.3 Faculty Empowerment Strategies

### 6.3.1 What efforts are made by the College to enhance the professional development of teaching and non teaching staff?

- For newly recruited faculty, faculty development programs are arranged in pedagogy and teaching methods and techniques
- Many faculty members are trained under WIPRO's Mission 10X programs to enhance the attention and interest of the students and hence the better learning outcomes
- Faculty members are encouraged to take up the qualification enhancement programs
- Since inception many faculty have been deputed for full time M.Tech and Ph.D programs with full salary.
- Many faculty have registered for part-time Ph.D and M.Tech programmes under different universities
- Departments regularly conduct faculty development programs in state of the art technologies, by inviting experts from industry and institutes of higher learning
- Faculties are deputed with registration fee and TA & DA for attending faculty development programs conducted by industry, university and other institutions.
- Non-teaching staff are also encouraged to take up part-time training program to enhance their skills in the respective area.
- In-house orientation/ training programs are conducted by the faculty for the new labs established
- College encourages the faculty to present research papers in conferences , journals etc by paying the registration fee, DA/TA etc
- Faculties are encouraged to take up sponsored research projects and consultancy and the management gives them some incentives.

### 6.3.2 What is the outcome of the review of the Performance Appraisal Reports? List the major decisions.

- From the feedback and performance appraisal reports, Principal, HODs and Management will look into the areas of weakness, then remedial action will be taken to overcome the weaknesses.
- The faculty members are counseled at the first level by the HODs and by principal at the second level. So that faculty performance improves subsequently, if there is no improvement in the performance, then they will be asked to seek employment elsewhere.

**6.3.3 What are the welfare schemes available for teaching and non teaching staff? What percentage of staff have availed the benefit of such schemes in the last four years?**

- Free Transportation to all the faculty and non-teaching staff
- Subsidized medical insurance scheme
- ESI scheme for non-teaching staff
- PF benefits
- Gratuity scheme
- Loan facility from the VIVIDDHODESHA Multi-purpose Co-operative Society
- Subsidized rent for campus staff quarters
- Insurance scheme
- Housing Co-operative Society

**6.3.4 What are the measures taken by the College for attracting and retaining eminent faculty?**

- Higher salary
- Deputing faculty for higher studies with salary
- Incentives for getting sponsored projects and consultancy
- Paying registration fee TA/DA for attending /presenting papers in conferences
- Support for paper publications in journals
- Support for patenting
- Financial support for presenting papers in international conferences
- Providing vehicles for pick-up and drop
- Providing facilities for research with flexible workload / timing
- Providing accommodation in faculty quarters

**6.3.5 Has the College conducted a gender audit during the last four years? If yes, mention a few salient findings.**

Though there is no formal gender audit is conducted, the following are the observations

- In circuit branches like CSE, ISE, ECE and EEE, the female faculty outnumber the male faculty
- In non-circuit branches like Civil, Mech and AE, male faculty outnumber the female faculty



**6.3.6 Does the College conduct any gender sensitization programs for its staff?**

- Staff members are informed to wear the dress code/Aprons
- There is an anti-sexual harassment committee to take care of any such cases

**6.3.7 What is the impact of the University's UGC-Academic Staff College Programmes in enhancing competencies of the College faculty?**

Our faculties have not utilized the facilities so far, we would encourage our faculty in attending the UGC-Academic staff college programs to enhance their competencies. There is no academic staff college for engineering teachers till now. But, teachers undergo refresher/Staff Development programs organized by ISTE/AICTE/VTU etc.

## **6.4 Financial Management and Resource Mobilization**

### **6.4.1 What is the institutional mechanism to monitor effective and efficient use of financial resources?**

Before the end of the current financial year, the budget for the next financial year is prepared by getting the recurring and non-recurring estimated amount required by HODs/Heads of sections. After a detailed review of expected income, budget is finalized and the same is approved by finance committee and the BOG. The financial position is reviewed midway if needed by reallocation of funds among various heads.

This procedure ensures the use of efficient use of financial resources.

### **6.4.2 Does the College have a mechanism for internal and external audit? Give details.**

Yes, annually audited. A full time internal auditor has been appointed by the Trust.

The college has a mechanism of internal and external auditing appointed by the management. The full time internal auditor regularly audits the income and expenditure and ensures that proper procedure is followed. The external auditor audits at the end of the year and gives audit reports

### **6.4.3 Provide audited income and expenditure statement of academic and administrative activities of the previous four years.**

An audited statement of the previous four years is enclosed, and also published in the college website.

### **6.4.4 Have the accounts been audited regularly? What are the major audit objections and how are they complied with?**

Yes, there are no major audit objections.

### **6.4.5 Narrate the efforts taken by the College for resource mobilization.**

Involving more number of faculties in research that leads to a good number of funded research projects and giving consultancy.

**6.4.6 is there any provision for the College to maintain the ‘corpus fund’? If yes, give details.**

As per the requirement of TEQIP-II program, the college has maintained 4 corpus funds in the bank. The four different accounts are:

- Corpus Fund
- Faculty Development Fund
- Equipment Replacement Fund
- Maintenance Fund

## 6.5 Internal Quality Assurance System

### 6.5.1 Does the College conduct an academic audit of its departments? If yes, give details.

The college does conduct an academic audit of the departments. The academic audit committee consists of principal, Dean (Academic) and the senior professors. The committee visits all the departments every semester, the department and the faculty files are reviewed. Each faculty maintains a personal file and a course file. At the review meetings, if any shortcomings are found, suggestions are given for necessary corrections.

### 6.5.2 Based on the recommendations of academic audit what specific measures have been taken by the College to improve teaching, learning and evaluation?

- To have tutorial classes in specified courses, wherein numerical problems are involved
- Arranging additional classes for academically weak students and paying remuneration for the faculty for conducting these additional classes
- To improve the quality of question papers
- Arranging faculty training programmes in pedagogy and new technologies
- Evaluated papers are made available to students to ensure transparency.

### 6.5.3 Is there a central body within the College to continuously review the teaching learning process? Give details of its structure, methodologies of operations and outcome?

The central body headed by the Principal and the Dean (Academic) and HODs as members continuously review the teaching-learning processes. The central body reviews the number of classes held, course delivery, course coverage, conduct of various continuous internal evaluation components, quality of question papers, evaluation methodologies, students performance, feedback from the students etc. and the conduct of tutorials and additional classes for academically weaker students.

The outcome has shown a steady and rapid improvement in program outcomes.

### 6.5.4 How has IQAC contributed to institutionalizing quality assurance strategies and processes?

- The institution has defined a minimum set of components for continuous internal evaluation

- Each and every faculty has to follow the minimum set of components. The institution gives an academic calendar with scheduling for minimum set of components for the semester.
- The tests are conducted at the institutional level with one department, coordinating the conduction by rotation, as per the academic calendar.
- Each faculty gives 3 sets of questions, which will be scrutinized by the DUGC for the quality of question papers and the format. Dean (Academic) will select one question paper to ensure transparency.
- There is academic audit of every department once in a semester to ensure that the quality is maintained.
- Even for SEE, one question paper is set by the internal examiner, 2 more question papers are set by two external examiners one each, which will be reviewed by BOE consisting of internal and external experts. The answer books are coded. External examiners also participate in the evaluation of SEE answer books and practical examinations. These processes assure quality and transparency at the institutional level.

**6.5.5 Does the IQAC have external members on its committees? If so, mention any significant contribution made by such members.**

- Currently Dr. N R Shetty, the former Principal, KREC, Suratkal, Former Vice Chancellor of Bangalore University, with his vast experience in the field of higher education and experience in Technical Education helps in quality maintenance / Assurance in all our academic activities.
- We propose to form different committees for each of the specializations by co-opting external experts from IISc / NITs / IITs in the committees to monitor the quality and take steps for continuous improvements in the learning outcome & employability of the students passing out of the institution.

**6.5.6 Has the IQAC conducted any study on the incremental academic growth of students from disadvantaged sections of society?**

- NO so far, action will be taken to conduct the study shortly

**6.5.7 What policies are in place for the periodic review of administrative and academic departments, subject areas, research centres, etc.?**

The committee headed by Prof.N.R.Shetty Former vice-chancellor of Bangalore University , Advisor, Nitte Education Trust, Member Governing Council NMIT, Bangalore along with the Principal, Dean (Academic) and Dean (R&D) will be reviewing the activities of the administrative , academic departments and research

centers twice in a year. All critical issues concerning progress made/suggestions for improvement in the performance are discussed and reviewed, solutions or suggested for improved performance.

## **CRITERIA VII: INNOVATION AND BEST PRACTICES**

### **7.1 Environment Consciousness**

#### **7.1.1 Does the College conduct a Green Audit of its campus?**

The college does conduct a Green Audit of its campus.

- The college has developed a lot of greenery in the campus by developing lawns and gardens. It has taken steps to maintain the trees in the campus. It also takes up tree plantation programs.
- Solar water heaters are provided for all the hostels to conserve energy.
- Has set up a sewage water treatment plant to recycle the waste water for the purpose of gardening.
- Energy audit has been done to find the leakage and to use energy efficiently by the use of automatic devices / equipments to save energy.

#### **7.1.2 What are the initiatives taken by the College to make the campus eco-friendly?**

- **Energy Conservation:**

The department of electrical has conducted an energy audit in the campus the following steps are initiated to conserve energy.

- Replace fluorescent / incandescent lamps by CFL in phases.
- Replace high energy consuming CRT monitors by TFT monitors in stages.
- Bring awareness among students/ staff and faculty to switch off lights /fans when not in use. To use ACs only when it is absolutely necessary.
- To operate the campus load near to unity power factors.
- Buildings are constructed so as to have natural light as far as possible.

- **Use of Renewable Energy.**

- All hostels are provided the solar water heaters.

- **Water harvesting**

- It is being incorporated in all new buildings under construction. Action is being taken for the existing building also.
- Sewage treatment plant is in operation and the treated water is used for the gardens.

- **Plantations:**

- Campus is full of greenery with lawns, gardens and trees.
- Steps are taken to maintain all the trees
- New plantations of trees are done through NSS/NCC.

- **Waste Management:**

- The waste from the hostels/ canteen is given to piggeries.
- The wet waste is used to generate fertilizer for the plants.
- Dry waste is separated and disposed off.

- **E waste Manage:**

- E wastes are collected from all the departments and are given to organisations handling e waste like cerebra Technologies for eco-friendly disposal.



## 7.2 Innovations

### 7.2.1 Provide details of innovations introduced during the last four years which have created a positive impact on the functioning of the College.

The innovations introduced during the last four years are

1. Design, development, testing and launching of India's first students' satellite called STUDSAT – I, by the students of NMIT in association with 6 other colleges were carried out. The satellite is of type Pico (satellite weighing less than 1Kg). As part of focus on research and innovation, the NMIT as lead institution along with 6 other colleges forming a consortium, in collaboration with ISRO, have designed, fabricated, tested and launched the India's first PICO (Student Satellite- STUDSAT-I) on 12<sup>th</sup> July 2010 from Sriharikota with the support of ISRO.
  - The students are currently involved in the design of STUDSAT-II
  - The students who were mainly responsible for the success of STUDSAT-I are undergoing advanced training and research in different universities all over the globe. This has led to a large number of UG Students of different departments undergoing training and participating in the research in multidisciplinary areas like Satellite, Vision based ROBOTS etc.
2. B.E. students are actively involved in R&D activities.
3. Internship for students during vacations with additional credits.
4. Under the Society of Automotive Engineers, students have designed and developed a formula one car.
5. Students are guided by the faculty in the multi-disciplinary research projects like Robotics and Small satellites.
6. Robotics is undertaken by the students under the Innovation Entrepreneurship Development Cell of the college.
7. Students are involved in various ongoing sponsored research projects.
8. Students have developed a Pick and Place Robot and OFC link, which are kept as permanent exhibits in Birla Science Center, Hyderabad.
9. Students have developed a model light weight Aircraft using Balsa wood with remote control facility.
10. Students have developed a moped to operate at speed upto 130kms/hr.
11. Mandatory soft skills and Domain specific skills are imparted for III year students, so that they will be ready to face the campus recruitment interviews in the final year.
12. Special classes for academically weaker students.

## 7.3 Best Practices

### 7.3.1 Give details of any two best practices which have contributed to better academic and administrative functioning of the College.

#### Best practice – I

##### 1. Title of Practice

Multi-disciplinary Research and development

##### 2. Objective of the Practice

- Objectives of the higher education in the present context have to be globally relevant. UG & PG students pursuing higher education besides focusing on lecture classes will have to participate in the pursuit of research and innovation.
- Pursuit of innovation requires the background of multidisciplinary research.
- Multidisciplinary research leads to improved opportunities and flexibility to the students to get better employment.

##### 3. The context

In the present Indian system of higher education the different disciplines are treated as opaque walls, which hinder quality research and innovation to be part of higher education system. These walls need to be adequately porous so that a student pursuing in any discipline has to necessarily go beyond the frontiers of his own subject which enables him to seriously pursue knowledge of yet another discipline and in such an environment the horizon of research one pursues gets deeper leading to newer and innovative practices.

##### 4. The practices

In the context of Indian higher education, if the departments work independently then the solution developed may not be feasible to meet the societal needs. Most of the societal requirements need expertise of several disciplines. In the above context NMIT has initiated the practice of Multidisciplinary Research. The faculty and students of different disciplines will come together to work towards a common goal. Multiple Center of Excellence in various areas has been established such as Centers of Small Satellites/Robotics/Nano Technology, etc. These centers provide research facilities and training for faculty and students drawn from various disciplines.

## 5. Evidence of Success

- Center for Design & Development and Launching of Small Satellite
- Center for Design & Development of Vision Based Robots
- Center for Nano Materials & MEMS
- Center for Design & Process Simulation
- Center for Computational Fluid Dynamics
- Electronics/Mechanical /Electrical/Computer science faculty and students are involved in Small Satellite Program.
  - First time in India, under the auspices of the above Center the UG students from a Consortium of seven prominent colleges of Karnataka &AndhraPradesh with NMIT as the lead institution had successfully built India's first Pico Satellite "STUDSAT-I" which was launched in to space through ISRO's PSLV-C15 vehicle on 12th July 2010 from Sriharikota.
  - STUDSAT team has created a National Record by entering into LIMCA BOOK of RECORDS 2011 Edition
  - NMIT has setup a unique Ground Station to track the Satellites (NASTRAC) which has obtained an Indian Patent.
- The vision based Robots and their applications require professionals/ engineers of different disciplines like Mechanical. Electrical, Electronics, Computer Science. The multidisciplinary group in NMIT developed several vision based robots for various applications. Students have developed a Pick & Place Robot and OFC link which are kept as permanent exhibits at Birla Science Center, Hyderabad
- NMIT has established an interdisciplinary "CENTER FOR NANO MATERIALS AND MEMS". Under this center,
  - Department of Physics and Electronics Engineering have been granted a VGST-KFIST Level II sponsored project titled "Fabrication and Characterization of Polymer Nanocomposites for MEMS Application" Amount granted is Rs.40 Lakhs.
  - Started national MEMS design center in the year 2009, and become as a nodal center and actively participating in the collecting the designs for the development of MEMS chip under INUP programme, CeNSE, IISc, Bangalore in collaboration with NPMASS, India.
  - Sumbitted unique inter-disciplinary research proposals with a worth of Rs. 4.9 crore to national funding agencies of MHRD, DIT, DRDO andf VGST collaboratively, i.e. Mechanical Engineering, Electronics and Communication Engineering, Physics and Chemistry with the institutions/universities viz. IISc, S.V. University, NITK.

## 6. Problems encountered and Resources Required

It is difficult to co – ordinate students drawn from different disciplines to undertake interdisciplinary research. Since UG students actively participating in R&D work leave the college after their graduation, continuing the projects undertaken requires financial support to retain them after their graduation. This requires some additional financial resources and availability of senior faculty.

### Best Practice – II

- **Title of the Practice**

Decentralization of the academic administration

- **Objective of the practice**

- The role of teachers in the academic and administrative processes has to be decentralized.
- In an autonomous setup the role of individual teacher becomes quite important since each teacher has to assess and evaluate the performance of students in his own subject. Since the evaluation of a student unlike in non-autonomous programs comprises of CIE and SEE components. CIE component would mean continuous internal evaluation in terms of Mid- term test, quiz, assignments, seminars, course projects, case studies, etc. and this component is given 50% weightage. This has led to a better academic appraisal of a student resulting in better performance exhibited in the academic outcome.

- **The context**

The faculty needs to be more mature to handle the academic and administrative responsibility. Each faculty needs to handle sensitive responsibilities like curriculum design, continuous internal evaluation, examination duties etc.

- **The practice**

- Institute believes in decentralization of academic responsibilities. As an Autonomous college the faculty of the college will have to actively participate and take responsibilities being members of academic bodies such
  - BOS
  - BOE
  - Academic Council
  - Governing Council

- Other committees
- Faculty will also have to take responsibilities in the implementation of the Outcome based education and participate in following bodies
  - IQAC
  - Advisory Committee
  - Program coordinator
  - Course Coordinator

- **Evidence of Success**

- Better Administration at the departmental level which is resulted in well defined curriculum and quality education
- Autonomy to faculty which has resulted in innovative delivery and assessment methods
- Successful implementation of outcome based education process.

- **Problems encountered and Resources Required**

**Some of the other Best Practices are:**

- Students / Staff are encouraged & involved in the R & D Activities
- Seminars/ Workshops are conducted continuously throughout the year to encourage / to keep updated about the recent trends in the technology
- Students are encouraged to take up internship in R&D Organizations, Defense Research Laboratories, Reputed industries etc.
- Open Electives across the Departments
- Industry oriented elective subjects
- Value added summer courses with additional credits
- Design and development of a robot is supported by IEEE & CAIR
- Participation of UG students in Research activities
- Full time Research associates are appointed to assist the students in their research work
- Students are encouraged to present papers in conferences and journals. The institute pays the registration Fee, TA and DA
- Special Classes are conducted for academically weaker students after working hours
- Book bank facility for students and additional books are issued for SC & ST students

The result of the periodic review and the best practices followed, NMIT has achieved the following distinctions in a short span of 10 years

- Autonomous Status was conferred by UGC/VTU/Govt of Karnataka
- Accredited by NBA

- Selected by TEQIP-II under sub-component 1.1
- Starting of research centers in all the departments
- Starting of PG Programs
- Large no of sponsored research projects

## Evaluative Report of the Departments

### Electrical & Electronics Engineering

**1. Name of the Department & its year of establishment:**

Electrical & Electronics Engineering and 2001.

**2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**

- UG- B.E. in Electrical & Electronics Engineering

**3. Interdisciplinary courses and departments involved**

NIL

**4. Annual/ semester/choice based credit system:**

Semester and Choice based Credit System

**5. Participation of the department in the courses offered by other departments:**

YES

- Department offers open elective for higher semester and in the 1<sup>st</sup> year subject basic electrical engineering for all under graduate engineering disciplines

**6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/Asst. Professors)**

	Sanctioned	Filled
Professor	02	02
Associate Professors	02	02
Asst. Professors	10	10

**7. Faculty profile with name, qualification, designation, specialisation (D.Sc./D.Litt./Ph.D. /M.Phil., etc.)**

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. students guided in the last 4 years
Dr.H.M. Ravikumar	M.E. PhD	Professor & Head	Power Systems	26	4
Dr.V.Krishnan	M.E. PhD	Professor	High voltage	38	5
Mr.Sanjeev.k. Nayak	M.Tech (PhD-submitted)	Assoc. Professor	Power systems & Power electronics	7	
Ms.Vasudha Hegde	M.Tech(PhD)	Assoc. Professor	Computer Application in Industrial Drives(CAID)	12	
Ms.Arunaprabha.B.S	M.Tech(PhD)	Asst. Professor	CAID	5	
Mr.V.M.Parthasarthi	M.Tech	Asst. Professor	Power systems	12	
Ms.Sujata .S.S	M.Tech	Asst. Professor	CAID	6	
Ms.Veena.S	M.Tech	Asst. Professor	VLSI	8	
Ms.Sridevi H.R	M.Tech	Asst. Professor	Power Electronics	8	
MrC.H.Ramesh	M.Tech	Asst. Professor	Power Electronics	4	
Ms.Samanvita.N	M.Tech(PhD)	Asst. Professor	Industrial Automation and Robotics	5	
Ms.Siridevi .N.C	M.E	Asst. Professor	Control & Instrumentation	3.4	
Swetha Ammankallu	M.Tech	Asst. Professor	Industrial Electronics	2	



Ms.Sowmya Raman	M.Tech	Asst. Professor	Control systems	2.6	
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**8. Percentage of classes taken by temporary faculty – programme-wise information:**  
NIL

**9. Programme-wise Student Teacher Ratio**

Programme	Student Teacher Ratio
BE	15:1

**10. Number of academic support staff (technical) and administrative staff: sanctioned and filled**

Number of academic support staff (technical) and administrative staff	Sanctioned	Filled
	6	6

**11. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Mention names of funding agencies and grants received project-wise.**

Type of Funding	Number of faculty	Ongoing projects	Total grants received
National funding	NIL	NIL	NIL
International funding	NIL	NIL	NIL

**12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received:**

Funding Agency	Total Grants Received
AICTE	10,00,000/-

**13. Research facility / centre with**

- **state recognition:** Department is recognized as a research centre by Vishveswaraya Technological University in the year 2012.
- **national recognition:** NIL
- **international recognition:** NIL

**14. Publications:**

- \* number of papers published in peer reviewed journals (national / international): 6

- \* **Monograph** -NIL
- \* **Chapter(s) in Books** -NIL
- \* **Editing Book**-NIL
- \* **Books with ISBN numbers with details of publishers:** Energy Auditing and Demand side management is in progress
- \* **number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)**  
-NIL
- \* **Citation Index – range / average** -2
- \* **SNIP**-NIL
- \* **SJR**-NIL
- \* **Impact factor – range / average** -NIL
- \* **h-index** -NIL

**15. Details of patents and income generated:** NIL

**16. Areas of consultancy and income generated:** NIL

**17. Faculty recharging strategies:**

- Staff development programmes ,Short term courses (FDP)
- Refresher courses
- Deputation for conferences
- Deputation for higher studies

**18. Student projects**

- **percentage of students who have done in-house projects including inter-departmental:**60%
- **percentage of students doing projects in collaboration with industries / institutes:** 40%

**19. Awards / recognitions received at the national and international level by**

- **Faculty:** -NIL
- **Doctoral / post doctoral fellows:** -NIL
- **Students: Bheema Rajulu (1NT07EE013)**
  - Presented a paper on “Centralized Onboard Computer for a Pico Satellite” in the International conference “Emerging Scenarios in Space Technology (ESSTA-2008)”Nov 13-15, 2008. Organized by Satyabama University Chennai, India and won the best paper award.

- Presented a paper on “Design Development and Fabrication of Pico Satellite- the first Indian Pico Satellite” in SRISHTI 2010 - a State Level Project Exhibition & Competition for Engineering Students ,May 2010, organized by ABVP at SSIT, Tumkur and won the best paper award.
- **Ujjwala Godavarthi (INT10EE054)**  
Presented international business case challenge on “Energy Harvesting using PZT” at schneider electric head quarters, paris, France as a part of global competitions “Go Green in the city” june 2013 and selected in top 25 worldwide.

**20. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.**

<b>Name of the Seminars/ Conferences/Workshops</b>	<b>Source of funding (national / international)</b>	<b>Outstanding participants/ Resource Persons</b>
workshop on – “Introduction to Neural Networks and Fuzzy Logics” – Nov 2010	IEEE sponsored	<ul style="list-style-type: none"> <li>• Dr. Chidanada</li> <li>• Dr. Omkar</li> </ul>
“Theory and practicals on Microcontroller”	SITECH	<ul style="list-style-type: none"> <li>• Prof. G.N Rathna</li> </ul>
“Modeling of power system and FACTS controllers”	CPRI/IISC	<ul style="list-style-type: none"> <li>• Dr. Nagesh Prabhu</li> <li>• Prof. B.R.Nagarajan</li> </ul>
“Developments, Issues & Challenges in Power Sector”	VGST	<ul style="list-style-type: none"> <li>• Prof.Naik wadi</li> <li>• Prof.Suresh kumar</li> <li>• Prof .Chandrashekariah</li> </ul>
National workshop on ‘research on renewable energy resource through matlab/ simulink models’ 5 <sup>th</sup> -7 <sup>th</sup> Feb 2014	TEQIP	<ul style="list-style-type: none"> <li>• Dr.D.N.Gaonakar NITK,Surthkal.</li> <li>• Dr.Suresh.H.jangamshetty</li> <li>• Shri. G.V. Balaram,</li> <li>• Dr. S. J. Krishna Murthy</li> <li>• Dr. Sridhara S. N.</li> <li>• Mr. Ananth J. Naik</li> </ul>
Workshop on ‘Patents, Design , Trademarks and copy rights’ 6 <sup>th</sup> &7 <sup>th</sup> Dec 2013	TEQIP	<ul style="list-style-type: none"> <li>• Prof .Thyagaraj Guptha</li> <li>• Prof .Ganapathy</li> </ul>
National Conference on Recent trends in alternative	TEQIP	<ul style="list-style-type: none"> <li>• Dr.K.Amaranarayan(IISC)</li> </ul>

energy “Biofuels, Solar, Electric & Air in Reducing pollution of motor vehicles- 22 <sup>nd</sup> Nov 2013		
Workshop on ‘DSP and Information processing with Hands on’. 19 <sup>th</sup> -23 <sup>rd</sup> Aug 2013	TEQIP	<ul style="list-style-type: none"> <li>• Dr. Venkatesh Babu(IISC)</li> <li>• Dr. Shashidhar G.Kooligudi</li> </ul>
Two day workshop on ‘PLC and SCADA’ 26 <sup>th</sup> & 27 <sup>th</sup> June 2013	TEQIP	<ul style="list-style-type: none"> <li>• Pratheesh (Prolific system)</li> </ul>

### 21. Student profile course-wise:

Name of the Course (refer question no. 2)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
B.E. 2012-13	NA	35	21	97.14%	100%
BE 2011-12	NA	45	14	96%	100%

### 22. Diversity of students

Name of the Course (refer question no. 2)	% of Students from the College	% of students from the State	% of students from other States	% of students from other countries
BE 2012-13	NA	46.96%	42.42%	10.60%
BE 2011-12	NA	60.6%	30.30%	9.09%
BE 2010-11	NA	56.92%	35.38%	7.69%

### 23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?

GATE-12

GRE-3

### 24. Student progression

Student progression	Percentage against enrolled
UG to PG	15 %
PG to M.Phil.	-

<b>PG to Ph.D.</b>	-
<b>Ph.D. to Post-Doctoral</b>	-
<b>Employed</b>	
• <b>Campus selection</b>	50 %
• <b>Other than campus recruitment</b>	35 %
<b>Entrepreneurs</b>	NIL

### 25. Diversity of staff

<b>Percentage of faculty who are graduates</b>	
<b>of the same parent university</b>	71.14%
<b>from other universities within the State</b>	14.28%
<b>from other universities from other States</b>	14.28%

### 26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.

Nil

### 27. Present details about infrastructural facilities

<b>Library</b>	287 no books in DEPT Library
<b>Internet facilities for staff and students</b>	All faculty is facilitated with computer and internet connection and departmental laboratory also NMIT is having common internet lab.
<b>Total number of class room</b>	03
<b>Class rooms with ICT facility</b>	Portable LCD Projector
<b>Students' laboratories</b>	DC machine & Transformer lab, Synchronous and Induction motor lab, Circuits & Measurements lab, Analog Electronics lab, Power Electronics lab, Microcontroller lab, Logic Design lab, Control Systems lab, power system protection lab, Power Systems Simulation lab
<b>Research laboratories</b>	Power Electronics Lab, STUDSAT , Image Processing and ROBOTICS

### 28. Number of students of the department getting financial assistance from College:

UG - 46 Students

**29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.**

No(Since no new program has been started.)

**30. Does the department obtain feedback from?**

**a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?**

Yes- Depending on the feedback by faculty on curriculum, the syllabus is revised as and when necessary. Similarly from feedback, questions from competitive exams like GATE are recently included for surprise and assignment based tests.

**b. students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?**

Yes- Depending on the feedback the faculty is counseled and sent for additional training programmes if necessary.

**c. alumni and employers on the programmes and what is the response of the department to the same?**

Yes-Department has started collecting the feedback from alumni and employers. The feedback focuses on technical skills, problem solving skills, leadership skills, ethical values, higher studies details research skills and placement details of alumni. From the information gathered from the feedback the department proposes to make suitable changes in the curriculum delivery & assessment method.

**31. List the distinguished alumni of the department (maximum 10)**

Sl.no	Name	Company	Designation
1	Chandrashekar Ramalingam	Accenture	Analyst Programmer
2	Chetan Saxena	D B power Ltd	Electrical Engineer
3	Bheemarajulu	Nitte Meenakshi Institute of Technology	Research Associate
4	Balasubramanyam	GE	Software Enginner
5	Divya T	IISC	Project Assistant
6	Vijay Jayram	Nokia	Sr. Engineer Cluster and business
7	Jagan J	Intel Tech India	Testing Enginner
8	Nayana.B.R	M.Visveswaraya Institute of technology.	Assistant Professor

9	Virat Kushuwaha	Tata Consultancy Services Ltd	Assistant systems Engineer
10	Manasa.R.Hegde	Tata Consultancy Services Ltd	Microsoft Exchange Administrator
11	Prashanth Karanth	TEKCEL	Automation Engineer
12	Vindhya	Fine Crafts	Production Manager
13	Latha B N	GE Health care	Lead Engineer

**32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.**

- Dr. Srini Ramaswamy from ABB Bangalore, given a talk on “smart grid technology” on 11<sup>th</sup> sep 2012.
- IEEE-PES-Chapter-Dr.Mini Shaji Thomas, JMI university New Delhi, given talk on “An Overview of SCADA in power system and power automation laboratories at JMI” on 2<sup>nd</sup> sep 2013.

**33. List the teaching methods adopted by the faculty for different programmes**

- To make effective delivery and to support students attention , teachers are experimenting by making use of relevant techniques as and when required in addition to regular blackboard/Modern technology
- Mini projects, self study, internship, Remedial classes, tutorial classes.
- Hands on training

**34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?**

<b>Field visit</b>	<b>Regularly taken to industries</b>
Problem solving	Students are exposed to different types of problems (different from routine problems from text books) in surprise and assignment based tests. These problems are normally taken from GATE question papers and Engineering services question papers.
Project work	Faculty is closely associated in guiding the students for both in house and industry oriented projects
Case study	NIL

**35. Highlight the participation of students and faculty in extension activities.**

- The College has started and supported various clubs / associations to sensitize the faculty and students on Institutional Social Responsibilities. Some of the social outreach clubs which have created an impact on the students' campus experience are as follows:
  - i) National Cadet Corps
  - ii) National Service Scheme
  - iii) Rotaract Club of "NMIT – Bengaluru"
  - iv) Youth Wing of Red Cross Society
  - v) Literary Forum

**Some of the activities arranged through these clubs are**

- Awareness programs of social responsibilities
- Blood donation camps
- NSS & NCC Camps
- Organ Donation camps
- Distributions of School furniture, Text books & stationeries to Govt Schools in the neighbouring villages
- Literacy Programs

The Faculty and Students of the department actively involved in the said activities.

Extension Activity	Participation of Students
Paper presentation contests	Sachin upare, sarvesh sundar rajan, Sridevi aravind, Bheema rajulu, anusha M, Sushma B.R, Manasa Nayak, Minraj Nepali, Safeer Mon, Anusha
IEDC activities	Anirudh, Shriram, Madhavmurthy, Prithviraj, Shyamsumukh Total funding received Rs.2 lakhs
Sports	Ponnanna, Ambili, Shivashankari, Shamanth datta swaroop, Kapildev, Easaw George,
NCC	Safeer moni, Kapildev, Ketan, Mrinal Hadnoorker
Cultural programs	Manasa joshi, Ranjan pai, Akanksha Rohit, Abhishek.C.P. Venkatesh naidu, Easaw George, Mohd.Sameer, Sushma.N,



	Amurthavarshini,
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**36. Give details of “beyond syllabus scholarly activities” of the department.**

Arranging guest lectures, field visits, conduction of workshops & Conferences

**37. State whether the programme/ department is accredited/ graded by other agencies. Give details.**

Programme/ Department	Accredited/ Graded	Agency
Electrical & electronics Engineering	Accredited for three years	NBA- AICTE

**38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department**

Strengths	Weaknesses	Opportunities	Challenges
Well qualified faculty	Scope for improvement in research activities	Being autonomous syllabus can be upgraded frequently	To sustain student interests in core area
Faculty – highly dedicated		Labs can be modernized with latest equipment and softwares	Students give less preference to this branch compared to E&C and CS branches, eventhough broad based areas are covered in this course.
Faculty- getting involved in research		The energy setter is constantly growing hence better quality students can be attracted	
Faculty contributing to the development of department in all areas			
Well equipped labs			

**39. Future plans of the department.**

- To start a PG program on Renewable Energy system.
- To improve infrastructure of labs in line with latest technology.
- To introduce industry oriented electives through strengthened Industry –Institute Interaction.
- Strengthening the faculty to procure sponsored projects.

## Information Science & Engineering

### **1. Name of the Department & its year of establishment:**

Information Science & Engineering and 2001

### **2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**

- UG- Information Science & Engineering
- PG- Computer Networks & Engineering
- Ph.D

### **3. Interdisciplinary courses and departments involved:**

NIL

### **4. Annual/ semester/choice based credit system:**

Semester and Choice Based Credit System

### **5. Participation of the department in the courses offered by other departments**

<b>Name of the Course</b>	<b>Offered by</b>
M.Tech	Electronics & Communication Engineering for PG Program

### **6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/Asst. Professors)**

	<b>Sanctioned</b>	<b>Filled</b>
Professor	2	2
Associate Professors	4	4
Asst. Professors	12	12

**7. Faculty profile with name, qualification, designation, specialisation (D.Sc./D.Litt./Ph.D./M.Phil., etc.)**

Name	Qualification	Specialization	Designation	No. of Years of Experience	No. of Ph.D. students guided in the last 4 years
Dr. Sanjay.H.A	Ph.D. (IISc)	Grid Computing, Parallel Computing	Prof & Head	15	5 Students are pursuing
	M.Tech.	Computer Sc. & Engg.			
	B.E.	Electrical & Electronics Engineering			
Mr. Prashanth Gogoi	Ph.D.	Computer Network Security	Professor	17	1 Student is Pursuing
	M.Tech.	Information Technology			
	B.E.	Electrical & Electronics Engineering			
Mr. D.B.Sreenivas.	B.E.	Computer Sc. & Engg.	Associate Professor	14	Nil
	M.E	Computer Sc. & Engg.			
	(Ph.D.)	Grid Computing			
Mr. Karunakar Rai	B.E.	Electronics & Communication Engg.	Associate Professor	13	Nil
	M.T.ech.	VLSI			
	M.S.	Computer Sc. & Engg			
	M.T.ech.	Computer Sc. & Engg			

	Ph.D.	Data Mining			
Mr. K. Aditya. Shastry	B.E.	Computer Sc. & Engg.	Associate Professor	11	Nil
	M.T.ech.	Computer Sc. & Engg			
Ms. Ashwini.J.P.	B.E.	Computer Sc. & Engg.	Associate Professor	10	Nil
	M.Tech. (IITb)	Computer Sc. & Engg.			
	(Ph.D.)	Grid Computing			
Mr.Chandrashekhar. B.N	B.E.	Computer Sc. & Engg.	Asst. Prof.	11	Nil
	M.T.ech.	Computer Sc. & Engg			
	(Ph.D)	Hybrid Computing			
Ms.Bini.Y.Baby	B.Tech	Information Technology	Asst. Prof	7.4	Nil
	M.T.ech.	Computer Sc. & Engg			
Ms. Lakshmi M	B.E	Computer Sci & Engg	Asst. Prof	8.5	Nil
	M.Tech	Computer Sci & Engg			
Mr.Manjunath.B.A	B.E.	Computer Sc. & Engg.	Asst. Prof	5	Nil
	M.T.ech.	Computer Sc. & Engg			
Mr.Rohith.H.P	B.E.	Computer Sc. & Engg.	Asst. Prof	3	Nil
	M.T.ech.	Computer Sc. & Engg			
Ms. Deepika.K.M	B.E.	Computer sci & Engg.	Asst. Prof	2.7	Nil
	M.T.ech.	Computer Network Engineering			
Ms. Lakshmi.H	B.E.	Information Sc. & Engg.	Asst. Prof	2.7	Nil
	M.T.ech.	Networking			

		& Internet Engineering			
Ms.Kshema Raphael	B.E.	Information Sc. & Engg.	Asst. Prof	5.6	Nil
	M.T.ech.	Master of Engineering Management			
Mrs.Sumithra Amith	BE	Computer Science & Engineering	Asst.Prof	1.1	Nil
	M.Tech	Computer Sc & eng			
Mrs.Yashaswini H.M	B.E.	Computer Sc. & Engg.	Asst. Prof	2.8	Nil
	M.Tech.	Computer Sc. & Engg			
Ms.Roopa R	B.E.	Computer Sc. & Engg.	Asst. Prof	3.6	Nil
	M.Tech.	Computer Sc. & Engg			
Mr. Preetham N	B.E.	Computer Sc. & Engg.	Asst. Prof	2	Nil
	M.Tech.	Computer Sc. & Engg			

**8. Percentage of classes taken by temporary faculty – programme-wise information**

NIL

**9. Programme-wise Student Teacher Ratio**

Programme	Student Teacher Ratio
B.E.	1:13
M.Tech	1:12

**10. Number of academic support staff (technical) and administrative staff: sanctioned and filled**

Number of academic support staff (technical) and administrative staff	Sanctioned	Filled
	6	6

**11. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Mention names of funding agencies and grants received project-wise.**

Type of Funding	Name of the funding agencies	Name of the Investigators	Ongoing projects	Total grants received
National Funding	Department of Information Technology, New Delhi	Dr. Sanjay H A Ms. Ashwini J P	Framework for Dynamic Resource Allocation & Efficient Scheduling Strategies to Enable Cloud for HPC Applications	15.26 Lakhs
National Funding	Vision Group on Science & Technology, Govt. of Karnataka	Dr. Sanjay H A	Efficient Searching Framework for Mining Large Scale Databases on Distributed Environment	4 Lakhs
National Funding	Visvesvaraya Technological University	Dr. Sanjay H A Ms. Ashwini J P	Framework for Dynamic Configuring & Allocation of Virtual Cores for the User Application: A Pilot Project for Educational Cloud	5.6 Lakhs
National Funding	IEDC, Department of Science & Technology	Dr. Sanjay H A Mr. Srinivas D .B	<ul style="list-style-type: none"> <li>• “Nodu” Project”</li> <li>• “Solution to Back Doar Virus</li> <li>• E-Pay</li> </ul>	3 Lakhs

**12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received**

Funding Agency	Total Grants Received
IEDC- DST	3 Lakhs
DIT	15.26 Lakhs
VGST	4 Lakhs
VTU	5.6 Lakhs

**13. Research facility / centre with**

- **state recognition** :
- 1) VTU Research Center
  - 2) Mysore University Research Center

- **national recognition** : Nil
- **international recognition:** Nil

**14. Publications:**

- \* **number of papers published in peer reviewed journals (national / international):** 7
- \* **Monographs:** -NIL
- \* **Chapter(s) in Books:-**NIL
- \* **Editing Books:-**NIL
- \* **Books with ISBN numbers with details of publishers:-**NIL
- \* **Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.):**  
10
- \* **Citation Index – range / average:** 1-28
- \* **SNIP:-** NIL
- \* **SJR:-** NIL
- \* **Impact factor – range / average :** 0.5 - 1.556
- \* **h-index:** 2

**15. Details of patents and income generated.**

NIL

**16. Areas of consultancy and income generated**

<b>Areas of Consultancy</b>	<b>Income generated</b>
Parallel Computing and Data Mining for KPTCL(Sponsored Project)	4 Lakhs ( Sponsored by VGST)

**17. Faculty recharging strategies**

- Short term courses (FDP)
- Refreshing courses
- Deputation of faculties for Ph.D's and M.Tech

**18. Student projects**

- **percentage of students who have done in-house projects including inter-departmental:** 87%
- **percentage of students doing projects in collaboration with industries / institutes:** 13%



**19. Awards / recognitions received at the national and international level by Faculty:**

- **Faculty:** Dr. Sanjay H A, Prof. & Head of ISE, has been given the “Seed Money to young Scientist for Research” (2011-12) award pursue scientific research
- **Doctoral / post doctoral fellows:** -NIL-
- **Students:** Gopinath of 8<sup>th</sup> SEM ISE received the memento from his Excellence H.R.Bharadwaj, Governor of Karnataka for highest collection of funds, for the National Association for Blind.

**20. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.**

Name of the Seminars/ Conferences/Workshops	Source of funding (national / international)	Outstanding participants/ Resource Persons
Current Trends in Grid and Cloud Computing	Funded by VGST	<ul style="list-style-type: none"> <li>• Dr. B.B Prahlada Rao Program Coordinator Software development group CDAC, Bangalore</li> <li>• R. Sridharan Systems Software Development Group Centre for Development of Advanced Computing, Bangalore, India</li> <li>• Dr.P.Santhi Thilagam Associate Professor &amp; Head Dept of C.S.E. NITk-Surathkal</li> <li>• Hemanth Yamijala Committer, Apache Hadoop Technical Lead, Map/Reduce, Yahoo!</li> <li>• Dr. Sanjay. H. A Prof. &amp; Head Dept. of Information Science &amp; Engg.</li> <li>• Mr. Biju Uthup Scientist ADA , Bangalore</li> <li>• Sachin Wasnik IBM,</li> </ul>

		<p>Bangalore</p> <ul style="list-style-type: none"> <li>• Mr. Shyam Kumar Infosys, Bangalore</li> <li>• Pavan Soni Innovation Evangelist CTO OFFICE Wipro</li> <li>• Mr prabu.D senior engineer EMC<sup>2</sup></li> </ul>
Green Computing/IT: Power Efficient and Eco-Friendly Computing	Funded by VGST	<ul style="list-style-type: none"> <li>• Dr. C. B Akki Wipro</li> <li>• Ms.Preethi C IBM, Bangalore</li> <li>• Dr. Rajan TCS , Bangalore</li> <li>• Dr. Hemanth TCS, Bangalore</li> <li>• Dr. Sanjay H A NMIT</li> <li>• Prof.Chandrasekaran K NITK, Surathkal</li> </ul>
NS-2 Workshop	Funded by NMIT	<ul style="list-style-type: none"> <li>• Mr. Mohith P, Research Scholar, NITK</li> </ul>
Matlab Workshop	Funded by NMIT	<ul style="list-style-type: none"> <li>• Dr.Rudra Pratap IISc., Bangalore</li> <li>• Dr. Sanjay,NMIT</li> </ul>
Advances in Wireless sensor networks with hands-on	Funded by TEQIP	<ul style="list-style-type: none"> <li>• Prof. vinod Sharma IISc., Bangalore</li> <li>• Dr. Reema Mathew DRDC, Bangalore.</li> <li>• Dr. Mohit NITK</li> <li>• Dr. Shridhar K.N.Rao SRM Research</li> </ul>
Digital Signal Processing & Information Signal Processing	Funded by TEQIP	<ul style="list-style-type: none"> <li>• Professors from IISc</li> </ul>

**21. Student profile course-wise:**

Name of the Course (refer question no. 2)	Year	Selected		Pass percentage	
		Male	Female	Male	Female
BE	2012-13	28	22	85.71%	90.90%
M.Tech	2012-13	06	11	NA	

**22. Diversity of students**

Name of the Course (refer question no. 2)	Year	% of students from the College	% of students from the State	% of students from other States	% of students from other countries
<b>BE</b>	2012-13	Nil	84.13%	15.87%	0
	2011-12	Nil	73.92	26.08%	0
	2010-11	Nil	86.54%	13.46%	0
<b>M.tech</b>	2012-13	3.7%	82.3%	11.76%	Nil

**23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?**

Academic Year	Number of students	Competitive exam cleared
2012-13	3	GRE,GATE
2011-12	3	GRE, GATE
2010-11	7	GRE, GATE
2009-10	6	GRE, PGCET

**24. Student progression**

Student progression	Percentage against enrolled
<b>UG to PG</b>	14%
<b>PG to M.Phil.</b>	NA
<b>PG to Ph.D.</b>	NA
<b>Ph.D. to Post-Doctoral</b>	NA
<b>Employed</b>	
• Campus selection	75%
• Other than campus recruitment	10%
<b>Entrepreneurs</b>	1%

**25. Diversity of staff**

<b>Percentage of faculty who are graduates</b>	
<b>of the same parent university</b>	77.7%
<b>from other universities within the State</b>	5.5%
<b>from other universities from other States</b>	11.11%

**26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.**

NIL

**27. Present details about infrastructural facilities.**

<b>Department Library</b>	Department Library contains 127- volumes and 46- Titles
<b>Internet facilities for staff and students</b>	<ul style="list-style-type: none"> <li>• Each faculty is facilitated with Computer and internet connection.</li> <li>• In each departmental laboratory, 10 system are connected with internet</li> <li>• NMIT is having common internet lab</li> <li>• Hostels are facilitated with wi-fi</li> </ul>
<b>Total number of class rooms</b>	6
<b>Class rooms with ICT facility</b>	<ul style="list-style-type: none"> <li>• 1</li> <li>• Also we have a portable LCD projectors</li> </ul>
<b>Students' laboratories</b>	4
<b>Research laboratories</b>	1

**28. Number of students of the department getting financial assistance from College:**

UG - 47 Students

PG – 1 Student

**29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.**

- Discussion at the Departmental Level
- Surveying of benefits from new program & Industry job requirements.
- Decide upon the Program educational objectives

- Discussion on Eligibility criteria & Curriculum
- Preparing application & applying to concerned organization for approval

**30. Does the department obtain feedback from?**

**a. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?**

- Yes
- Preparation of curriculum by the faculty in consultation with senior faculty.
- DUGC consists of senior faculties who discusses about prepared curriculum.

**b. Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?**

- Yes on staff. If the feedback is low, HOD and principal inform the faculty about the same.
- Alumni are part of BOS, who gives suggestion on as teaching-learning evaluation. Valid inputs will be considered by the departments.

**c. Alumni and employers on the programmes and what is the response of the department to the same?**

Yes, every year at the time of alumni meet we will take a feedback on the program and try to implement their suggestions. The alumni are also a part of BOS, which helps the department to design a better syllabus. Also feedback is collected through online Survey.

**31. List the distinguished alumni of the department (maximum 10)**

<b>Name of the Alumni</b>	<b>Designation</b>	<b>Present Status</b>
Arun Kumar	Software Engineer	VM ware, Bangalore
Akshay Bulbule	Officer	Indian Navy
Sejal Rai	PG Student	Rochester Institute of Technology, NY
Srinivas Kodancha	Software Engineer	SAP Labs, Bangalore
Vinay G	PG Student	University of Texas
Sameer Ravi	PG Student	Dept. of SOIC Indiana University Bloomington
Ashwin Joshy	Software Engineer	Accenture, Chennai
Varun Rao	Software Engineer	SAP Labs, Bangalore
Meghana	Software Engineer	IBM, Bangalore

Anitha M	Software Engineer	Infosys, Bangalore
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**32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.**

Student Enrichment Programmes	External Experts
NS-2 Workshop	<ul style="list-style-type: none"> <li>Mr. Mohith P, Research Scholar, NITK</li> </ul>
Workshop on Matlab	<ul style="list-style-type: none"> <li>Dr. Rudra Pratap IISc., Bangalore</li> </ul>
Experts Lectures	<ul style="list-style-type: none"> <li>Dr. Vijay Kumar, MSRIT, Bangalore</li> <li>Dr. Prakash, Director, Karnataka State Natural Disaster Management Center, Bangalore</li> <li>Mr. Roopesh Kumar N A, SAP Labs, Bangalore</li> <li>Mr. Hymanand Angara, NXP</li> <li>Mr. Sridhar Krishnan, Transend</li> <li>Dr. D.K Subramanyan, IISc</li> <li>Mr. Ramalingam Srinivasan, IBM</li> </ul>
Technical Activities by IEEE student chapter	Experts from Various Industries/R&D Organizations.
Technical activities by Sanghyartham (Departmental Association)	

**33. List the teaching methods adopted by the faculty for different programmes.**

- To make effective delivery and to support students attention, teachers are experimenting by making use of relevant techniques as and when requires in addition to regular blackboard/Modern(LCD) technology
- Hands on training
- Tutorials
- Course Project
- Assignments/ Case Studies/ Programming Assignments.

**34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?**

<ul style="list-style-type: none"> <li>Field visit</li> </ul>	<ul style="list-style-type: none"> <li>Department Mandates Internship programs</li> <li>Industry Visit during Workshops for</li> </ul>
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	the students
<ul style="list-style-type: none"> <li>• Problem solving</li> </ul>	<ul style="list-style-type: none"> <li>○ Tutorial classes will more focus on Problem Solving</li> <li>○ Course Assignments includes analytical problems</li> </ul>
<ul style="list-style-type: none"> <li>• Project work</li> </ul>	<ul style="list-style-type: none"> <li>○ More weightage for In-house research oriented projects</li> <li>○ Continuous evaluation during the project</li> <li>○ Motivation for taking projects in well known R&amp;D organization</li> </ul>
<ul style="list-style-type: none"> <li>• Case study</li> </ul>	<ul style="list-style-type: none"> <li>○ Industry oriented case studies are part of many subjects</li> <li>○ Home assignments are more oriented towards case studies</li> </ul>

**35. Highlight the participation of students and faculty in extension activities.**

- The College has started and supported various clubs / associations to sensitize the faculty and students on Institutional Social Responsibilities. Some of the social outreach clubs which have created an impact on the students' campus experience are as follows:
  - i) National Cadet Corps - Gopinath
  - ii) National Service Scheme
  - iii) Rotaract Club of "NMIT – Bengaluru"
  - iv) Youth Wing of Red Cross Society
  - v) Literary Forum – Rohit.H.P, Namitha S, Seemanthini, Sateesh, Megha.G

**Some of the activities arranged through these clubs are**

- Awareness programs of social responsibilities
- Blood donation camps
- NSS & NCC Camps
- Organ Donation camps
- Distributions of School furniture, Text books & stationeries to Govt Schools in the neighbouring villages
- Literacy Programs

The Faculty and Students of the department actively involved in the said activities.

**36. Give details of “beyond syllabus scholarly activities” of the department.**

- Workshops on current technologies.
- Entrepreneurship activities.
- Value Added Courses
- Internship Program
- Additional Self Learning facilities are provided using e-learning courseware
  - NPTEL
  - MIT
  - BERKELY
  - STANFORD
  - Visveswaraya Technological University Video lectures from NPTEL.

**37. State whether the programme/ department is accredited/ graded by other agencies. Give details.**

No

**38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department**

Strengths	Weaknesses	Opportunities	Challenges
<ul style="list-style-type: none"> <li>• Flexible course curriculums supporting latest technology &amp; practices and application based. Regular reorganization of curriculums according to the needs of industry</li> <li>• Academic staff with ability to</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of consistency of advising at the graduate level</li> <li>• Lack of off-campus and alternative programming</li> <li>• Inadequate research culture emanating from the initial “developmental” focus.</li> <li>• Low</li> </ul>	<ul style="list-style-type: none"> <li>• Individuals for faculty positions which can be translated into opportunities to develop a doctoral program either in the department or collaboratively with other departments</li> <li>• Internship opportunities for students</li> </ul>	<ul style="list-style-type: none"> <li>• Increased class size decreases faculty ability to serve students</li> <li>• Adoptability to ever-changing technologies</li> <li>• Limited faculty rewards and recognition</li> <li>• Low faculty retention</li> </ul>



<p>use and teach the up-to date technolog</p> <ul style="list-style-type: none"> <li>• Good relations between teachers and students</li> <li>• Fairly good employment rate of graduates</li> <li>• Summer training and graduation project requirements. More focus towards research oriented projects</li> <li>• Faculty are supportive of each other and collegial</li> <li>• The department has a fairly good lab infrastructure</li> <li>• A strong focus on quality teaching with a faculty that excels in</li> </ul>	<p>proportion of PhD holders among academic staff.</p> <ul style="list-style-type: none"> <li>• Scope for improving industry-institute interaction</li> <li>• Lack of interest among graduating engineers for pursuing research degree programs or teaching careers</li> </ul>	<ul style="list-style-type: none"> <li>• IT tools are becoming available for Technology-Enhanced Learning, for widening the reach, and improving the effectiveness of Engineering Education.</li> <li>• New opportunities for tie ups between department and industries like IISC, DRDO, etc</li> <li>• Research environment for students</li> </ul>	
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teaching students at all levels • The department is strongly student centered and focused			
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**39. Future plans of the department.**

- More Focus towards research activities.
- Involving in Funded Reserch Projects and Consultancy work.

## Electronics & Communication Engineering

### **1. Name of the Department & its year of establishment:**

Electronics & Communication engineering and 2001

### **2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**

UG in Electronics & Communication Engineering

PG in VLSI & Embedded System and Digital Communication and Networking

### **3. Interdisciplinary courses and departments involved:**

Nil

### **4. Annual/ semester/choice based credit system:**

Semester and Choice Based Credit System

### **5. Participation of the department in the courses offered by other departments:**

Yes

Department offers open elective and first year basic subjects for all undergraduate engineering discipline.

### **6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/Asst. Professors)**

	<b>Sanctioned</b>	<b>Filled</b>
<b>Professor</b>	10	10
<b>Associate Professors</b>	5	5
<b>Asst. Professors</b>	21	21

**7. Faculty profile with name, qualification, designation, specialization (D.Sc./D.Litt./ Ph.D/M.Phil., etc.)**

Name	Qualification	Specialization	Designation	No. of Years of Experience	No. of Ph.D. students guided in the last 4 years
Dr. H.C. Nagaraj	Ph.D. (IIT, Madras)	Biomedical Instrumentation and Signal Processing	Principal & Professor	31	3
	M.E	Communication Systems			
	B.E.	Electronics & Communication Engg.			
Dr S Sandya	Ph.d	Embedded System and Communication	Professor & Head	30	Nil
	M.Tech				
	B.E				
Prof. N. Mahaveera Swamy	M.Tech.	Industrial Physics	Professor	42	Nil
	M Sc	Physics			
Prof. G. H. Sarma	Msc, M.Tech	Electrical Engineering	Professor	41	Nil
	B Sc	Physics and Electronics			
Dr. S. L. Pinjare	Ph.d	Physics and Electronics	Professor	32	1
	MSc, MEd	Physics			
	B.Sc, BEd	Physics, Maths			
Dr. Rukmini	Phd	Electromagnetics & Antenna	Professor	40	Nil
	M Sc	Physics & Electronics			

	B Sc	Physics, Maths			
Dr. Mrinal Sarvagya	Ph.D. (IIT,Kharagpur)	Mobile Communication	Professor	15	Nil
	M.Tech.	Digital Communication			
	B.Tech	Electronics & Communication Engg.			
Robert Wilfred	M Tech	Industrial Physcis	Professor	29	Nil
	B.E	Electronics & Communication Engg.			
Dr. Srinivasappa B.	Ph.D.	Power Electronics	Professor	15	Nil
	M.Tech.	Power Electronics	Professor	36	Nil
	B.E.	Electronics & Communication Engg.			
Prof. Sankar Dasiga	M.Tech.	Electronics & Instrumentation	Professor	29	
	BE	Electronics & Communication Engg.			
Prof Shashidhar K. S.	M.Tech.	Industrial Electronic	Asst. Prof.	11	Nil
	B.E.	Electrical & Electronics Engg.			
Mr.Rajesh N.	M.Tech.	Digital Electronics	Associate Professor	13	Nil
	B.E.	Electrical & Electronics Engg.			
Ms.Veda S. N.	M.Tech.	VLSI & Embedded System	Associate Professor	14	Nil
	B.E.	Electronics & Communication Engg.			

Ms.Varsha Prasad	M.Tech.	Digital Communication	Asst. Prof.	6	Nil
	B.E.	Instrumentation Engg.			
Ms.Sowmya Madhavan	M.Tech.	Digital Electronics Communication	Asst. Prof.	5	Nil
	B.E.	Electronics & Communication Engg.			
Ms.Madhu Patil	M.Tech.	Digital Communication	Associate Professor	9	Nil
	B.E.	Electronics & Communication Engg.			
Ms.Manjula BM	M.Tech.	Electronics	Associate Professor	11	Nil
	B.E.	Electronics & Communication Engg.			
Prof Prasanna Paga	M.Tech.	Industrial Electronics	Associate Professor	8	Nil
	B.E.	Electronics & Communication Engg.			
Prof Rekha Phadke	M.Tech.	DCN	Asst. Prof.	9	Nil
	B.E.	Electronics & Communication Engg.			
Prof Girish G.K	M.Tech.	VLSI & embedded System	Asst. Prof	6	Nil

	B.E.	Electronics & Communication Engg.			
Mrs.Seema Sreekumar	M.Tech.	VLSI & embedded System	Asst. Prof	6	Nil
	B.E.	Electronics & Communication Engg.			
Ms Bhuvaneshwari	M.Tech.	Communication System	Asst. Prof	12	Nil
	B.E.	Electronics & Communication Engg.			
Ms Naina Karkal	M.Tech.	VLSI & Embedded System	Asst. Prof	7	Nil
	B.E.	Electronics & Communication Engg.			
Ms Ayesha Siddiqua	M.Tech.	Digital Communication	Asst. Prof	3	Nil
	B.E.	Electronics & Communication Engg.			
Ms Pramodini	M.Tech.	Digital Communication	Asst. Prof	7	Nil
	B.E.	Electronics & Communication Engg.			
Ms Rubala	M.Tech.	Communication System	Asst. Prof	4	Nil
	B.E.	Electronics & Communication Engg.			
Mr Badarala Sri Pavan	M.Tech.	Digital Communication	Asst. Prof	2	Nil
	B.E.	Electronics & Communication Engg.			
Mrs Kushalatha	BE	Electronics & Communication Engg.	Asst. Prof	4	Nil

Ms Deeksha R Shetty	M.Tech	Digital Electronics and communication	Asst. Prof	2	Nil
	BE	Electronics & Communication Engg.			
Ms Latha Kumari	ME	VLSI & Embedded system	Asst.Prof	0	Nil
	BE	Electronics & Communication Engg.			
Ms G.Divya	M.Tech	Digital Electronics	Asst. Prof	1	Nil
	BE	Electronics & Communication Engg.			
Ms.Ashitha R Naik	M.Tech	Digital Electronics & Communication	Asst. Prof	2. 6	Nil
	BE	Electronics &Communication Engg.			
Ms.Deeba Lakshmi	M.Tech	Digital Electronics & Communication	Asst. Prof	5	Nil
	B.E	Electronics &Communication Engg.			
Mr.Rudresha K.J	M.Tech	Digital Electronics	Asst. Prof	0	Nil
	B.E	Electronics &Communication Engg.			
Ms.Shylaja S	M.Tech	VLSI	Asst. Prof	1. 6	Nil
	BE	ECE			

**8. Percentage of classes taken by temporary faculty – programme-wise information:**  
NIL

**9. Programme-wise Student Teacher Ratio**

Programme	Student Teacher Ratio
B.E.	15:1
M.Tech(VLSI)	12:1
M.Tech(DCN)	12:1



**10. Number of academic support staff (technical) and administrative staff: sanctioned and filled**

Number of academic support staff (technical) and administrative staff	Sanctioned	Filled
	9	9

**11. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Mention names of funding agencies and grants received project-wise.**

Type of Funding	Name of the funding agencies	Name of the Investigators	Ongoing projects	Total grants received
<b>National Funding</b>	Vision Group on Science & Technology, Govt. of Karnataka	Dr. H C Nagaraj Dr. S L Pinjare Ms. Jyothi B G	Polymer MEMS	40Lakhs
<b>International Funding</b>	IEEE	Prof. Mahaveera Swamy Dr. Mrinal Sarvagya	Fiber Optic Link	6.7Lakhs
<b>National Funding</b>	VGST ,TRIP	Mr. Shashidhar	Low cost solution for Automated Irrigation System	0.4Lakhs
<b>National Funding</b>	VGST – SMYSR	Dr. Mrinal Sarvagya	Zero Padding OFDM signal for Cognitive Radio Network	5 Lakhs
<b>National Funding</b>	VTU	Prof. Sankar	STUDSAT-2	45 akhs

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**12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received**

<b>Funding Agency</b>	<b>Total Grants Received</b>
<b>DST</b>	3 lakhs
<b>VGST</b>	45.4 Lakhs
<b>IEEE</b>	6.7 Lakhs
<b>VTU</b>	45 Lakhs

**13. Research facility / centre with**

- **state recognition:** 1) VTU Research Center  
2) University of Mysore
- **national recognition:** Nil
- **international recognition:**

**14. Publications:**

- \* **number of papers published in peer reviewed journals (national / international)**
  - National: 1
  - International: 18
- \* **Monographs:** NIL
- \* **Chapter(s) in Books:** NIL
- \* **Editing Books:** NIL
- \* **Books with ISBN numbers with details of publishers:** NIL
- \* **Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)** 2
- \* **Citation Index – range / average:** 1-15
- \* **SNIP:** NIL
- \* **SJR:** NIL
- \* **Impact factor – range / average:** 0.7-1.9
- \* **h-index:** NIL

**15. Details of patents and income generated:** NIL

**16. Areas of consultancy and income generated**

Areas of Consultancy	Income generated
VLSI Design	2.2 Lac

**17. Faculty recharging strategies:**

- Refreshing courses: Analog Electronics, Analog Electronics, ASIC Design
- Deputation of faculties for Ph.D's and M.Tech

**18. Student projects**

- **percentage of students who have done in-house projects including inter-departmental:** 74.7%
- **percentage of students doing projects in collaboration with industries / institutes:** 25.2%

**19. Awards / recognitions received at the national and international level by**

• **Faculty:**

- “Jewel of India” Award by Indian Solidarity Council, New Delhi in 2008.
- “Eminent Citizen of India” Award by National & International Compendium, NewDelhi in 2008.
- Prof. Rajesh N A letter from Limca Book of Record for contribution in India’s first pico satellite “STUDSAT-1”
- Prof Varsha Prasad Best Paper Award “Design of two stage op amp with improved CMRR and PSRR”, CISCON-2011, Manipal Institute of Technology, November-2011.

• **Doctoral / post doctoral fellows:**

NIL

• **Students:**

**20. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.**

Name of the Seminars/ Conferences/Workshops	Source of funding (national / international)	Outstanding participants/ Resource Persons
ASIC Design using Open Source CAD tools	Funded by TEQIP Phase II	Dr.Cyril Prasanna Raj Dean R&D MSRIT
ARM Cortex-M3	Funded by TEQIP Phase II	Dr Sadanand Gulwadi, ARM Cortex Mr A.K.Phani,Nano Materials
Advances in wireless sensor	Funded by TEQIP	Prof Vinod Sharma,ECE IISc

networks with handson	Phase II	<p>Dr Reema Mathew Sc.D DRDO</p> <p>Dr Chaitra M, Sc.CDRDO</p> <p>Mr Sandeep,CISCO</p> <p>Mr Chethan Bhanudas Technical Consultant HP Globalsoft Ltd</p> <p>Mr P.V Anand Mohan ,ED(Tech),ECIL</p> <p>Mr Mohit .P ,Research Scholar NITK</p> <p>Mr Shashidhar KN Rao Research Lead SRM Reaearch Institute</p>
Analog Electronics Workshop	Funded by MHRD	<p>Prof. Anindya Sundar Dhar, Department of Electronics &amp; Electrical Communication Engineering, IIT Kharagpur,</p> <p>Prof. Pradip Mandal, Department of Electronics &amp; Electrical Communication Engineering, IIT Kharagpur.</p> <p>Prof. Indrajit Chakrabarti, Department of Electronics &amp; Electrical Communication Engineering, IIT Kharagpur.</p> <p>Prof. Achintya Halder, Department of Electronics &amp; Electrical Communication Engineering, IIT Kharagpur</p>
Workshop On “Signals & Systems”	Funded by MHRD	<p>Prof V.M.Gadre Prof. Department of Electrical, IIT Bombay</p> <p>Prof. Some senguptha Professor Department of Electronics &amp;</p>

		Electrical Communication Engineering, IIT Kharagpur.
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**21. Student profile course-wise:**

Name of the Course (refer question no. 2)	Year of graduation	Selected		Pass percentage	
		Male	Female	Male	Female
BE (ECE)	2012-13	82	52	87.8%	94%
	2011-12	105	35	90.4%	94%
M Tech (VLSI)	2012-13	10	8	60%	87.5%
	2011-12	5	13	80%	92.3%
M Tech (DCN)	2012-13	5	12	NA	

**22. Diversity of students**

Name of the Course (refer question no. 2)	% of students from the College	% of students from the State	% of students from other States	% of students from other countries
ECE 2010-11 2011-12 2012-13	NA	66.4	30.4	3.2
	NA	69	29	2
	NA	73.2	24.6	2
M Tech (VLSI) 2010-11 2011-12 2012-13	Nil	89%	11%	Nil
	Nil	83%	17%	Nil
	Nil	89%	11%	Nil

**23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations? 68**

**24. Student progression**

Student progression	Percentage against enrolled
UG to PG	12%
PG to M.Phil.	NIL
PG to Ph.D.	NIL

<b>Ph.D. to Post-Doctoral</b>	NIL
<b>Employed</b>	
• <b>Campus selection</b>	54%
• <b>Other than campus recruitment</b>	24%
<b>Entrepreneurs</b>	5%

## 25. Diversity of staff

<b>Percentage of faculty who are graduates</b>	
<b>of the same parent university</b>	70%
<b>from other universities within the State</b>	11%
<b>from other universities from other States</b>	19%

## 26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period:

1.Dr.sreenivasappaB.V

## 27. Present details about infrastructural facilities

<b>a) Library</b>	:	149 Books, 15 Journals
<b>b) Internet facilities for staff and students</b>	:	Yes
<b>c) Total number of class rooms</b>	:	11
<b>d) Class rooms with ICT facility</b>	:	1
<b>e) Students' laboratories</b>	:	10
<b>f) Research laboratories</b>	:	1

## 28. Number of students of the department getting financial assistance from College.

UG - 90 Students  
 PG (VLSI) – 6 Students  
 PG (DCN) – 2 Students

## 29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.

- Discussion at the Departmental Level
- Surveying of benefits from new program & Industry job requirements.
- Decide upon the Program educational objectives
- Discussion on Eligibility criteria & Curriculum
- Preparing application & applying to concerned organization for approval

**30. Does the department obtain feedback from**

**a. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?**

Yes

- Preparation of curriculum by the faculty in consultation with senior faculty.
- DUGC consists of senior faculties who discusses about prepared curriculum.
- BOS will have faculties at deferent cadre who gives suggestion about curriculum

**b. students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?**

- Yes on staff. If the feedback is low, HOD and principal inform the faculty about the same.
- Alumni are part of BOS, who gives suggestion on as teaching-learning – evaluation. Valid inputs will be considered by the departments

**c. alumni and employers on the programmes and what is the response of the department to the same?**

Yes, every year at the time of alumni meet we will take a feedback on the program and try to implement their suggestions. The alumni are also a part of BOS, which helps the department to design a better syllabus.

**31. List the distinguished alumni of the department (maximum 10)**

<b>Name of the Alumni</b>	<b>Designation</b>	<b>Present Status</b>
Sujay Dajananda	Assist.Manager,Forensic	KPMG Denmark
Srikanta Patanjali	Associate System Engineer	IBM
Aravinth Rajan	Application Engineer	IBM
Ramanjayeale	Design Engineer	S M Netsrve
Rohit Kool	Information technology,Specialist officer,DatacentreinNavimumbai	CentralBankof India
Kaushikee mishra	Software Engineer	Cap gemini

**32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.**

Student enrichment programmes	External experts
MOBILE COMPUTING ANDROID	Li2 Innovations
ROLE OF IEEE IN HIGHER EDUCATION	Mr. RACHEL
MOBILE COMPUTING ANDROID	Li2 Innovations
MICROSOFT QUIZ	Organised by Students with Faculty Coordinators

**33. List the teaching methods adopted by the faculty for different programmes.**

- Course project
- Programming Assignment
- Tutorials
- Hands on training

**34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?**

<ul style="list-style-type: none"> <li>• Field visit</li> </ul>	<ul style="list-style-type: none"> <li>▪ Department Mandates Internship programs to have a industrial exposure</li> <li>▪ Industrial Visit during Workshops held for the students</li> </ul>
<ul style="list-style-type: none"> <li>• Problem solving</li> </ul>	<ul style="list-style-type: none"> <li>▪ Tutorial classes will focus more on Problem Solving</li> <li>▪ Course Assignments includes analytical problems</li> <li>▪ Extra classes are taken for weaker students</li> </ul>
<ul style="list-style-type: none"> <li>• Project work</li> </ul>	<ul style="list-style-type: none"> <li>▪ More wieghtage for In-house research oriented projects</li> <li>▪ Continuous evaluation during the project</li> <li>▪ Motivation for taking projects in well known R&amp;D organization</li> </ul>
<ul style="list-style-type: none"> <li>• Case study</li> </ul>	<ul style="list-style-type: none"> <li>▪ Industry oriented case studies are part</li> </ul>



	<p>of many subjects</p> <ul style="list-style-type: none"> <li>▪ Home assignments are more oriented towards case studies</li> </ul>
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**35. Highlight the participation of students and faculty in extension activities.**

- The College has started and supported various clubs / associations to sensitize the faculty and students on Institutional Social Responsibilities. Some of the social outreach clubs which have created an impact on the students' campus experience are as follows:
  - i) National Cadet Corps-Karan Badalad, Arunakumari, Kiran Mayee, Snigda, Pallavi
  - ii) National Service Scheme
  - iii) Rotaract Club of "NMIT – Bengaluru"-Chetan S.P
  - iv) Youth Wing of Red Cross Society
  - v) Literary Forum
  - vi) Sports-Sinchana

**Some of the activities arranged through these clubs are**

- Awareness programs of social responsibilities
- Blood donation camps
- NSS & NCC Camps
- Distributions of School furniture, Text books & stationeries to Govt Schools in the neighbouring villages
- Literary Forum

The Faculty and Students of the department actively involved in the said activities.

**36. Give details of "beyond syllabus scholarly activities" of the department.**

- Workshops on current technologies.
- Entrepreneurship activities.
- Value Added Courses
- Internship Program

**37. State whether the programme/ department is accredited/ graded by other agencies. Give details.**

Programme/ Department	Accredited/ Graded	Agency
UG/ECE	2009-2012 (3 Years)	NBA

**38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department**

Strengths	Weaknesses	Opportunities	Challenges
<ul style="list-style-type: none"> <li>• Dedicated Faculty with 6 Ph.Ds, 10 pursuing Ph.D and rest M.Tech</li> <li>• Faculty have Teaching, Industrial and Research experience</li> <li>• Well equipped HW/SW Laboratories</li> <li>• Visvesvaraya Technological University, University of Mysore - Recognized Research center</li> <li>• Have sponsored projects - IEEE, VGST, VTU, DST</li> </ul>	<ul style="list-style-type: none"> <li>• Lack of off-campus and alternative programming</li> <li>• Scope for improving industry-institute interaction</li> <li>• Lack of interest among graduating engineers for pursuing research or teaching careers</li> </ul>	<ul style="list-style-type: none"> <li>• Individual faculty can pursue higher studies doctoral programs</li> <li>• Internship opportunities for students</li> <li>• OIT tools are available for improving the effectiveness of Engineering Education.</li> <li>• New opportunities for tie ups between department and industries like IISC, DRDO, etc</li> <li>• Research environment for students</li> </ul>	<ul style="list-style-type: none"> <li>• Adoptability to ever-changing technologies</li> <li>• Limited faculty rewards and recognition</li> </ul>

**39. Future plans of the department.**

- Increase the number of projects [Research & Sponsored Projects ]
- Publications from research work taken up by faculty members in National/International Journals.
- Encourage the publication of final year project of UG & PG.
- Placement & Training Activities for the Students.

## Computer Science & Engineering

### **1. Name of the Department & its year of establishment:**

Computer Science & Engineering and 2001

### **2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**

UG- Computer Science and Engineering

PG- Computer Science and Engineering

Ph.D - Computer Science and Engineering

### **3. Interdisciplinary courses and departments involved:**

NIL

### **4. Annual/ semester/choice based credit system**

Semester and Choice base Credit System

### **5. Participation of the department in the courses offered by other departments**

Open Elective and 1<sup>st</sup> year basic subject for all under graduate disciplines

### **6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/Asst. Professors)**

	Sanctioned	Filled
Professor	4	4
Associate Professors	6	6
Asst. Professors	31	31

### **7. Faculty profile with name, qualification, designation, specialisation (D.Sc./D.Litt./ Ph.D./M.Phil., etc.)**

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. students guided in the last 4 years
Dr Jharna Majumdar	PhD(CSE)	Professor	Image and Video	41	1 Students are

			Processing		persuing
Dr. Nalini N	PhD(CSE)	Professor & Head	Cryptography & Network Security	17	2completed 5 Students are persuing
Dr H Sarojadevi	PhD(CSE)	Professor	Computer Science & Engineering Computer Architecture	23	Registered -5
Prof. K A Ranganatha Setty	MSc (Engg), MTech(CST)	Dean, Academics	Computer Network & Computer Graphics	46	Nil
Vidyadevi G Biradar	B.E, M.Tech., (PhD)	Associate Professor	Image Processing	14	Nil
Aparna Manikonda	B.E, M.Tech(CS E).	Assistant Professor	Networking & Image Processing	8	Nil
Vijaya Shetty	B.E, M.Tech(CS E), (PhD)	Associate Professor	CNE System performance	21	Nil
Prathibha A Ballal	B.E, M.E(CSE), (Phd)	Associate Professor	Computer Science & Engineering	20	Nil
Kavitha Sooda	B.E, M.Tech(CS E), (PhD)	Associate Professor	Network Routing	11	Nil
Sanju	B.E, M.Tech(CS E), (PhD)	Associate Professor	On Chip	11	Nil
Archana Naik	B.E, M.Tech. (CSE)	Associate Professor	Computer Science & Engineering	11	Nil
Mohan B.A	B.E, M.Tech(CS E), (Phd)	Assistant Professor	Computer Networks	10	Nil
Bhuvaneshwar i Patil	B.E, M.Tech(CS E).	Assistant Professor	Image Processing	4	Nil
Pallavi	B.E,	Assistant	Networking	1	Nil

Munihanumaiah	M.Tech. (CSE)	Professor	and Image Processing		
Santhosh Kumar K.L	B.E, M.Tech(CS E).	Assistant Professor	Image Processing	1	Nil
Lakshmi devi Noolvi	B.E, M.Tech(CS E).	Assistant Professor	Image Processing	1	Nil
Sujata joshi	B.E, M.Tech(CS E).	Assistant Professor	Computer science & Engineering	12	Nil
N Srinivas	B.E, M.Tech(CS E).	Assistant Professor	Computer Networks	10	Nil
Chaitra H.V	B.E, M.Tech(CS E).	Assistant Professor	Computer science & Engineering	10	Nil
Ramya S	B.E, M.Tech(CS E).	Assistant Professor	Electronics & Communication Computer Science & Engineering	8	Nil
Sushma M	B.E, M.Tech(NIE).	Assistant Professor	Network & Internet Engineering	6	Nil
Nirmala J Saunshimat	B.E, M.Tech.(Software Engg)	Assistant Professor	Software Engineering	10	Nil
Nagaraj S. R	B.E, M.Tech. (Software Engg)	Assistant Professor	Computer Science & Engineering Software Engineering	8	Nil
Jagadevi N Kalashetty	B.E, M.Tech(CS E).	Assistant Professor	Diploma in CSE Information Science & Engineering	8	Nil
E.G Satish	B.E, M.Tech. (Software Engg)	Assistant Professor	Software Engineering	7	Nil

Kavya B.S	B.E, M.Tech(NIE ).	Assistant Professor	Network & Internet Engineering	5	Nil
Asha HV	B.E. MTech (Software Engg)	Assistant Professor	Computer Science & Engineering	4	Nil
Sangeetha GM	B.E. MTech(CSE )	Assistant Professor	Computer Science & Engineering	1	Nil
Shruthi M	B.E. MTech(CSE )	Assistant Professor	Computer Science & Engineering	1	Nil
Madhumita Mishra	B.E. MTech(CSE )	Assistant Professor	Computer Science & Engineering	1.5	Nil
Chaitra KR	BE, MTech (Software Engg)	Assistant Professor	Computer Science & Engineering	7	Nil
Afroz Pasha	BE, MTech (Software Engg)	Assistant Professor	Computer Science & Engineering	7	Nil
Shobha	BE, MTech(CN E)	Assistant Professor	Computer Science & Engineering	7	Nil
Soumya MR	BE, MTech MTech(CSE )	Assistant Professor	Computer Science & Engineering	4	Nil
Anju Thomas	BE, MTech MTech(CSE )	Assistant Professor	Computer Science & Engineering	1	Nil
Shobana TS	BE, MTech MTech(CSE )	Assistant Professor	Computer Science & Engineering	1	Nil
Meenakshi	BE, MTech MTech(CSE )	Assistant Professor	Computer Science & Engineering	5	Nil
Ramakrishna	BE, MTech (Software Engg)	Assistant Professor	Computer Science & Engineering	4	Nil
Rajeshwari	BE, (MTech)	Assistant Professor	Computer Science & Engineering	6	Nil

Poornima MS	BE, MTech MTech(CSE )	Assistant Professor	Computer Science & Engineering	4	Nil
Madhura	BE	Lecturer	Computer Science & Engineering	5	Nil

**8. Percentage of classes taken by temporary faculty- Nil**

**9. Programme-wise Student Teacher Ratio**

<b>Programme</b>	<b>Student Teacher Ratio</b>
B.E.	15:1
M.Tech	12:1

**10. Number of academic support staff (technical) and administrative staff:**

Support Staff- Lab Instructors Sanctioned: 8, Filled: 8

Administrative Staff- Sanctioned: 4, Filled: 4

**11. Number of faculty with ongoing projects from**

<b>Type of Funding</b>	<b>Name of the funding agencies</b>	<b>Name of the Investigators</b>	<b>Ongoing projects</b>	<b>Total grants received</b>
National Funding	Department of Science and Technology	Dr. Jharna Majumdar	Design and Development of Robot Mechanisms, Vision and Control Algorithms	Rs 28.00 Lakhs
National Funding	Centre for Artificial Intelligence and Robotics, DRDO	Dr. Jharna Majumdar	Development of a Real Time Human Tracking Capability on a Mobile Platform	Rs 9.9 Lakhs
National Funding	Combat Vehicle Research and Development Establishment, DRDO	Dr. Jharna Majumdar	Development of Algorithms for Video Shot Detection and Video Summarization	Rs 18 Lakhs
National Funding	DST(IEDC)	Dr Sarojadevi Vidyadevi Birader	BLIND NAV	1 lakh

**12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received**

<b>Funding Agency</b>	<b>Total Grants Received</b>
<b>CAIR,DRDO</b>	24.4 LAKHS
<b>ADE, DRDO</b>	29.35
<b>VTU</b>	8.17 Lakhs
<b>IEEE,USA</b>	9 Lakhs
<b>IEDC</b>	3
<b>DST</b>	28 LAKHS
<b>CVRDE</b>	17.33 LAKHS
<b>AICTE</b>	8.5LAKHS

**13. Research facility / centre with**

<b>State recognition</b>	:	VTU and Mysore University
<b>National recognition</b>	:	DST/CAIR/ADE/CVRDE/AICTE/IEDC
<b>International recognition</b>	:	None

**14. Publications:**

- \* number of papers published in peer reviewed journals (national / international) --30
- \* Monographs: NIL
- \* Chapter(s) in Books: 2
- \* Editing Books: 2
- \* Books with ISBN numbers with details of publishers: 2
- \* number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.): 16
- \* Citation Index – range / average: 1 to 31
- \* SNIP: NIL
- \* SJR: NIL
- \* Impact factor – range / average: NIL
- \* h-index: 2 to 3

**15. Details of patents and income generated**

<b>Sl. No.</b>	<b>Title</b>	<b>Inventor</b>	<b>Year</b>
Patent - 1	Development of a New Measurement method to find mould/metal gap in an Ingot Casting System	Jharna Majumdar, Scientist, Central Mechanical Engineering Research Institute (CSIR), Govt. of India	1975



<b>At the Nitte Meenakshi Institute of Technology</b>			
Patent - 2	Ground Station to Track Satellites in Low Earth Orbit – NASTRAC 1640/CHE/2011	Dr. Jharna Majumdar, DEAN R & D, Prof. CSE & Team, Nitte Meenakshi Institute of Technology, Bangalore	2011
Patent - 3	System and Method for Horizon Detection on Aerial Vehicle 1374/CHE/2011	Dr. Jharna Majumdar, DEAN R & D, Prof. CSE & Team, Nitte Meenakshi Institute of Technology, Bangalore	2011
Patent - 4	Automatic Contrast Limited Adaptive Histogram Equalization Method 2986/CHE/2013	1. Dr. Jharna Majumdar, DEAN R & D, Prof. CSE Nitte Meenakshi Institute of Technology, Bangalore  2. Santhosh Kumar K L, Final Year M Tech Student Nitte Meenakshi Institute of Technology, Bangalore	July 2013
Patent - 5	Invention network router using forward flow feasibility function for channel selection Application number 2113/che/2010	kavitha Sooda Associate Prof. CSE & Team, Nitte Meenakshi Institute of Technology, Bangalore	2012

**16. Areas of consultancy and income generated :**

**BE:** None

**M.Tech:**

<b>Name of the Organization</b>	<b>Area of consultancy</b>	<b>Name of the organization to which consultancy service is provided</b>	<b>Revenue generated</b>
IEEE USA	Articulated 5 DOF Pick and Place Robot	NMIT, Bangalore	Rs. 8.5 Lakhs

**17. Faculty recharging strategies**

- Faculty Development Program
- Support for Higher studies
- Support for PhD paper publication
- Support for attending Conferences/Workshop/Seminar

### 18. Student projects

- **percentage of students who have done in-house projects including inter-departmental:** 97.9 %
- **percentage of students doing projects in collaboration with industries / institutes:** 2.09%

### 19. Awards / recognitions received at the national and international level by

- **Faculty:**

#### **Dr. Nalini N**

1. Received “Bharat Jyothi Award” by IIFS, Dec 20 2012, New Delhi
2. Editor-in-Chief, ANUSANDHANA-Journal of Science, Engineering and Management (ISSN-2231-4032)
3. Associate Editor, Research Journal of Information Technology, Maxwell Scientific Organization, <http://www.maxwellsci.com>.
4. AICTE-RPS Funded Project on “Cryptanalysis of Stream and Block Ciphers Using Optimization Techniques” from 1/4/2011 to 31/3/2013.
5. Guiding THREE Candidates for PhD under Visvesvaraya Technological University, Belgaum and TWO Candidates under Mysore University.
6. Programming Committee member in Advanced Cloud Computing. 2012, organized by CSI
7. Program Committee Member, BIOMA-2012
8. Program Chair ERCICA 2013 and ERCICA 2014( Emerging Research in Computing Information Communication and Application

#### **Dr. SarojaDevi H**

1. Guided Project under Innovation and Entrepreneurship Development Centre on “Classification of Sky and Non sky Region during the academic year 2010-11
2. Processor-Directed Cache Coherence Mechanism, ISBN 978-3-659-11944-6, LAP LAMBERT Academic Publishing GmbH and Co. KG, Germany.
3. Guiding FIVE Candidates for PhD under Visvesvaraya Technological University, Belgaum.

#### **Dr. Jharna Majumdar**

##### **International award:**

1. **Certificate of Appreciation** from the President, Stanford Research International, California, USA for working on the ‘Development of a novel approach for Consistency Models of Computer Vision algorithms’ during study leave from DRDO (Jan – May 2002).
2. **Citation in VDI, Germany** for Development of a new method to use CAD modeler for 3D objects Recognition in Robot vision at the Forschungszentrum Informatik, Karlsruhe, Germany.

**National award:**

1. **Best Paper Award in the** National Conference on Conglomeration of Knowledge and Technology (Tantragnana), Mysore, 2008
2. **Kalpna Chawla Memorial Lecture**, Aeronautical Society of India, 2007
3. **Suman Sharma Award** for Women Engineers from National Design and Research Forum, Institution of Engineers, 2006
4. **Dr. VM Ghatage Award** from Aeronautical Society of India, 2005
5. **Performance Excellence Award** from Prime Minister of India, 2004
6. **Director’s Commendation Certificate** for the contribution made towards the development of Aerial Image Exploitation Systems for Surveillance application, 2003
7. **Technology Breakthrough award** for contribution to ‘Aerial Image Exploitation for UAV NISHANT Program’ from Min of Defence India, 2002
8. **National Science Day Commendation Certificate** in recognition of significant contributions in the field of Image Exploitation, 2000
9. **Director’s Commendation Certificate** for the remarkable contributions to the rapid growth of Aerial Image Processing capabilities at ADE, 1999
10. **Certificate of Appreciation DRDO HQ** for demonstrating a Practical Vision System for Robotic application in the DRDO stall of Computer Society of India Annual Conference in Delhi, 1991
11. **Best Paper Award** in the All India Machine Tool Design and Research Conference (AIMTDR) Conf., 1984
12. **Best Paper Award** in the All India Machine Tool Design and Research Conference (AIMTDR) Conf., 1982

**20. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.**

Name of the Seminars/ Conferences/Workshops	Source of funding (national / international)	Outstanding participants/ Resource Persons
Why multicore architecture? Case studies on multicore architecture	Funded by VGST	<ul style="list-style-type: none"> <li>• Prof V Rajaraman SERC, IISC Bangalore</li> <li>• Mr Ganga Prasad Centre for Development of Advanced Computing, Bangalore, India</li> <li>• Mr Raghavendra IIT Chennai</li> </ul>

Algorithms for New Parallel Computing Environment	Funded by NMIT	<ul style="list-style-type: none"> <li>Prof V Rajaraman SERC, IISCBangalore</li> </ul>
Random walk in Image plane	Funded by NMIT	Dr. KG Narayanan, Former Director ADE, Chief Advisor DRDO (Retd.)
Vetronics in Armoured Fighting Vehicles & Unmanned Ground Vehicles	Funded by NMIT	Mrs Jayashree Vardhan, Scientist 'G', Additional Director, CVRD, Chennai
Pre-Conference Tutorials 1. Image and Video Processing- Algorithms 2. Advances in Scientific Computing and Cloud	Funded by TEQIP (International Conference)	Dr. Jharna Majumdar Dean R& D , NMIT  1. Prahlada Rao B.B C-DAC, Joint Director  2. Dr. Sanjay HA NMIT
Emerging research in computing information communication and applications	Funded by TEQIP (International Conference)	1. Shri R.V Deshpande Minister of Higher Education 2. L.M Patnaik Former Vice Chancellor DIAT, Pune 3. Dr. Satish Udpa Executive Vice President Michigan State University , USA 4. Prof. NR Shetty Advisor, NMIT 5. Shri. N.Vinay Hegde President ,NMIT 6. Prof. R Natarajan 7. Dr. Venugopal KR
Application Research in Data Mining	Funded by TEQIP	1. Dr. Arun Kumar Assistant Director in Research Academy at Vellore Institute of Technology. 2. Vijay Nadadur CEO, TATIONEM
MS-Office	Funded by TEQIP	Faculty from CSE dept

**21. Student profile course-wise:**

Name of the Course (refer question no. 2)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
2008-09	119	69	50	92%	100%
2009-10	117	65	52	93.3%	98 %

**22. Diversity of students**

Name of the Course (refer question no. 2)	% of students from the College	% of students from the State	% of students from other States	% of students from other countries
2012-13	NA	68%	23%	9%
2011-12	NA	71%	21%	8%
2010-11	NA	69%	28%	3%

**23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?**

Academic Year	Number of students	Competitive exam cleared
2012-13	10	GRE, GATE
2011-12	11	GRE, GATE
2010-11	5	GRE, GATE
2009-10	3	GRE, PGCET

**24. Student progression**

Student progression	Percentage against enrolled
UG to PG	10%
PG to M.Phil.	NA
PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA
Employed	
• Campus selection	87%
• Other than campus recruitment	3%
Entrepreneurs	NA

**25. Diversity of staff**

<b>Percentage of faculty who are graduates</b>	
<b>of the same parent university</b>	6%
<b>from other universities within the State</b>	85%
<b>from other universities from other States</b>	9%

**26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.**

1. Dr Suresha under the guidance of Dr Nalini N from VTU Belgaum.

**27. Present details about infrastructural facilities**

**a) Library**

<b>Area</b>	<b>25 sqm</b>
No of Volumes	296
No of Titles	302
No of National Journals	15
No of International Journals	46

**b) Internet facilities for staff and students:**

Yes

10 staff rooms have the internet facility. Students can avail the internet facility from internet lab having 30 systems and also from the project lab having 21 systems.

**c) Total number of class rooms : 8**

**d) Class rooms with ICT facility: 1**

**e) Students' laboratories: 8**

**f) Research laboratories: 1**

**28. Number of students of the department getting financial assistance from College.**

UG - 97 Students

PG – 4 Students

**29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.**

Yes

(Detailed Project Reports)

- Discussion at the Departmental Level
- Surveying of benefits from new program & Industry job requirements.
- Decide upon the Program educational objectives
- Discussion on Eligibility criteria & Curriculum
- Preparing application & applying to concerned organization for approval

**30. Does the department obtain feedback from  
a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?**

Yes

- Subjects for the curriculum are selected by the Faculty members within the department
- Syllabus is formed by the experienced faculty in the respective subject
- Elective groups are made and syllabus for the same is prepared by the subject expertise within the department.
- Any faculty may give his/her view in selecting the subject as well as in forming the syllabus Evaluation is done by
  - DUGC team which will planning and monitoring the academic activities of the department throughout the semester
  - BOS meeting is held before starting of every academic year for any changes or correction in the syllabus
  - BOE team will be organizing the examination and deciding the examiners Achievement of the learning process is reflected in the good academic result and placement
  - Internal Advisory Committee and Advisory Committee

**b. students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?**

Yes

- Feedback will be taken for every subject and each faculty
- Alumni will be included in the BOS members

**Response**

Department will be taking all the feedback positively

**c. alumni and employers on the programmes and what is the response of the department to the same?**

**Alumni**

- Improvement in the infrastructure and transport facility of the college
- Increase in lab hours and additional training for the student like Soft skill and advanced technologies

**Response**

- Department appreciate the fact that changes have been recognized
- Improvement mentioned is incorporated in the department

**Employer**

- There will be regular monitoring of the programmes

**31. List the distinguished alumni of the department (maximum 10)**

<b>Name of the Alumni</b>	<b>Designation</b>	<b>Present Status</b>
1. Kaverappa K.S.	Pursuing M.S	South California University
2. Deepk B M	Pursuing M.S	University of Texas Dullas
3. Rahul John Louis	Assosiate System Engineer	Dell
4. Ashwin Venkat	Pursuing M.Tech	VTU
5. Aditya Arun	Pursuing M.S	South California University
6. Pooja V	Assosiate System Engineer	Robert Bosch
7. Sneha Srisha	Helpdesk Engineer	TCS

**32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.**

<b>Student Enrichment Programmes</b>	<b>External Experts</b>
Android	Thushar Kumar Wegilant , IIT Bombay
Ethical Hacking	Ashique Rehm Java Systems, Bangalore
Application Research on Data Mining	1.Dr.Arun Kumar Assistant Director in Research Academy at Vellore Institute of Technology. 2.Vijay Nadadur CEO, TATIONEM



Next Generation Internet Protocol IPV6	Mr.Baladev Krishnamurthy, Founder and Managing Director, A2B2 IT Services
Multicore SoC for Next Level Power/Performance	Dr. C. P Ravi Kumar, University Relations Texas Instruments, India
Pre-Conference Tutorials 1. Image and Video Processing- Algorithms  2. Advances in Scientific Computing and Cloud	Dr. Jharna Majumdar Dean R& D , NMIT  1. Prahlada Rao B.B C-DAC, Joint Director 2. Dr. Sanjay HA NMIT

**33. List the teaching methods adopted by the faculty for different programmes.**

- To make effective delivery and to support students attention, teachers are experimenting by making use of relevant techniques as and when requires in addition to regular blackboard/Modern(LCD) technology
- Hands on training
- Tutorials
- Course Project
- Assignments/ Programming Assignments.

**34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?**

- Field visit – Faculty from the department have attended the Campus connect program conducted by Infosys
- Problem solving- Our faculties have improved their teaching methodologies by attending programs like Mission 10X,Soft skill Development
- Project Work- All our staff have successfully guided the student projects all final year projects problem statement will be given by faculty members
- Case study- In subject like SE, OOMD, OOPs, SS, CG,D BMS students take up the problem and implement using the concepts studied in these subjects at the end of the course

**35. Highlight the participation of students and faculty in extension activities.**

- The College has started and supported various clubs / associations to sensitize the faculty and students on Institutional Social Responsibilities. Some of the social outreach clubs which have created an impact on the students' campus experience are as follows:
  - i) National Cadet Corps
  - ii) National Service Scheme

- iii) Rotaract Club of “NMIT – Bengaluru”
- iv) Youth Wing of Red Cross Society
- v) Literary Forum

**Some of the activities arranged through these clubs are**

- Awareness programs of social responsibilities
- Blood donation camps
- NSS & NCC Camps
- Organ Donation camps
- Distributions of School furniture, Text books & stationeries to Govt Schools in the neighbouring villages
- Literacy Programs

The Faculty and Students of the department actively involved in the said activities.

Extension Activity	Participation of Students
Paper presentation contests	Rashmi Nalwad Dixit, Ashwin, Akshay, Shruthi R Patil, Vaishnavi S
IEDC activities	Madhukiran, Shilpa, Nithin.
Sports	Praveen Shankar, Avijit.
Rotaract Club of “NMIT – Bengaluru	Anitharaj, Rashmi V Vishwanath, Vijayalakshmi, Vinay HJ
NSS	Soumya S, Srinidhi, Suhas Gowda
NCC	Rashmi B, Akshata Rao,, Vijayalakshmi, Shikha Phogat, Shraddha Goni, Anitharaj Shirahatti, Pavithra KS, Prithika, Neethu S, Priya , Manoranjan, Sachin S Bommale, Shephali
Cultural programs	Nithin R Gupta, Nikhil, Akshata Basavaraj, Madhukiran ,Russia,Ramdheeraj,Nakul,Ananya, Asha

**36. Give details of “beyond syllabus scholarly activities” of the department.**

Concevoir- Inter departmental technical fest for will be conducted every accademic year  
E-learnig facility  
EDUSAT from VTU  
Technical Talk by Industry expert  
Workshops on current technologies.  
Entrepreneurship activities.  
Value Added Courses  
Internship Program

**37. State whether the programme/ department is accredited/ graded by other agencies. Give details.**

NBA Accreditation Dated June 2010 for three years

**38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department**

<p><b>Strength:</b></p> <ul style="list-style-type: none"><li>• Resource and capabilities usage</li><li>• Unique product and service utilization</li><li>• Efficient and cost-effective operations</li><li>• Deputation o faculty for higher studies</li><li>• MoU with industries</li></ul> <p><b>Weakness:</b></p> <ul style="list-style-type: none"><li>• Faculty participation in paper publication specially in Journals</li></ul>
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<p><b>Opportunities:</b></p> <ul style="list-style-type: none"><li>• Modernizing classrooms</li><li>• Upgradation of departmental library</li><li>• Establishment of incubation centre</li><li>• Utilization of on-campus services by looking forward for new funding agencies</li></ul> <p><b>Challenges:</b></p> <ul style="list-style-type: none"><li>• Online courses</li><li>• Declining enrollment for engineering for job opportunity</li><li>• Competition due to distance education institution</li><li>• Declining supply of qualified faculty</li><li>• Possibility of attrition of key staff</li></ul>
--

**39. Future plans of the department.**

<b>Long Term Goal</b>	Starting new PG programs
	Modernization of class rooms to have systems with LCD projectors
	Networking with technical institutions like NIT, IIT and IISc
	Web supported departmental library/Journal/Reference Section
	Deputing more faculty for PhD
<b>Short Term Goals</b>	Develop high demand hybrid programs
	Enhance industry institute partnership for certification courses
	Coaching classes for academically weaker students

## Department of Civil Engineering

### **1.Name of the Department & its year of establishment:**

Civil Engineering  
Established in the year 2009-10

### **2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**

UG- BE in Civil Engineering  
PG- M.Tech in Structural Engineering

### **3. Interdisciplinary courses and departments involved:**

NIL

### **4. Annual/ semester/choice based credit system:**

Semester Based Credit System

### **5. Participation of the department in the courses offered by other departments:**

Department offers open elective and first year basic subjects for all under graduates engineering disciplines.

### **6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/Asst. Professors)**

<b>Teaching Posts</b>	<b>Sanctioned</b>	<b>Filled</b>
Professor	02	02
Associate Professors	01	01
Asst. Professors	13	13

**7. Faculty profile with name, qualification, designation, specialization (D.Sc./D.Litt./ Ph.D. /M.Phil., etc.)**

Name	Qualification	Specialization	Designation	No. of Years of Experience	No. of Ph.D. students guided in the last 4 years
Dr. H.R. DHANANJAYA	Ph.D. (IISc)	Structural Engineering	Prof & Head	25 Years	Nil
	M.Tech.	Structural Engineering			
	B.E.	Civil Engineering			
Dr. Ramachandra Reddy	B.Sc	Geology	Professor	21 Years	Nil
	M.Sc	Geology			
	Ph.D.	Geology			
Mr. Suresh Sapare S	B.E.	Civil Engineering	Asst Prof	35 Years	Nil
	M.E.	Civil Engineering			
Mr. Ananthayya M. B.	B.E.	Civil Engineering	Associate Prof.	13 Years	Nil
	M.Tech	Structural Engineering			
	Ph.D.	Hydraulic Engineering			
Mr. Vasudev M. V.	B.E.	Civil Engineering	Asst. Prof.	22 Years	Nil
	M.Tech	Structural Engineering			
Ms. Archana Nayak	B.E.	Civil Engineering	Asst. Prof.	7 Years	Nil
	M.T.ech.	Environmental Engineering			
Mrs.Prathima.G	B.E.	Civil Engineering	Asst. Prof.	10 Years	Nil
	M.T.ech.	Highway Technology			
Mr.	B.E.	Civil	Asst. Prof.	3 Years	Nil

Muralidhar.H		Engineering			
	M.Tech.	Highway Technology			
Ms. Rashmi H.R	B.E.	Civil Engineering	Asst. Prof.	3 Years	Nil
	M.Tech.	Environmental Engineering			
Mr. Jairaj.C.	B.E.	Civil Engineering	Asst. Prof.	8 Years	Nil
	M.T.ech.	Geotechnical Engineering			
	(Ph.D.)	Geotechnical Engineering			
Mr.Vinay. M	B.E.	Civil Engineering	Asst. Prof.	2 Years	Nil
	M.T.ech.	Structural Engineering			
Mr.Kiran. M.U.	B.E.	Civil Engineering	Asst. Prof	3 Years	Nil
	M.T.ech.	Structural Engineering			
Mr.Nanjundi Prabhu	B.E.	Civil Engineering	Asst. Prof	1 Year	Nil
	M.T.ech.	Water Resources Engg			
Ms.Radhika V. Gaikwad	B.E.	Civil Engineering	Asst. Prof	2Years	Nil
	M.T.ech.	Structural Engineering			
Mrs. Amitha S.B	B.E.	Civil Engineering	Asst. Prof	06 Months	Nil
	M.Tech.	Pre Stressed Concrete			
Mrs. Arpitha M.	B.E.	Civil Engineering	Asst. Prof	06 Months	Nil
	M.Tech	Earthquake Engineering			

**8. Percentage of classes taken by temporary faculty – programme-wise information:**  
NIL

**9. Programme-wise Student Teacher Ratio**

<b>Programme</b>	<b>Student Teacher Ratio</b>
B.E.	15:1
M.Tech	12:1

**10. Number of academic support staff (technical) and administrative staff: sanctioned and filled**

Number of academic support staff (technical) and administrative staff	<b>Sanctioned</b>	<b>Filled</b>
	04	04

**11. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Mention names of funding agencies and grants received project-wise: NIL**

**12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received: NIL**

**13. Research facility / centre**

<b>State Recognition</b>	VTU Research Center.
<b>National Recognition</b>	Nil
<b>International Recognitions</b>	Nil

**14. Publications:**

**\* number of papers published in peer reviewed journals (national / international)**

**International:** 11

**National:** 06

**\* Monographs:** NIL

**\* Chapter(s) in Books:** NIL

**\* Edited Books:** 02 (Proceedings of Conferences)

**\* Books with ISBN numbers with details of publishers:** NIL

**\* number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.):** NIL



- \* **Citation Index – range / average:** 02
- \* **SNIP** : NIL
- \* **SJR:** NIL
- \* **Impact factor – range / average:** - 0.5 to 0.8
- \* **h-index:** - 01

**15. Details of patents and income generated:** NIL

**16. Areas of consultancy and income generated:** NIL

**17. Faculty recharging strategies:**

- Short term courses (FDP)--- 4
  - 1) Staad Pro: Analysis & Design software
  - 2) Auto CAD: Drafting software
  - 3) Surveying using Total station
  - 4) Laminated composites
- Refreshing courses --- Auto CAD Training
- Deputation of faculties for Ph.D's and M.Tech -- Nil

**18. Student projects**

- **percentage of students who have done in-house projects including inter-departmental:** 79%
- **percentage of students doing projects in collaboration with industries / institutes:** 21%

**19. Awards / recognitions received at the national and international level by**

- **Faculty:** NIL
- **Doctoral / post doctoral fellows:** NIL
- **Students:** NIL

**20. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.**

- a. Two week Faculty Development Working on “Drafting Software”, July 2013, NMIT, Bangalore  
Sourced by TEQIP –II, Subcomponent 1.1
- b. One week Faculty Development International Workshop on “Analytical and Computational Solid Mechanics (ACSM-2013)”, 5-9 August 2013, NMIT, Bangalore  
Sourced by TEQIP –II, Subcomponent 1.1

- c. One week Faculty Development National Workshop on “Water Resources and Environmental Engineering (WREE-2014)”, 3-7 February 2014, NMIT, Bangalore  
Sourced by TEQIP –II, Subcomponent 1.1

**21. Student profile course-wise:**

Name of the Course (refer question no. 2)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
UG (2009– 2013)	NA	48	11	100	100

**22. Diversity of students**

Name of the Course (refer question no. 2)	% of students from the College	% of students from the State	% of students from other States	% of students from other countries
UG (2012 – 2013)	-	66.66	33.33	-
UG (2011 – 2012)	-	63.93	34.42	-
UG ( 2010 – 2011)	-	63.15	36.84	-

**23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations? :**

03 (GATE)

**24. Student progression**

Student progression	Percentage against enrolled
UG to PG	NIL
PG to M.Phil.	NA
PG to Ph.D.	NA
Ph.D. to Post-Doctoral	NA
Employed	
• Campus selection	7%
• Other than campus recruitment	16%
Entrepreneurs	2%

**25. Diversity of staff**

<b>Percentage of faculty who are graduates</b>	
<b>of the same parent university</b>	10
<b>from other universities within the State</b>	3
<b>from other universities from other States</b>	-

**26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period:** NIL

**27. Present details about infrastructural facilities**

**a) Library:** Department Library contains 69- volumes and 68- Titles

**b) Internet facilities for staff and students:**

- Civil Dept is facilitated with 5 Computer with internet connection.
  - NMIT is having common internet lab
- Hostels are facilitated with wi-fi

**c) Total number of class rooms:** 4

**d) Class rooms with ICT facility:** 1 portable LCD projector

**e) Students' laboratories:** 10

**f) Research laboratories:** NIL (Proposed -01)

**28. Number of students of the department getting financial assistance from College.**

UG - 32 Students

PG – 2 Students

**29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology**

- Discussion at the Departmental Level
- Surveying of benefits from new program & Industry job requirements.
- Decide upon the Program educational objectives
- Discussion on Eligibility criteria & Curriculum
- Preparing application & applying to concerned organization for approval

**30. Does the department obtain feedback from?**

**a. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?**

- Yes

- Preparation of curriculum by the faculty in consultation with senior faculty.
- DUGC consists of senior faculties who discusses about prepared curriculum.
- BOS will have faculties at different cadre who gives suggestion about curriculum.
- BOS will comprise senior faculty members of the Dept and Subjects experts from other Premier institutions and industry.

**b. Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?**

- Yes on staff. If the feedback is low, HOD and principal inform the faculty about the same.
- Alumni are part of BOS, who gives suggestion on as teaching-learning – evaluation. Valid inputs will be considered by the departments

**c. Alumni and employers on the programmes and what is the response of the department to the same?**

- Yes, every year at the time of alumni meet we will take a feedback on the program and try to implement their suggestions. The alumni are also a part of BOS, which helps the department to design a better syllabus.

**31. List the distinguished alumni of the department (maximum 10):**

Name of the Alumni	Designation	Present Status
Vijay Kumar R.N	Site Engineer	Poorvankara
Vishwanath M.B	Site Engineer	Poorvankara
Arun Kumar	Site Engineer	Poorvankara
Harish H.G	Site Engineer	Poorvankara
Santhosh K	Site Engineer	Poorvankara
Ankith R	Site Engineer	Prestige
Mohammad Aarshad	Trainee Engineer	Salarpuria
Arun Kumar N	Trainee Engineer	Salarpuria
Shruthi B.S	Trainee Engineer	Salarpuria

**32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts:**

- International Workshop on “Analytical and Computational Solid Mechanics (ACSM-2013)”, 5-9 August 2013, NMIT, Bangalore  
Sourced by TEQIP –II, Subcomponent 1.1

- b. National Workshop on “Water Resources and Environmental Engineering (WREE-2014)”, 3-7 February 2014, NMIT, Bangalore  
Sourced by TEQIP –II, Subcomponent 1.1

**33. List the teaching methods adopted by the faculty for different programmes.**

- To make effective delivery and to support students attention , teachers are experimenting by making use of relevant techniques as and when requires in addition to regular blackboard/Modern(LCD) technology
- Hands on training
- Tutorial classes are conducted
- Remedial classes are conducted
- Mini projects are to be submitted by the students.

**34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?**

• Field visit	<ul style="list-style-type: none"> <li>• Department Mandates Internship programs</li> <li>• Industry Visit and Workshops for the students</li> </ul>
• Problem solving	<ul style="list-style-type: none"> <li>• Tutorial classes will more focus on Problem Solving</li> <li>• Course Assignments includes analytical problems</li> </ul>
• Project work	<ul style="list-style-type: none"> <li>• More weightage for In-house research oriented projects</li> <li>• Continuous evaluation during the project</li> <li>• Motivation for taking projects in well known R&amp;D organization</li> </ul>
• Case study	<ul style="list-style-type: none"> <li>• Industry oriented case studies are part of many subjects</li> <li>• Home assignments are more oriented towards case studies</li> </ul>

**35. Highlight the participation of students and faculty in extension activities.**

- The College has started and supported various clubs / associations to sensitize the faculty and students on Institutional Social Responsibilities. Some of the social outreach clubs which have created an impact on the students’ campus experience are as follows:
  - i) National Cadet Corps: Neha M.B. (VI SEM CIVIL ENGINEERING, 2011-2015)
  - ii) National Service Scheme
  - iii) Rotaract Club of “NMIT – Bengaluru”
  - iv) Youth Wing of Red Cross Society

v) Literary Forum

**Some of the activities arranged through these clubs are**

- Awareness programs of social responsibilities
- Blood donation camps
- NSS & NCC Camps
- Organ Donation camps
- Distributions of School furniture, Text books & stationeries to Govt Schools in the neighbouring villages
- Literacy Programs

The Faculty and Students of the department actively involved in the said activities.

**36. Give details of “beyond syllabus scholarly activities” of the department.**

- Value Added Courses
- Internship Programs
- Field Visits
- Additional Self Learning facilities are provided using e-learning courseware

**37. State whether the programme/ department is accredited/ graded by other agencies. Give details. : NO**

**38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department**

Strengths	Weaknesses	Opportunities	Challenges
<ul style="list-style-type: none"> <li>• Flexible course curriculums supporting latest technology &amp; practices and application based. Regular reorganization of curriculums according to the needs of industry</li> <li>• Academic staff with ability to use and teach the up-to date technology</li> <li>• Good relations between teachers</li> </ul>	<ul style="list-style-type: none"> <li>• Inadequate research culture emanating from the initial “developmental” focus.</li> <li>• Low proportion of PhD holders among academic staff.</li> <li>• Scope for improving industry-institute interaction</li> <li>• Lack of interest among graduating engineers for pursuing research degree programs or teaching careers</li> </ul>	<ul style="list-style-type: none"> <li>• Individuals for faculty positions which can be translated into opportunities to develop a doctoral program either in the department or collaboratively with other departments</li> <li>• Internship opportunities for students</li> <li>• Software tools are becoming available for Technology-Enhanced Learning,</li> </ul>	<ul style="list-style-type: none"> <li>• Adoptability to ever-changing technologies</li> </ul>

<p>and students</p> <ul style="list-style-type: none"> <li>• Fairly good employment rate of graduates</li> <li>• Summer training and graduation project requirements. More focus towards research oriented projects</li> <li>• Faculty are supportive of each other and collegial</li> <li>• The department has a fairly good lab infrastructure</li> <li>• A strong focus on quality teaching with a faculty that excels in teaching students at all levels</li> <li>• The department is strongly student centered and focused</li> </ul>		<p>for widening the reasearch, and improving the effectiveness of Engineering Education.</p> <ul style="list-style-type: none"> <li>• New opportunities for tie ups between department and industries</li> <li>• Research environment for students</li> </ul>	
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**39. Future plans of the department.**

- Planning to start new PG courses in other Civil Engineering areas other than Structural Engineering.
- More Focus towards research activities through proposed R & D Centre

## Department of Aeronautical Engineering

### **1. Name of the Department & its Year of Establishment:**

Department of Aeronautical Engineering and 2011

### **2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**

UG- BE in Aeronautical Engineering

### **3. Interdisciplinary courses and departments involved:**

NIL

### **4. Annual/ semester/choice based credit system:**

Semester and Choice Based Credit System

### **5. Participation of the department in the courses offered by other departments:**

Involved In Teaching of Elements of Aeronautics Subject for Mechanical Engineering

### **6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/Asst. Professors)**

Teaching Posts	Sanctioned	Filled
Professor	2	2
Associate Professors	-	-
Asst. Professors	6	6

### **7. Faculty profile with name, qualification, designation, specialisation (D.Sc./D.Litt./ Ph.D./M.Phil., etc.)**

Name	Qualification	Designation	Specialization	No. of Years of Experience	No. of Ph.D. students guided in the last 4 years
R.Jayakumar	Mtech	Professor &	Thermal	26	NIL



	PGDM, MSc in Defence Studies	HOD			
Santhosh N	M E (PhD)	Assistant Professor	Manufacturing Science And Engineering	2.5	NIL
Prashanth Mohanta	AMAE SI, Mtech (PhD)	Professor	Aeronautical	22	NIL
Mahendra M A	Mtech	Assistant Professor	Aeronautical Engineering	1	NIL
Harish HV	Mtech	Assistant Professor	Thermal	6	NIL
Nishant Desai	BE, Msc	Assistant Professor	Mech, Aeronautical	1	NIL
Karthick S	BTech, MTech	Assistant Professor	Aeronautical	6	NIL
Srikanth H V	BE, MTech (PhD)	Assistant Professor	Thermal	1	NIL

**8. Percentage of classes taken by temporary faculty – programme-wise information**

NOT APPLICABLE

**9. Programme-wise Student Teacher Ratio**

Programme	Student Teacher Ratio
UG	1:15

**10. Number of academic support staff (technical) and administrative staff: sanctioned and filled**

Number of academic support staff (technical) and administrative staff	Sanctioned	Filled
	1	1

**11. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Mention names of funding agencies and grants received project-wise.**

IEDC (Innovation and Entrepreneurship Development Cell), Department of Science and Technology(DST), Foot Energy Harvester

**12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received**

Foot Step Energy Harvester, IEDC Project funded by DST

**13. Research facility / centre with**

- state recognition
- national recognition
- international recognition

NOT APPLICABLE

**14. Publications:**

\* number of papers published in peer reviewed journals (national / international): **14**

\* Monographs: NIL

\* Chapter(s) in Books: **NIL**

\* Editing Books: **NIL**

\* Books with ISBN numbers with details of publishers:

NIL

\* number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.):

NIL

\* Citation Index – range / average:

NIL

\* SNIP: NIL

\* SJR:

NIL

\* Impact factor – range / average:

NIL

\* h-index:

NIL

**15. Details of patents and income generated** NOT APPLICABLE

**16. Areas of consultancy and income generated** NOT APPLICABLE

**17. Faculty recharging strategies**

Two of the Faculty Have Undergone Teacher Training Program,  
 Faculties Have Been Sent To Workshops (Organized By Infosys)  
 Faculties have been sent to aeromodelling workshops  
 Faculties are regularly sent to Computational fluid dynamics and Gas Dynamics  
 Lectures at CFD Research Centre , NMIT

**18. Student projects**

- **percentage of students who have done in-house projects including inter-departmental** - NOT APPLICABLE
- **percentage of students doing projects in collaboration with industries / institutes** -NOT APPLICABLE

**19. Awards / recognitions received at the national and international level by**

- **Faculty**
- **Doctoral / post doctoral fellows**
- **Students**

NOT APPLICABLE

**20. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.**

<b>Name of the Seminars/ Conferences/Workshops</b>	<b>Source of funding (national / international)</b>	<b>Outstanding participants/ Resource Persons</b>
1.Recent Advances In Manufacturing Process Technology	International	Santhosh N
2.Advanced Manufacturing Technology	National	Santhosh N

**21. Student profile course-wise:**

<b>Name of the Course (refer question no. 2)</b>	<b>Applications received</b>	<b>Selected</b>		<b>Pass percentage</b>	
		<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>
2011-12	65	53	12	82	18
2012-13	63	53	10	84	16

**22. Diversity of students**

Name of the Course (refer question no. 2)	% of students from the College	% of students from the State	% of students from other States	% of students from other countries
Aeronautical Engineering 4 <sup>TH</sup> Semester 2011-12	N A	30/49 (61%)	14/49 29%	5/49 (10%)
Aeronautical Engineering 2012-13	N A	31/54 58	20/54 37	3/54 5

**23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?**

N A

**24. Student progression**

Student progression	Percentage against enrolled
UG to PG	Not Applicable
PG to M.Phil.	Not Applicable
PG to Ph.D.	Not Applicable
Ph.D. to Post-Doctoral	Not Applicable
Employed • Campus selection • Other than campus recruitment	Not Applicable
Entrepreneurs	Not Applicable

**25. Diversity of staff**

Percentage of faculty who are graduates	
of the same parent university	12.5%
from other universities within the State	37.5%
from other universities from other States	50%

**26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.**

NIL

**27. Present details about infrastructural facilities**

**a) Library**

<b>Library</b>	National Journals, International Journals, Subject related text books and reference books available.
<b>Internet facilities for staff and students</b>	Staff rooms have the internet facility. Students can avail the internet facility from internet lab. Provider <u>BSNL</u> Bandwidth <u>10 MBPS</u> (1:1 Leased line) Access Speed <u>512 kbps</u>
<b>Total number of class rooms</b>	3
<b>Class rooms with ICT facility</b>	1
<b>Students' laboratories</b>	5
<b>Research laboratories</b>	To be provided

**28. Number of students of the department getting financial assistance from College.**

UG – 9 Students

**29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.**

NIL

**30. Does the department obtain feedback from?**

**a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?**

Yes Feed Back Obtained Rectifying Measures Taken Based On Feed Back Constant Upgradation of Faculty Members on Curriculum Done In Order To Improve Their Teaching Capability.

Syllabus is formed by the experienced faculty in the respective subject. Subjects for the curriculum are selected by the Faculty members within the department. Elective groups are made and syllabus for the same is prepared by the subject expertise within the department.

Evaluation is done by DUGC team which will planning and monitoring the academic activities of the department throughout the semester. BOS meeting is held before starting of every academic year for any changes or correction in the syllabus

**b. students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?**

Feedbacks from students are collected every semester. There are certain levels of evaluating the teaching process. After every feedback, consistency, performance and attendance profiles are checked. Feedback is collected as a hard-copy and documented.

The feedback analysis process is done manually. The comments are analyzed by the concerned HOD and Dean (Academic) and are discussed with the concerned faculty individually. Suggestions for improvement in teaching performance are given if required.

**c. alumni and employers on the programmes and what is the response of the department to the same?**

NOT APPLICABLE

**31. List the distinguished alumni of the department (maximum 10)**

NOT APPLICABLE

**32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.**

Aero Modelling Workshops conducted to enrich the aeromodelling skills of students  
Special lectures given by Air Cmde (Retd) R Jayakumar on Combined Defence Services Exam and Air force Recruitment Drive to enrich students aptitude skills.

**33. List the teaching methods adopted by the faculty for different programmes.**

Charts and Models Displayed For Applied Thermodynamics  
Animations And Videos Displayed For Elements Of Aeronautics Subject.  
Multimedia classes taken for students with interactive sessions held regularly.

**34. Give details of “beyond syllabus scholarly activities” of the department.**

Quiz and Technical Competitions Conducted  
Students Taken For Air Force Visit  
Students Taken For HAL Museum

Students Taken to Air Force Training College

Students taken to ASTE

Students Visited IMTEX Exhibition

• <b>Field visit</b>	Faculty from the department along with students have visited to various industries
• <b>Problem solving</b>	Our faculties have improved their teaching methodologies by attending programs like Soft skill Development, STTP
• <b>Mini projects</b>	All our staff have successfully guided the student mini projects

**35. Highlight the participation of students and faculty in extension activities.**

- The College has started and supported various clubs / associations to sensitize the faculty and students on Institutional Social Responsibilities. Some of the social outreach clubs which have created an impact on the students' campus experience are as follows:
  - i) National Cadet Corps
  - ii) National Service Scheme
  - iii) Rotaract Club of "NMIT – Bengaluru"
  - iv) Youth Wing of Red Cross Society
  - v) Literary Forum

**Some of the activities arranged through these clubs are**

- Awareness programs of social responsibilities
- Blood donation camps
- NSS & NCC Camps
- Organ Donation camps
- Distributions of School furniture, Text books & stationeries to Govt Schools in the neighbouring villages
- Literacy Programs

The Faculty and Students of the department actively involved in the said activities.

**36. State whether the programme/ department is accredited/ graded by other agencies. Give details.**

NOT APPLICABLE

**37. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department**

**Strengths:**

An emerging department with enthusiastic faculty

A state of Art Wind tunnel and laboratory set up  
Interactive sessions are constantly held  
Counseling and special attention given for weak students  
Practical oriented syllabus.

**Weakness:**

Deputation of faculty for higher studies  
Limited number of industry interactions  
Lagging behind in research  
Up gradation of resource required  
Less number of live projects

**Opportunities:**

Upgradation of departmental library  
Utilization of on campus services by looking forward for new funding agencies  
A relatively new department with very few colleges offering the course  
Aeronautical engineering is the new booming industry in indian context

**Challenges:**

Declining supply of qualified faculty  
Competition due to distance education institution  
Online courses  
Declining opportunity in job market for engineers  
Possibility of attrition of key staff

**38. Future plans of the department.**

To setup a research centre.  
To encourage students to take up new projects.  
To build state of the art aircraft testing and overhauling facility.  
To procure an aircraft engine and trainer aircraft from Indian Air Force  
To start PG Course in aircraft Testing and Simulation



## Department of Mechanical Engineering

### **1. Name of the Department & its Year of Establishment:**

Department of Mechanical Engineering and 2002

### **2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.)**

UG – Mechanical Engineering

PG – Thermal Power Engineering and Machine Design

Ph. D- Mechanical Engineering

### **3. Interdisciplinary courses and departments involved:**

Nil

### **4. Annual/ semester/choice based credit system:**

Semester based credit system

### **5. Participation of the department in the courses offered by other departments:**

Dept. offers open elective & first year basic subjects for all under graduate engineering disciplines

### **6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/Asst. Professors)**

	<b>Sanctioned</b>	<b>Filled</b>
Professor	5	5
Associate Professors	3	3
Asst. Professors	29	29

**7. Faculty profile with name, qualification, designation, specialization (D.Sc./D.Litt./ Ph.D. /M.Phil. etc.)**

Sl No	Name of the Faculty	Qualification and Year of Graduation	Designation	Specialization	No. of Years of Experience	No. of Ph.D. students guided in the last 4 years
1	Dr. P G Mukunda	Ph.D IIT KGP, 1971	Professor	Metallurgy	45	40
2	Dr. Sekhar Majumdar	Ph.D NIT Durgapur, 1981	Professor HOD(MTech)	Computational Fluid Dynamics	42	02
3	Dr. P B Shetty	Ph.D VTU 2008	HOD, Professor	Aeronautics	28	-
4	Prof. Desai Gowda H S	ME PSGT Coimbatore 1984	Assoc. Prof	Engg Design	28	-
5	Dr. Sudheer Reddy	Ph.D NITK 2011	Professor	Machine Design	15	-
6	Mr. K Srikanth Prabhu	M.Tech Mysore 1980	Assoc. Prof	Engg. Management	28	-
7	Dr. Kiran Aithal S	Ph.D NITK, 2012	Asst. Prof	Machine design	16	-
8	Mr. Madhusudhan	M.Tech NITK 2006	Assoc. Prof	Heat Power Engg	15	-
9	Mr. Hemanth Kumar	M.Tech Ghousia College of Engg	Asst. Prof	Manufacturing	14	-
10	Mrs. Smriti Rekha Sen	M.Tech KIIT 2006	Asst. Prof	Manufacturing	9	-
11	Mr. Ravi Prakash	M.Tech	Asst. Prof	Thermal Power Engg	7	-
12	Mr. Sriram Mukunda	M.Tech NITK 2011	Asst. Prof	Manufacturing	4	-
13	Mr.	M.Tech VTU	Asst. Prof	Thermal Power	3	-

	Manjunath H N	2011		Engg		
14	Mr Ramesh Babu N	M.Tech VTU 2010	Asst. Prof	Machine design	3	-
15	Mr. Sunil Kumar H S	ME UVCE 2011	Asst. Prof	Machine design	3	-
16	Mr Praveen Kumar S	ME UVCE 2011	Asst. Prof	Manufacturing Engg	3	-
17	Mr. Rudra Naik. M	M.Tech NITK 2011	Asst. Prof	Mechatronics Engg	2	-
18	Mr. Chethan K S	M.Tech VTU 2012	Asst. Prof	Thermal Power Engg	3	-
19	Mr. Arun kumar	M.Tech VTU 2012	Asst. Prof	Thermal Power Engg	2	-
20	Mr. Charan Kumar D	M.Tech VTU 2013	Asst. Prof	Thermal Power Engg	2	-
21	Ms. Nivedita	BE VTU 2009	Asst. Prof	Mechanical Engg	3	-
22	Mr. Praveen B A	M.Tech VTU 2012	Asst. Prof	CIM	1	-
23	Mr. Pavan K N	M.Tech VTU 2012	Asst. Prof	Thermal Power Engg	1	-
24	Mr. Shanthosh	ME BU 2012	Asst. Prof	Manufacturing Engg	1	-
25	Ms. Krupa R	M.Tech VTU 2012	Asst. Prof	Thermal Power Engg	2	
26	Mr. Harish	M.Tech, VTU 2013	Asst. Prof	Mechanical Engg	1	-
27	Mrs. Rashmi Vokkarne	MBA VTU	Asst. Prof	HR	6	
28	Mr. Vinayaka	M.Tech VTU 2012	Asst. Prof	Machine design	1	
29	Mr. Manikanta	BE VTU	Asst. Prof	Mechanical engg	2	
30	Mr. Sathis. G	M.Tech VTU 2013	Asst. Prof	Thermal Power Engg	2	
31	Mr.Raj Kumar	M.TechNITT 2006	Asst. Prof	Energy engg.	7	
32	Ms. Hamritha S	M.Tech, VTU, 2013	Asst. Prof	Mechanical Engg	1	-

33	Mr Surendra	M.Tech	Asst. Prof	Machine Tool design	11	-
34	Mr. Prashanth. N	M.Tech VTU 2011	Asst. Prof	Production Engg And management	2	-
35	Mr. Shivaprathap Singh Yadav	M.E, Bangalore University 2012	Asst. Prof	Machine Design	-	-
36	Mr. Muralidharan	M.Tech, NITK 2011	Asst.Prof	Mechatronics	-	-
37	Mr. Sachin	M.Tech VTU 2013	Asst.Prof	CIM	-	-

**8. Percentage of classes taken by temporary faculty – programme-wise information**

Nil

**9. Programme-wise Student Teacher Ratio**

Programme	Student Teacher Ratio
UG	1:15
PG	1:12

**10. Number of academic support staff (technical) and administrative staff: sanctioned and filled**

Number of academic support staff (technical) and administrative staff	Sanctioned	Filled
	23	23

**11. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Mention names of funding agencies and grants received project-wise.**

Type of Funding	Name of faculty	Ongoing projects	Total grants received (Rs)
National funding VTU	Dr. Sekhar	“Numerical	7.5 Lakhs

VTU	Majumdar  Dr. P.G.Mukunda	Simulation of Complex Flows with Laminar to Turbulent transition”  “Modeling and analysis of fluid behavior in centrifugal casting”	8.6 Lakhs
NRB (DRDO)	Dr. Sekhar Majumdar	“Modeling and Simulation of Transitional Flows”	21.15 Lakhs
IEDC	Mr. H.S. Desai Gowda	“All Wheel Drive Bike (AWD)”	1 Lakh
IEDC	Dr. P.G.Mukunda	“Harvesting Energy from the vibrations of an automobile engine using piezo-ceramic crystals”	1 Lakh
IEDC	Mr. Kiran Aithal	“Design and modeling of VTOL (Vertical Takeoff and Landing Vehicle)”	1 lakh
KSCST	Mr. Madhusudan	“Performance test on four stroke Diesel engine using Bio diesel Methyl ester of used vegetable oil as fuel”.	Rs 4500/-

KSCST	Mr. Raviprakash	“To produce biodiesel from milk dairy wash water scum and to study its performance and properties as a blended fuel in IC engines”	Rs 8000/-
KSCST	Mr.Manjunath HN	“Diesel-Jatropa-Ethanol: Performance on C.I Engine.	Rs 8000/-
KSCST	Mr.Rudra Naik	“Organic processing facility to generate high quality renewable fuel as biogas from the utilization of kitchen wastes	Rs 6000/-
<b>International Funding</b>	Nil	Nil	Nil

**12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received**

<b>Funding Agency</b>	<b>Total Grants Received</b>
Naval Research Board (DRDO)	Rs. 21.15 Lakhs
DST (IEDC)	Rs. 1 Lakh
VTU	Rs.16.1 Lakhs
IEDC	Rs. 7 Lakh
KSCST	Rs. 1 Lakh
CAIR(DRDO) (Completed)	Rs. 9.5 Lakhs

Refer Appendix 1:

**13. Research Facility / Centre with**

<b>State Recognition</b>	Advanced Manufacturing, Metrology and Measurement Lab.
<b>National Recognition</b>	Computational Fluid Dynamics Lab

<b>International Recognitions</b>	-
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#### 14. Publications:

- \* number of papers published in peer reviewed journals (national / international) - 12
- \* Monographs -NIL
- \* Chapter(s) in Books- 1
- \* Editing Books - NIL
- \* Books with ISBN numbers with details of publishers- NIL
- \* number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)- NA
- \* Citation Index – range / average - NIL
- \* SNIP - NIL
- \* SJR - NIL
- \* Impact factor – range / average - 0.8 to 1.3
- \* h-index- NIL

#### 15. Details of patents and income generated

NIL

#### 16. Areas of consultancy and income generated

Areas of Consultancy	Income generated
Fluidyne Software- CFD	Collaborative work on CFD
Assam Carbon Products-Carbon Brushes	Collaborative work
Flow Serve, CANADA-3D Modeling	Collaborative work
Shantala Foundry-Shimoga	Collaborative work
Image processing	Rs 20000/-

#### 17. Faculty recharging strategies

1. Sending for higher studies in the reputed institutes to complete M.Tech and PhD research program and allowing faculty to attend the conference and workshop held in India and abroad.
2. MHRD sponsored “CFD workshop” and “Introduction to Research Methodology” are held in college and the faculties attended the workshop.
3. Internet facilities and new edition textbooks are provided for the purpose of continuous growth of the subject knowledge.

4. Faculty Development Programs are conducted regularly for upgradation of knowledge.
5. The college organizes seminars and workshops on different academic themes
6. The faculties are referred to attend refresher and orientation courses, training programs, seminars, conferences and workshops.
7. Short term courses

**18. Student projects**

- **percentage of students who have done in-house projects including inter-departmental : 85%**
- **Percentage of students doing projects in collaboration with industries / institutes :15%**

**19. Awards / recognitions received at the national and international level by**

- **Faculty**
- **Doctoral / post doctoral fellows**
- **Students**

<b>Awards / recognitions received by</b>	<b>Name of the Faculty with Award</b>
Dr. Sekhar Majumdar	<ul style="list-style-type: none"> <li>➤ Awarded the Fellowship of the Indian National Academy of Engineers and Institute of Engineers India in 2010 and 2011 respectively.</li> <li>➤ Awarded the Senior Visiting Fellowship at the Centre for Turbulence Research, Stanford University, USA from May 2001 to May 2002.</li> <li>➤ Dr. M.G.Deshpande memorial award for the best paper from academic institutes and national research laboratories, presented in the 23<sup>rd</sup> National conference on Fluid mechanics and Fluid power, Bopal, December 27<sup>th</sup> – 29<sup>th</sup>, 1996.</li> </ul>
Dr. P.G.Mukunda	<ul style="list-style-type: none"> <li>➤ Kamani Gold Medal for Best paper in I.I.M 1962</li> <li>➤ Silver Medals for the best non ferrous paper 2004 – 06, 2006 – 08 and 2008 – 2010 of. Indian Institute of Foundary</li> </ul>
Dr.P.B.Shetty	Awarded with the “Cambridge International Certificate for Teachers” in Nov 2011 by Cambridge University, London.
Doctoral / post doctoral fellows	Nil



Students	<ul style="list-style-type: none"> <li>• NCC: 2/2 Coy, 1 Karnataka Signal Regiment, NCC Students</li> </ul> <p>National Integration Camp held at Visakhapatnam from 23<sup>rd</sup> November 2009 to 03<sup>rd</sup> December 2009. The following 06 Students represented the Karnataka and Goa directory and won Gold medals in Tug of War, Debate and Quiz.</p> <p>1. Rishub R Shetty, VI Sem                      4.Satish K H, VI Sem  2. Roshan R Rao, VI Sem                      5.Manjunath KT, VI Sem  3. Phanindra Choudary, VI Sem    6.Naveen C, VI Sem</p> <p>Karthik Ravi (IV SEM)</p> <ul style="list-style-type: none"> <li>➤ 1<sup>st</sup> prize at PES Engg. For line follower event.</li> <li>➤ 3<sup>rd</sup> prize at NIT, Warangal for line follower event</li> <li>➤ 1<sup>st</sup> price at Amrita college of Engg. For Li-fo  6<sup>th</sup> place at IITK for Mechanical Design.</li> </ul> <p>Lohith .B.R has won Silver Medal in Body Building in  Mr V.T.U competition and selected to Nationals</p>
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**20. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.**

Name of the Seminars/ Conferences/Workshops	Source of funding (national / international)	Outstanding participants/ Resource Persons
CFD - A potential Engineering Design Tool	Funded by NMIT under TEQIP-II	Dr. Sekhar Majumdar
Computational Fluid Dynamics- An Introduction	AICTE	Dr. Sekhar Majumdar
“CFD workshop”	MHRD, National mission on Education through ICT	Prof. Balachandra Puranik Prof. Atul Sharma
“Introduction to research methodology”	MHRD, National mission on Education through ICT	<ul style="list-style-type: none"> <li>• Prof. Shreepad Karmalkar</li> <li>• Prof Uday Gaitonde</li> <li>• Prof. Sahan Murthy</li> <li>• Prof. Santhosh Noronha</li> </ul>

Engineering thermodynamics	MHRD, National mission on Education through ICT	<ul style="list-style-type: none"> <li>• Prof. U.N Gaitonde</li> <li>• Prof. U.V Bhandarkar</li> <li>• Prof. Balachandra Puranik</li> </ul>
Trends In Mechanical Engineering- TIME-2014	Funded by NMIT under TEQIP-II	<ul style="list-style-type: none"> <li>• Prof. J. Srinivasan</li> <li>• Prof. S.S Desai</li> <li>• Prof. Q H Nagpurwala</li> <li>• Prof. S. Vengadesan</li> <li>• Prof. R.M.V.G.K. Rao</li> </ul>
National Conference on Recent trends in alternative energy “Biofuels, Solar, Electric & Air in Reducing pollution of motor vehicles- 22 <sup>nd</sup> Nov 2013	TEQIP	<ul style="list-style-type: none"> <li>• Dr.K.Amaranarayan(IIS C)</li> </ul>
Research on Renewable Energy Resource through Matlab / Simulink Models	Funded by NMIT under TEQIP-II	<ul style="list-style-type: none"> <li>• Shri. G.V. Balaram,</li> <li>• Dr. S. H. Jangamshetty</li> <li>• Dr. S. J. Krishna Murthy</li> <li>• Dr. Sridhara S. N.</li> <li>• Dr. D. N. Gaonkar. P</li> <li>• Mr. Ananth J. Naik</li> </ul>

### 21. Student profile course-wise:

Name of the Course (refer question no. 2)	Applications received	Students		Pass Percentage%	
		Female	Male	Female	Male
UG 2012-2013	128	4	124	100%	99.19%
UG 2011-2012	73	2	71	100%	94.36%
UG 2010-2011	69	1	68	100%	98.52%
PGThermal 2012-2013	14	1	13	100%	84.65

PGThermal 2011-2012	16	0	16	0	87.65%
PG Design (2013)	19	1	18		

## 22. Diversity of students

Name of the Course (refer question no. 2)	% of students from the College	% of students from the State	% of students from other States	% of students from other countries
UG: Mechanical Engineering	Nil	80%	19.5%	0.5%
PG: Thermal Engineering	8%	75%	17%	Nil
PG: Machine Design	Nil	100%	Nil	Nil

## 23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?

Number of students	Competitive exam cleared
5	CAT
22	GRE
10	GATE
22	TOEFL
8	Defense service

## 24. Student progression

Student progression	Percentage against enrolled (%)
UG to PG	20%
PG to M.Phil	Nil
PG to Ph,d	10%
PhD to Post-Doctoral	
Employed	
• Campus selection	50%
• Other than campus selection	20%
Entrepreneurs	2%

**25. Diversity of staff**

<b>Percentage of faculty who are graduates</b>	
<b>of the same parent university</b>	6%
<b>from other universities within the State</b>	84%
<b>from other universities from other States</b>	10%

**26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.**

<b>Name of the faculty</b>	<b>Year</b>
Dr Sudheer Reddy	2010, NITK
Dr. Kiran Aithal . S	2012,NITK

**27. Present details about infrastructural facilities**

<b>Library</b>	National Journals, International Journals, Subject related text books and reference books available.
<b>Internet facilities for staff and students</b>	Staff rooms have the internet facility. Students can avail the internet facility from internet lab. Hostels are facilitated with Wi-Fi
<b>Total number of class rooms</b>	14
<b>Class rooms with ICT facility</b>	Faculty use portable LCD projectors
<b>Students' laboratories</b>	12
<b>Research laboratories</b>	CFD, Robotics and Advanced Manufacturing, DEPS

**28. Number of students of the department getting financial assistance from College.**

UG – 95 Students  
PG (Thermal) – 7 Students

**29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.**

Yes

Aeronautical labs are arranged and required numbers of faculty are appointed. Separate class rooms and required facilities are made.

**30. Does the department obtain feedback from?**

**a. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?**

Syllabus is formed by the experienced faculty in the respective subject. Subjects for the curriculum are selected by the Faculty members within the department. Elective groups are made and syllabus for the same is prepared by the subject expertise within the department.

Evaluation is done by DUGC team will plan and monitoring the academic activities of the department throughout the semester. BOS meeting is held before starting of every academic year for any changes or correction in the syllabus

**b. Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?**

Feedbacks from students are collected every semester. There are certain levels of evaluating the teaching process. After every feedback, consistency, performance and attendance profiles are checked. Feedback is collected as a hard-copy and documented.

The feedback analysis process is done manually. The comments are analyzed by the concerned HOD and Dean (Academic) and are discussed with the concerned faculty individually. Suggestions for improvement in teaching performance are given if required

**c. Alumni and employers on the programmes and what is the response of the department to the same?**

Improvement in the infrastructure and transport facility of the college. Increase in lab hours and additional training for the student like Soft skill and Advanced CAE Tools

Response: Department appreciates the fact that changes have been recognized

**31. List the distinguished alumni of the department (maximum 10)**

<b>Name of the Alumni</b>	<b>Designation</b>	<b>Company Name</b>
Mr. Ravindra	Quality Engineer	Robert Bosch
Mr. Sharath Hegde	Engineer	MCD
Mr. K. Vishwanath Sharma	Scientist	ISRO, Bangalore
Mr. Aravind Shenoy	Scientist	ISRO, Bangalore

Ms. Hitha Nanjappa	Quality Engineer	Toyota kirloskar
Mr. Pradeep kumar	Engineer	Quest global
Mr. Shashi kiran .P	Engineer	Toyota kirloskar
Mr. Hemanth	Software- Engineer	Infosys
Mr. Muniswara	Design Engineer	Schnider electrical
Mr. Harish M Rao	Pursing (Ph.D)	USA

**32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.**

1. Lecture by J.S. Rao (Altair Engineering Pvt Ltd., Former HOD, Mech Engg Dept IIT, Delhi) on Introduction to CFD and their application conjugate heat Transfer & Aero acoustics on 5<sup>th</sup> Mar 2007.
2. Lecture By Prof. G.R.K Murthy (Former Head, FEM Division, CMTI, Blore) on Thermal Analysis using FEM Approach on 5<sup>th</sup> Mar 2007.
3. Lecture by Prof.S.N.Sreedhar (Prof. & Dean, R&D M.S.R.School of Advanced Studies, Banglore) on introduction to CFD Methodology on March 5<sup>th</sup>, 2007.
4. Lecture by Dr.S. Majumdar (Head, CTFD Division, National Aerospace Laboratories, Bangalore) Numerical Simulation of Incompressible Turbulent Flow in Complex Configuration on March 6<sup>th</sup>, 2007.
5. Lecture by Dr.S.V.Raghurama Rao (Prof, Aerospace Dept IISC, Banglore on CFD Algorithms on 6<sup>th</sup> Mar 2007.
6. Lecture by Prof. Rama Govindarajan (Associate Prof, Engineering Mech Unit JNCASR, and Banglore) on an incomplete roadmap of the Routes toTurbulence in Shear flow on March 6<sup>th</sup> 2007.
7. Lecture by Prof N.Ramesh from EDII, Banglore on Entrepreneurial Competencies, Motivating the students and assessing entrepreneurial competencies on 7<sup>th</sup> June 2008.
8. Lecture by Prof N.Ramesh from EDII, Banglore on Business opportunity identification, Innovation as a tool to create new goods and service & incubation centre on 8<sup>th</sup> June 2008.
9. Lecture by Mr.DS. Vishwanath (Industries Department) on Industrial Policy of Govt of Karnataka and Steps in starting a small enterprise on 9<sup>th</sup> June 2008.
10. Lecture by Mr.KSN Bhat EDII, Banglore, on Financial Assistance from state financial corporation on 9<sup>th</sup> June 2008.
11. Lecture by C.H.V Rao on “Centrifugal casting” on 12<sup>th</sup> Jan 2009.

12. Lecture by Sri Eshwaran on Aero Modeling on 13<sup>th</sup> May 2009.
13. Lecture by Cdr.SureshKumar Thakur on R&D Projects at N.R.B on 11<sup>th</sup> Sep 2009.
14. Lecture by Sri S.K Bharathi on “Values and Job Satisfaction”. On 12<sup>th</sup> Sep 2009.
15. Lecture by Prof. Jayvanth.H.Arakeri (Chairman Mechanical Dept IISC) on Fluid Mechanics through Pictures on 22nd Oct 2009.
16. Lecture by WgCdr (Retd) M.P .Benjamin AGM, HAL on carrier opportunities for the Engineers in the field of Aviation. 28<sup>th</sup> Nov 2009.
17. Visit of K.P Murthy from BOSCH Agency for creating centre of Excellence Labs on 13<sup>th</sup> Jan 2010.
18. Mr. Michal Donet Consultant, M/s Physik, institute GMBH, Germany on Positioning for extreme precision challenge and solution on 11 May 2010.
19. Lecture by Dr Ram Thurag, Head R&D Bloom energy Inc. on Advance in mechanical Engineering on 17<sup>th</sup> Feb 2010.
20. Lecture by Mr. Pihaniraj Bhat, CEO seven seers consulting (P) ltd on Job opportunity for mechanical Engineering students on 17<sup>th</sup> Feb 2010.
21. Mr. Akshoy Raj Paul, Deptt. Of Applied Mechanics, MNNIT, Allahabad on Turbulent Flow in Y shaped Air intakes on May 15<sup>th</sup>, 2010.
22. Stephen Knapp (American philosopher) on Rediscovering India’s culture on 6<sup>th</sup> Sep 2010
23. Mr. Sudhakar [RGBSI] on Geometric Dimensioning & Tolerance on 30<sup>th</sup> Aug 2010.
24. Training on soft Skill’s And Aptitude Skills organized by T.I.M.E coaching centre Bangalore on 25<sup>th</sup> Oct 2010.
25. Mr Sudhakar [Registrar Nitte University] on corrosion on 25th Oct 2010.
26. Mr. K.P Murthy, Mr. Murthy and Mr. Javaji Munirathnam Inaugurated SAE India on 12th Nov 2010.
27. Mr.K.P. Murthy form BOSCH Agency on Centre of Excellence on 13<sup>th</sup> Jan 2010.
28. Lecture by Sam Swaroop on EDS Technology on 3<sup>rd</sup> Mar 2011.

**33. List the teaching methods adopted by the faculty for different programmes.**

1. Laboratory experiments performed by more than two students working together
2. Class discussions conducted by a student or student committee
3. Special assistance provided for students having difficulty in the course.
4. Using case studies reported in literature to illustrate psychological principle and facts
5. Reading assignments in journals, monographs and supplementary books
6. Use of motion pictures, educational films, video tapes, diagrams, tables, graphs and charts
7. Report on research studies and experiments by students.
8. Tutorial, students assigned to the other students for assistance, peer teaching

**34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?**

- Internal assessment tests are conducted, both in theory as well as laboratory through which the student's knowledge in the subject is evaluated.
- Extra class's for academically weaker students are arranged.

• Field visit	Faculty from the department along with students have visited to various industries
• Problem solving	Our faculties have improved their teaching methodologies by attending programs like Soft skill Development, STTP
• Project work	All our staff has successfully guided the student projects.
• Case study	Industry oriented case studies are part of the many subjects like, project management, operation management, operation Research and operation management

**35. Highlight the participation of students and faculty in extension activities.**

- The College has started and supported various clubs / associations to sensitize the faculty and students on Institutional Social Responsibilities. Some of the social outreach clubs which have created an impact on the students' campus experience are as follows:

**Some of the activities arranged through these clubs are**

- Awareness programs of social responsibilities
- Blood donation camps
- NSS & NCC Camps
- Organ Donation camps
- Distributions of School furniture, Text books & stationeries to Govt Schools in the neighbouring villages
- Literacy Programs

The Faculty and Students of the department actively involved in the said activities.

Activities	Faculty	Students
National service scheme	Mr.Hemanth kumar	Mr.Vijay Kumar, Mr.Pavan
NCC Camps		Mr.Ravindra, Mr.Mukesh yadav
Rotract club	Mr.Hemanth kumar	Mr.Adarsh upadyaya,



		Mr.Anil.G.Bardwaj
Literacy Programs	Mr.Charan Kumar .D	Mr.Ragav,Mr.Karthik .S
Yantra mechanical association	Mr.Charan Kumar .D	Mr.Bharath,Mr.Shreyas ningappa
Placement co-ordinator	Dr.Sudheer Reddy	Mr.Shashank,Mr.Vinayak shenoy
Robotics	Mr.Sunil Kumar	Mr.KarthikRravi,Mr.Syed Masood
MEMS/NANO centre	Dr.P.G.Mukunda Mr.Rudra Naik.M	Mr.Sandeep Singh, Mr.Vivek kumar Gupta
IEDC	Dr.Sudheer Reddy	Mr.Vaibhav,Mr. Sathwik
Autonomous	Dr.Kiran Aithal,Mrs.Rashmi,Mr.Harish	
Hostel warden	Mr.Madhusudan	

**36. Give details of “beyond syllabus scholarly activities” of the department.**

- Internship programme
- Industry visit
- Value added courses
- Workshops on current technology
- Mechanical branch festival MECHALICA and IGNITION
- Supra SAE Formula 1 car and aero SAE

**37. State whether the programme/ department is accredited/ graded by other agencies. Give details.**

Programme/ Department	Accredited/ Graded	Agency
UG	Accredited in 2009 for three years	NBA-AICTE

**38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department**

Strengths	Weaknesses	Opportunities	Challenges
MOU with industries	Inadequate research culture emanating	Research opportunities for faculties and	Declining supply of qualified faculty

	from the initial “developmental” focus.  Industry-institute interaction a low	students	
Deputation of faculty for higher studies	Lack of consistency of advising at the graduate level Lack of off-campus and alternative programming	Utilization of on-campus services by looking forward for new funding agencies	Competition due to distance education institution
Efficient and cost-effective operations	Scope for improving industry-institute interaction	Opportunities for tie ups between department and industries like IISC, DRDO, etc	Online courses
Unique product and service utilization	Inadequate research culture emanating from the initial “developmental” focus.	Up gradation of departmental library	Declining enrollment for Engineering for job opportunity
Resource and capabilities usage	Lack of interest among graduating engineers for pursuing research degree programs or teaching careers	Streamlining the curriculum to meet the industry needs	Possibility of attrition of key staff

**39. Future plans of the department.**

- Strengthen the R & D activities
- Motivate the students to take up entrepreneurship activities
- Up gradation of syllabus to suit the industry requirement
- To set up science and technological entrepreneurship park (STEP)
- Take up more and more industry oriented research activities
- Introducing more post graduate programs
- Organizing more number of student workshop

- To search for apprenticeship programs during vacations and develop industry institute interaction
- Modernization of labs with state of art equipments like, Scanning electro microscope, X-Ray diffraction machine.
- Modernization of class rooms to have systems with LCD projectors.

## Department of Management Studies

### **1. Name of the Department:**

Department of Management Studies

Year of establishment: 2004

### **2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**

PG: Master of Business Administration

### **3. Interdisciplinary courses and departments involved:**

N/A

### **4. Annual/ semester/choice based credit system:**

Semester and Choice based system

### **5. Participation of the department in the courses offered by other departments:**

Courses offered on Entrepreneurship Development, Intellectual Property Rights and HR is being handled by faculties from the department.

### **6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/Asst. Professors)**

<b>Teaching Post</b>	<b>Sanctioned</b>	<b>Filled</b>
Professor	2	2
Associate Professors	2	2
Asst. Professors	10	10

**7. Faculty profile with name, qualification, designation, specialization (D.Sc./D.Litt./ Ph.D. /M.Phil. etc.)**

Name	Designation	Qualification	Specialization	No. of Years of Experience	No. of Ph.D. students guided in the last 4 years
Dr. Sridhar Sambatur	Professor	MBA, M.Tech, Ph.D	Management	30	01(Ongoing)
Prof. Jayaram Shetty	Professor	MBA, M.Com, LLB, CAIB, PGDHRM, PGDMM, DTD (ISTD), (Ph.D) Pursuing	Banking and HRM.	21	----
Dr.S.Harish Babu	Associate Professor and Head	MBA, M.Phil Ph.D	Finance, Marketing, and General Management.	11	01 (Ongoing)
Dr. Jayasmita Rath	Associate. Professor	Ph.D (IISc)	HRM, Sustainable Development, Public Policy.	08	06 (Ongoing)
Prof. Senthil Kumar	Asst.Professor	B.Sc. MBA, MHRM,M.Phil,PG DCA, (Ph.D) Pursuing	HR, Marketing, General Management and Systems	17	
Prof. N.Kiran Kumar	Asst.Professor	BA,MA, MBA, M.Phil, L.L.B (Ph.D) Pursuing	Marketing, HR, and Law	12	
Mrs. Shilpa Ajay	Asst. Professor	MBA, M.Com, PGDMM (Ph.D) Pursuing	HR and Marketing	08	

Mr. Sreedhar. N	Asst. Professor	MBA	HR and Marketing	04	
Ms. Deepali V K	Asst. Professor	MBA	Finance	03	
Ms. Nayana	Asst. Professor	MBA	Marketing	03	
Mr. Ashwath Reddy	Asst. Professor	BE, MBA	Finance	06	
Ms. Jyothi. G	Asst. Professor	MBA	Finance	02	
Ms Malini	Asst. Professor	MBA	Marketing and HR	07	
Ms. Dephni Liria Rereira	Asst. Professor	MBA	HR	0.5	

**8. Percentage of classes taken by temporary faculty – programme-wise information:**

NIL

**9. Programme-wise Student Teacher Ratio**

Programme	Student-Teacher Ratio
MBA	15:1
Ph.D	3:1

**10. Number of academic support staff (technical) and administrative staff: sanctioned and filled**

Number of academic support staff (Technical) and administrative staff; sanctioned and filled		Sanctioned	Filled
	Technical	01	01
	Admin	01	01

**11. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Mention names of funding agencies and grants received project-wise.**

Type of funding	Name of the Funding Agency	Name of The investigator	Ongoing project	Total Grant Received
National Funding	C Science Research- New Delhi.	Dr.Ashwini Kumar BJ Dr. Harish Babu	Yes	Institutional Finance- 3,37,550
National Funding	NABARD	Dr. Ashwini Kr. BJ	Yes	International Trade- 8,20,000

**12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received**

Funding Agency	Total Grants Received
ICSSR-2 Projects granted	Institutional Finance-3,37,550 International Trade- 8,20,000

**13. Research facility / centre with**

<b>State Recognition</b>	VTU Research Centre Mysore University Research Center
<b>National Recognition</b>	NIL
<b>International Recognition</b>	NIL

**14. Publications:**

<b>Publication per faculty</b>	<ul style="list-style-type: none"> <li>• Dr. Sridhar S-20</li> <li>• Dr. Jayasmita Rath-5</li> <li>• Prof. Senthil Kumar-8</li> <li>• Dr. Harish Babu-18</li> <li>• Prof. N Kiran Kumar-5</li> <li>• Mrs. Shilpa Ajay-2</li> <li>• Mr. Sreedhar.N-1</li> </ul>
<b>Number of papers published in peer reviewed journal (national / international)</b>	International: 06 National: 08
<b>Number listed in International Database ( For E.g.: Web of Science, Scopus,</b>	01SCOPUS, 01 EBSCO, 04 in SSRN

humanities International Complete, dare Database – International Social Sciences Director, EBSCO host, etc.)	
Citations Index	01
SNIP	NIL
SRJ	NIL
Impact factor	NIL
H-index	NIL
Monographs	NIL
Chapter in Books	NIL
Books with ISBN / ISN numbers with details of publishers	01 Thakur Publication, ISBN # 978-93-83130-90-0. Published in 2013-14.
Editing books	02

**15. Details of patents and income generated:** NIL

**16. Areas of consultancy and income generated:** NIL

**17. Faculty recharging strategies:** Participation in conferences, FDPs and MDPs.

**18. Student projects**

- **percentage of students who have done in-house projects including inter-departmental:** NIL
- **percentage of students doing projects in collaboration with industries / institutes:** 100

**19. Awards / recognitions received at the national and international level by**

- **Faculty**
- **Doctoral / post doctoral fellows**
- **Students**

Awards / recognitions received by	Name of the faculty
Faculty	Faculty-01, Prof. Senthil Kumar received 1 <sup>st</sup> rank in MHRM.
	Dr. S. Harish Babu has been awarded doctoral degree from Bangalore University.
	1. Dr. Jayasmita Rath is a reviewer for International Business Review, Indexed by



	<p>SCOPUS and for International Journal of Sociology and Social Policy, EmeraldInsight.</p> <p>2. Prof. MK Senthil is a reviewer for Pezzottaite International Journal and Research India Publication.</p>
<p>Students</p>	<ul style="list-style-type: none"> <li>• Ms. Rajini secured 7<sup>th</sup> Rank at University level exam conducted by VTU.</li> <li>• Ms. Shwetha Murthy secured 9<sup>th</sup> Rank at University level exam conducted by VTU.</li> <li>• Navin Kumar Pol was awarded as Best Manager in Management fest organized by Sheshadripuram College</li> <li>• Mr. Vineet Kotian secured first place in Case Study Analysis Competition conducted by Nagarjuna College of Engineering, Bangalore on 17<sup>th</sup> October 2012</li> <li>• Shehil Hameed and Sunil Hegde secured 3<sup>rd</sup> prize in Marketing event in Management fest organized by Garden City College</li> <li>• Raghunath Rao and Sudeep K Kurup secured 2<sup>nd</sup> Prize in HR event in Management fest organized by Garden City College</li> <li>• Group of 8 students secured I prize in Ice breaking event in Management fest organized by East West College- Bangalore</li> </ul>

**20. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.**

<b>Name of the Seminars/ Conferences/Workshops</b>	<b>Source of funding (national / international)</b>	<b>Outstanding participants/ Resource Persons</b>
One Day workshop on Total Quality Management held on 29 <sup>th</sup> Januray 2014 in collaboration with Nitte School of Management.	Funded by NMIT and NSOM	The workshop was targeted at faculty handling TQM subject and participants from industry. Dr. G. Nagalingappa, Director, BNMIT, Bangalore, Prof. Manjunath VS, Director, NSOM were the resource persons.
Faculty Development workshop “Building Career in teaching and research” was held in September 2012.	Funded by NMIT	1. Faculties with less than 2 years of experience from various colleges were the participants.  2. Dr. N. Rathi, CNO, Loratis, Dr. DK. Murthy, Director, Dept. of MBA, Sheshadripuram College and Dr. Ashwini Kr. BJ, Faculty, IIPM were resources persons.
Conference titled “International Trade in Goods and Services - Issues and Paradigms” 20 Oct 2010	Funded by NMIT and NABARD	MBA Students of Various College <ul style="list-style-type: none"> <li>• Mr. Anand Ganeshan-Managing Director, EM Business Labs Private Ltd.</li> <li>• Prof. Ranganath Iyengar-Managing Partner and founder "Strategic Interventions India</li> </ul>

		Private Limited
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**21. Student profile course-wise:**

Name of the Course (refer question no. 2)	Applications received	Selected		Pass percentage	
		Male	Female	Male	Female
MBA (2011-13)	-	68	44	94	93

**22. Diversity of students**

Name of the Course (refer question no. 2)	Year	% of students from the College	% of students from the State	% of students from other States	% of students from other countries
MBA	2012-13	----	93	3	4
MBA	2011-2012	----	95	5	--
MBA	2010-2011	----	96	4	--

**23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?**

NIL

**24. Student progression**

Student progression	Percentage against enrolled
UG to PG	NIL
PG to M.Phil.	NIL
PG to Ph.D.	NIL
Ph.D. to Post-Doctoral	NIL

<b>Employed</b>	
• <b>Campus selection</b>	75%
• <b>Other than campus recruitment</b>	20%
<b>Entrepreneurs</b>	5%

**25. Diversity of staff**

<b>Percentage of faculty who are graduates</b>	
<b>of the same parent university</b>	35.7%
<b>from other universities within the State</b>	42.8%
<b>from other universities from other States</b>	21.4%

**26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period. : 1**

**27. Present details about infrastructural facilities**

<b>a) Department Library</b>	Volume: 4414 Titles: 2235 Journals: 24
<b>b)Internet facilities for staff and students</b>	<ul style="list-style-type: none"> <li>• Each faculty has been provided with computer and Internet facility</li> <li>• Department is having separate internet lab with 90 Computers</li> </ul>
<b>c)Total number of class rooms</b>	06
<b>d)Class rooms with ICT facility</b>	ICT Facility- Nil We have mounted- LCDs and OHPs in each classrooms
<b>e) Students laboratories</b>	NIL
<b>f) Research laboratories</b>	NIL

**28. Number of students of the department getting financial assistance from College.**

36 Students

**29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology. :**

Yes. Discussion is held at the Departmental level before introducing any new programmes.

**30. Does the department obtain feedback from?**

**a. faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?**

Yes, for teaching-learning evaluation feedback is obtained from students and training-need analysis is identified with discussion with the Head of the Department.

**b. students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?**

Yes on staff. If the feedback is poor HOD and principal inform the faculties about the same and methods are chalked out for enhancement of performance.

**c. alumni and employers on the programmes and what is the response of the department to the same?**

Yes every year during alumni meet, we take the feedback on the program and try to see the feasibility in implementing their suggestions

**31. List the distinguished alumni of the department (maximum 10)**

Sl.No	Name of the Alumni	Profession/ Company
1	Mr.Bijay Kumar Das	Tax Analyst, Ernst & Young, Bangalore
2	Shilpa.R	HR Executive, Wipro, Bangalore
3	Narahari.P.C	Senior Analyst-HR-Impel Solution,Bangalore
4	Mr.Karthik Joshi	Asst Manager,Vijaya Bank, Bangalore
5	Nagaraj.S Patil	Trade and Risk Services Analyst, Deutsche Bank
6	Vishaka.L	Senior Business Analyst, TCS Bangalore
7	Ravi Gudi	Process Executive, Infosys, BPO Limited
8	Ashreya	Financial Analyst, International Business Times
9	Nayana	Tax Executive, Northern Trust
10	Anbu Kumar.B	Process Associate, Thomson Reuters

**32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.**

- A talk on “Developing the sprit of entrepreneurship the new competitive edge at the work place” by Prof. Ranganath Iyenger Managing partner and founder strategic inventions India private Ltd.

- Dr. DK. Murthy, Director of SIMS, Bangalore gave a talk on financial derivatives.
- Mr. Naveen Sananguly, Finance Associate at EMC<sup>2</sup> delivered a talk on “Risk Management”.
- Mr. Karunakar, General Manager of Engine dept, HAL delivered a talk on international operations management.
- Dr. Justin Paul, Professor, University of Washington had delivered a talk on Japanese Management Practices.
- Mr. Rajeev Juneja, Executive General Manager of Millipore gave a talk about international marketing
- Mr. Anand Ganesan Managing Director, EM business Labs Private Ltd delivered a talk on supply chain and market competitiveness
- Faculty development workshop on “Building Career in teaching and research”
- Dr. N Rathi CNO, Loratis delivered a talk on industry institute interaction and career progression.
- Ms. Prathibha Priyadarshini Manger, HR, Shell India delivered a talk on best HR practices at Shell.

**33. List the teaching methods adopted by the faculty for different programmes:**

Faculties adopt Case Analysis Method, Role Play and Presentation Method for teaching Different Concepts.

**34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?**

<b>Field visit</b>	Every semester students are taken for industrial visit to get acquainted with latest industrial practices.
<b>Problem solving</b>	Students are advised and trained on acquiring skills such as enhancing self awareness, self esteem, effective communication skills and enhancing domain knowledge so as to find a solution to the problem encountered in day to day life and maintain a balanced personal and professional life.
<b>Project work</b>	Students undertake 10 weeks project as a part of their curriculum in industrial sector to understand the overall functioning of the organization.
<b>Case study</b>	Industry based case studies are part of every subject in the curriculum.

**35. Highlight the participation of students and faculty in extension activities:**

- The College has started and supported various clubs / associations to sensitize the faculty and students on Institutional Social Responsibilities. Some of the social outreach clubs which have created an impact on the students' campus experience are as follows:
  - i) National Cadet Corps
  - ii) National Service Scheme
  - iii) Rotaract Club of "NMIT – Bengaluru":
  - iv) Youth Wing of Red Cross Society
  - v) Literary Forum

**Some of the activities arranged through these clubs are**

- Awareness programs of social responsibilities
- Blood donation camps
- NSS & NCC Camps
- Organ Donation camps
- Distributions of School furniture, Text books & stationeries to Govt Schools in the neighbouring villages
- Literacy Programs
  
- The Faculty and Students of the department are actively involved in the said activities.
  - Rotaract Club Details: Youth president: Kiran Kumar Kirtipathi, Secretary: Somasundar G., 103 students from the current batch are registered members of Rotaract.

**36. Give details of "beyond syllabus scholarly activities" of the department:**

Workshops, Conferences, Seminars, Management fests,

**37. State whether the programme/ department is accredited/ graded by other agencies. Give details:**

No

**38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department**

**Strength:**

- Highly qualified faculty members
- Strong focus on quality teaching
  - Strong focus on Research activities and Industry Institute Interaction

- Good infrastructure facility
- Team work

**Weakness:**

- Under VTU curriculum, limited scope for introducing changes in pedagogy befitting the current expectations from the market.

**Opportunities:**

- Opportunities for collaboration with industry and academic institutes of repute to buttress the position of the department.

**Challenges:**

- Creating a research mindset among students.
- Competition due to mushrooming institutes offering distance education.
- Scarcity of job opportunities for MBA grads due to economic slowdown.

**39. Future plans of the department:**

Since, getting autonomous status for the department is on the anvil, the department is planning to introduce pedagogy befitting the expectation of the industry. Besides, more attention will be paid on upgrading the skills of students to make them industry ready. Faculties will be encouraged to get involve in scholarly activities and put more focus on Research and Development activities.



## Master of Computer Application

### **1. Name of the Department & its year of establishment**

Master of Computer Applications and 2006

### **2. Names of Programmes / Courses offered (UG, PG, M.Phil., Ph.D., Integrated Masters; Integrated Ph.D., etc.):**

PG – Semester System

### **3. Interdisciplinary courses and departments involved:**

NA

### **4. Annual/ semester/choice based credit system**

Semester Based

### **5. Participation of the department in the courses offered by other departments**

NIL

### **6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/Asst. Professors)**

	Sanctioned	Filled
Professor	1	1
Associate Professors	2	2
Asst. Professors	12	12

### **7. Faculty profile with name, qualification, designation, specialization (D.Sc./D.Litt./ Ph.D. /M.Phil, etc.)**

Name	Qualification	Specialization	Designation	No. of Years of Experience	No. of Ph.D. students guided in the last 4 years
Dr. Prasad N.	Ph.D.(JNU	Mobile Adhoc			

H.	, New Delhi)	Wireless Networks	Prof & Head	11.6	
	M.Tech.	Mobile Adhoc Wireless Networks			
	MCA				
Ms. Geetha Priyadarshini	B.E.	Computer Sc. & Engg.	Associate Professor	14.6	Nil
	MCA				
Ms. Joy Lavinya	B.E.	Electronics & Communication Engg	Assistant Professor	9.2	Nil
	M.S.	Medical Software			
Ms. Deepthi J. Shetty	B.E.	Information Science & Engg.	Assistant Professor	7.6	Nil
	M.T.ech.	Computer Sc. & Engg.			
Ms. Uma R.	B.E.	Computer Sc. & Engg.	Assistant Professor	6	Nil
	M.T.ech.	Computer Sc. & Engg			
Ms. Ramyashree B. R.	B.E.	Computer Sc. & Engg.	Assistant Professor	8.5	Nil
	M.Tech.	Computer Sc. & Engg.			
	(Ph.D.)	Grid Computing			
Ms. Shruthi. B. V.	B.E.	Computer Sc. & Engg.	Assistant Professor	6.	Nil
	M.T.ech.	Computer Sc. & Engg			
Ms. Sowmya H. N.	MCA		Assistant Professor	3.6	Nil
Mr. Mariyan Richard	MCA		Assistant Professor	3.9	Nil
Mr. Lakshmi Narayan	MCA		Assistant Professor	5	Nil

Ms. Sushitha	MCA	Assistant Professor	1.5	Nil
Ms. Vijayalakshmi	MCA	Assistant Professor	1.5	Nil
Mr. Navaneeth	MCA	Assistant Professor	4	Nil
	MPhil.			
Ms. Soumya Rai	MCA	Assistant Professor	1.5	Nil
Ms. Smriti Rai	MCA	Assistant Professor	3.2	Nil

**8. Percentage of classes taken by temporary faculty – programme-wise information**

Nil

**9. Programme-wise Student Teacher Ratio**

15:1

**10. Number of academic support staff (technical) and administrative staff: sanctioned and filled**

Number of academic support staff (technical) and administrative staff	Sanctioned	Filled
		4

**11. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Mention names of funding agencies and grants received project-wise.**

NIL

**12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received**

NIL

**13. Research facility / centre with: NIL**

- state recognition
- national recognition
- international recognition

**14. Publications:**

**\* number of papers published in peer reviewed journals (national / international)**

Dr. Prasad N. H. – 6

Prof. Shruti B. V. – 1

Prof. Uma R. – 2

Prof. Deepthi J. Shetty – 1

Prof. Lakshmi Narayan- 2

**\* Monographs:**

NIL

**\* Chapter(s) in Books:**

**\* Editing Books:** ERCICA-2013, ISBN:978-93-5107-102-0

**\* Books with ISBN numbers with details of publishers:** Object Oriented Programming using C++, Thakur Publishers. ISBN : 978-93-8392-223-9

**\* number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.)**

NA

**\* Citation Index – range / average:**

NIL

**\* SNIP:**

NIL

**\* SJR:**

NIL

**\* Impact factor – range / average:**

2

**\* h-index:**

NIL

**15. Details of patents and income generated:**

NIL

**16. Areas of consultancy and income generated:**

NIL

**17. Faculty recharging strategies**

Short term courses (FDP)

Refreshing courses

Deputation of faculties for Ph.D's and M.Tech

**18. Student projects**

**• percentage of students who have done in-house projects including inter-departmental**

Nil

**• percentage of students doing projects in collaboration with industries / institutes**

100%

**19. Awards / recognitions received at the national and international level by**

• **Faculty:**

**Dr. Prasad N. H.**

1. Dr. Prasad Naik Hamsavath was felicitated with the prestigious award of “ Dr. Abdul Kalam Life Time Achievement Award” in the field of Teaching/Training/Research and Administration by Dr. Shivappa, Economic Advisor for Planning Commission of India, Govt. of India.
2. Dr. Prasad N. H., was nominated and awarded for “Young Faculty” by Education Expo TV at 2nd Academic Brilliance Awards, New Delhi

• **Doctoral / post doctoral fellows:** NIL

• **Students**

<b>Name of the student</b>	<b>Activity (Sports/NCC/NSS/cultural/Paper presentation etc.)</b>	<b>Name of the competition</b>	<b>Awards/Prize if any</b>
Dhanesh Paika & Sanket Jain	Techno Cultural	Marketing	Second
Abhishek Patil & Ganesh Shetty	Techno Cultural	Advertising	Second
Dhanesh Paika	Techno Cultural	Product Launch	First
Shruti & Ganesh	Techno Cultural	Paper Presentation	First
Dhanesh Paika Ganesh Shetty	Techno Cultural	Innovative Ideas	First Second
Madhavi & Chaitanya	Techno Cultural	Painting	Second
Namdev & Yashas	Techno Cultural	Web Designing	First
Madhavi & Rachana	Techno Cultural	Pot Painting	Second
Sanket Jain & Bhavani Shankar	Techno Cultural	Quiz	Second
Abhishek & Kiran	Techno Cultural	Collage Making	Second

Guruchirag, Madhuri, Maruthi & Vidya	Techno Cultural	Scavenger Hunt	Third
Dhanesh Paika, Shivraj, Maruthi, Alamdhar, Guruchirag, Vineet & Prince Roy	Techno Cultural	Mad Ads Street play	Third
Dhanesh Paika	Techno Cultural	Keliedoscope	Second
Dhanesh Paika	Techno Cultural	British Parliament(Debate )	Third
Dhanesh Paika	Techno Cultural	Toggle Talk	First
Abhishek Patil & Team	Techno Cultural	Cultural	First
Ganesh Shetty & Team	Techno Cultural	Ice Breaker	Second
Allen Moses	Techno Cultural	Gaming	First
Dolly DeviLaipuba m	Techno Cultural	Su-Do-Ku	First
Anand Singh and Sonali Rajput	Techno Cultural	Antakshari	First
Jignesh and Jainam	Techno Cultural	Web page Designing	First
Nethravathi	Sports	400 meters track event 100m	First Second
Vardhika	Sports	100m track event	Third
Nethravathi, Vardhika, Sapna & Ashwini	Sports	4*100 meter relay	Second
Sapna	Sports	Javelin throw	Second

**20. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.**

<b>Name of the Seminars/ Conferences/Workshops</b>	<b>Source of funding (national / international)</b>	<b>Outstanding participants/ Resource Persons</b>
Teaching Methods and techniques	Funded by TEQIP	<ul style="list-style-type: none"> <li>• Dr. Jagath.R, NITTR, Chennai</li> <li>• Dr. Somasundran, NITTR, Chennai</li> </ul>
International Conferences on Emerging Research in Computing, Information, Communication and Applications (ERCICA-13)	Funded by TEQIP	Eminent Scientist

**21. Student profile course-wise:**

<b>Name of the Course (refer question no. 2)</b>	<b>Applications received</b>	<b>Selected</b>		<b>Pass percentage</b>	
		<b>Male</b>	<b>Female</b>	<b>Male</b>	<b>Female</b>
MCA 2010-11	56	34	22	94%(34)	91%(20)
MCA-2011-12	60	39	21	79%(31)	100%(21)
MCA-2012-13	61	37	24	83%(31)	100%(24)

**22. Diversity of students:**

<b>Name of the Course (refer question no. 2)</b>	<b>% of students from the College</b>	<b>% of students from the State</b>	<b>% of students from other States</b>	<b>% of students from other countries</b>
MCA-2012-13	NIL	73%	27%	NIL
MCA-2013-14	NIL	75%	25%	NIL

**23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?**

NA

## 24. Student progression

Student progression	Percentage against enrolled
UG to PG	NA
PG to M.Phil.	NA
PG to Ph.D.	1.78%
Ph.D. to Post-Doctoral	NA
Employed	
• Campus selection	40%
• Other than campus recruitment	20%
Entrepreneurs	NA

## 25. Diversity of staff

Percentage of faculty who are post graduates	
of the same parent university	10
from other universities within the State	1
from other universities from other States	4

## 26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.

NIL

## 27. Present details about infrastructural facilities

### a) Library

- Volumes – 2000
- Journals – 12
- Titles - 500

### b) Internet facilities for staff and students

- Every faculty is facilitated with Computer and internet connection (2:1).
- In each departmental laboratory, 1 system is connected with internet
- NMIT is having common internet lab
- Hostels are facilitated with Wi-Fi

### b) Total number of class rooms

- 5

### c) Class rooms with ICT facility

- Faculty use portable LCD projectors



**d) Students' laboratories**

4

**e) Research laboratories - NIL**

**28. Number of students of the department getting financial assistance from College.**

18 Students

**29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology.**

NA

**30. Does the department obtain feedback from**

**a. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?**

- MCA syllabus is framed by the VTU.
- In addition to the routine classes, our faculty take interest in conducting seminars for the students on either the subject content or recent trends in technology; in order to build up the confidence level and communication skills.
- Assignments are given to improve the reading and analyzing skills of the students.
- Laboratory exercises, other than the ones in the syllabus are also added to their programs, list to increase their logical thinking ability.

**b. Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?**

- Feedback forms are given to the students at the end of every semester to evaluate the teaching-learning activity.
- This form contains a set of questions which includes many parameters with some value associated with it. Adding these values gives a score.
- Based on the score, a department level discussion is held in order to improve the teaching-learning activity.

**c. Alumni and employers on the program and what is the response of the department to the same?**

- Some alumni attend the departmental events and assist the junior students in organizing the same in a better way.
- They give information about the recent trends in industry.
- Faculties try to a maximum extent to conduct their classroom sessions in par with the industry needs.

**31. List the distinguished alumni of the department (maximum 10)**

Name	Designation	Company
Bhimray	Senior Engineer, Java Developer	Integra Micro Software ltd.
Pratibha	Senior Engineer	Cap-Gemini
Navya J.	Content Testing Associate	Amazon Development Sector, India
Asha P	Senior Engineer	Tata Elxsi
Bhupal singh chowhan	Senior Engineer	Tata Elxsi
Sonali Rajput	Senior Engineer	Tata Elxsi
Tushar Goel	Services Engineer	Dell
Rameshwar Singh	Services Engineer	Dell
Apoorva	Services Engineer	Dell
Vikas U Nair	Assistant System Engineer	Tata Consultancy Service
Rachana Solanki	Assistant System Engineer	Tata Consultancy Service
Karibasaiah	Assistant System Engineer	Tata Consultancy Service

**32. Give details of student enrichment programs (special lectures / workshops / seminar) with external experts.**

1. A two day workshop on “**Patents, Designs, Trademarks and Copyrights**”, in association with CGPDTM, Chennai during 06-07, December 2013.
2. A one Technical Seminar on “**Voice Recognition**” by Mr. Umang, Student, AIT, on dated 15, November 2013.

3. A two day International conference on “**Emerging Research in Computing, Information, Communication and Applications (ERCICA-13) on during 02-03, August, 2013**”
4. A 2 Day Workshop on “**Facets of Entrepreneurship**” in association with IEDC-NMIT, organized by Department of MCA on dated 19-20, April, 2013
5. One day Technical seminar was organized on 21<sup>st</sup> December 2012. Mr. Rajeev Arora, Director & VP (R&D), Apex Decisions delivered a talk on “**Technologies and its impact on human life**”. Mr. I C Joseph, Consulting Engineer, Abacus limited, gave a talk on “**Skill sets needed for Engineering Profession**”.
6. A three day faculty development program on “**Teaching Methods & Techniques**” was held during 5<sup>th</sup> to 7<sup>th</sup> November 2012. The resource persons were Dr. Jagath Rakshakan and Dr. Somasundaran from NITTR, Chennai.
7. A one day workshop on “**Data Mining and Machine Learning**” and “**Corporate Awareness**” was conducted on 3<sup>rd</sup> September 2012. Mr. Rajeev Arora, Director & VP (R&D), Apex Decisions, Bangalore gave a talk on “Data Mining and Machine Learning”. Mr. Mohan Kumar K.R. delivered a talk on “Corporate Awareness”.
8. A one day Workshop on “**Android Mobile Platform, Data Integration and Software Testing**” was conducted 21<sup>st</sup> of April 2012. Mr. Jitendra Singh, Associate Manager- Technology, Bally Technology India Pvt. Ltd, Bangalore gave a talk on “Android Mobile Platform”. Mr. Akalabya Sahu, Lead Software Engineer, Informatica Technology, Bangalore gave a talk on “Data Integration”. Mr. Yogendra S, Senior Associate - Projects, Cognizant Technology Solutions, Bangalore, gave a talk on “Software Testing”.
9. A one day Workshop on “**Network Simulator**” was conducted on 17<sup>th</sup> March 2012. The Speakers were Ms. Kavitha Sooda, Asst. Prof., Mr. Mohan B.A., Sr. Lecturer, Mr. Nagaraj SR, Lecturer, Dept. of CS & Engg, NMIT. The participants were given a theoretical and hands on session on NS-2.

**33. List the teaching methods adopted by the faculty for different programs.**

- Chalk and board
- LCD projectors
- Quizzes
- Seminars
- Assignments
- Laboratory programs apart from the syllabus
- Surprise tests

**34. How does the department ensure that program objectives are constantly met and learning outcomes monitored?**

- Every month an internal assessment test is conducted, both in theory as well as laboratory, through which the students' knowledge in the subjects is evaluated.
- Extra classes for weaker students are arranged.

**35. Highlight the participation of students and faculty in extension activities.**

- The College has started and supported various clubs / associations to sensitize the faculty and students on Institutional Social Responsibilities. Some of the social outreach clubs which have created an impact on the students' campus experience are as follows:
  - i) National Cadet Corps
  - ii) National Service Scheme
  - iii) Rotaract Club of "NMIT – Bengaluru"
  - iv) Youth Wing of Red Cross Society
  - v) Literary Forum

**Some of the activities arranged through these clubs are**

- Awareness programs of social responsibilities
- Blood donation camps
- NSS & NCC Camps
- Organ Donation camps
- Distributions of School furniture, Text books & stationeries to Govt Schools in the neighbouring villages
- Literacy Programs

The Faculty and Students of the department actively involved in the said activities.

**36. Give details of "beyond syllabus scholarly activities" of the department.**

- Our department organizes a state level technical fest every year in which the faculty and students enthusiastically participate.

**37. State whether the program/ department is accredited/ graded by other agencies. Give details.**

NO

**38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department**

Strengths	Weaknesses	Opportunities	Challenges
<ul style="list-style-type: none"> <li>• Well-qualified and highly experienced staff</li> <li>• State-of-art infrastructure</li> <li>• Frequently updated syllabus by university</li> <li>• Student-centric environment</li> <li>• Project outside in collaboration with industries / institutes</li> </ul>	<ul style="list-style-type: none"> <li>• Inadequate research culture among students, as the course is application oriented.</li> <li>• Value added courses are inadequate in number</li> <li>• Insufficient internship opportunities in industries</li> <li>• Low proportion of PhD holders among faculty</li> <li>• Lack of adequate communication skills in students, as majority of them come from non-urban areas.</li> </ul>	<ul style="list-style-type: none"> <li>• Provide tie ups &amp; encourage interaction between department and industries</li> <li>• Inculcating an attitude for research</li> <li>• Developing entrepreneurial skills among students</li> <li>• Streamlining the curriculum to meet the industry needs</li> <li>• New technologies increases employability</li> </ul>	<ul style="list-style-type: none"> <li>• Upgrading to new technologies and skill sets</li> <li>• Increased student intake, lessens one-to-one student interaction</li> <li>• Restricted faculty rewards and appreciation</li> </ul>

**39. Future plans of the department.**

- Focus towards research activities
- Development of Entrepreneurial skills
- Collaboration with industry
- Introduction of value added courses

## Applied Sciences & Humanities

**1. Name of the Department & its year of establishment:**

APPLIED SCIENCES & HUMANITIES and 2001

**2. Names of Programmes / Courses offered (UG, PG, M.Phil, Ph.D., Integrated Masters; Integrated Ph.D., etc.)**

NA

**3. Interdisciplinary courses and departments involved:**

MECH, CSE, ISE, EEE, ECE, AE, and CIV

**4. Annual/ semester/choice based credit system:**

Semester and Choice Based Credit System

**5. Participation of the department in the courses offered by other departments:**

NA

**6. Number of teaching posts sanctioned and filled (Professors/Associate Professors/Asst. Professors)**

	Sanctioned	Filled
Professor	1	1
Associate Professors	3	3
Asst. Professors	33	33

**7. Faculty profile with name, qualification, designation, specialization (D.Sc./D.Litt./ Ph.D./M.Phil., etc.)**

**Physics**

Sl.No	Name	Qualification	Specialization	Designation	No. of Years of Experience	No. of Ph.D. students guided in the last 4 years
	Dr.Shaik abdul sulaman	Ph.D	Solid State Physics	Associate professor	20	<b>5</b>
1	Mrs.Jyothi.G. B	[Ph.D]	Electronics	Asst.Prof	15	
		M.Sc				
2	Mrs.Hitha Shetty	[Ph.D]	Nuclear Physics	Asst.Prof	12	
		M.Sc				
3	Mrs.Kavitha Kamath	M.Sc	Solid State Physics	Asst.Prof	10	
4	Dr.Jeevan Kumar	Post Doc		Asst.Prof	0.2	Nil
		Ph.D	Thin films			
5	Mr.G.Ranjith Kumar	[Ph.D]	Spectroscop y	Asst.Prof	6.5	
		M.Phil	Spectroscop y			
		M.Sc	Solid State physics			
6	Mr.Ashok Reddy	[Ph.D]	Spectroscop y	Asst.Prof	05	
		M.Phil				
		M.Sc	Solid state physics			
7	Mr.Shiva	M.Tech	Material Science	Asst.Prof	03	

	Prasad	M.Sc				
8	Mrs.Jyothi Gupta	M.Sc	Nuclear Physics	Asst.Prof	06	
9	Ms.Chaitra.J .C	M.Sc	Solid State Physics	Asst.Prof	03	

### Chemistry

1	Dr. Srilatha Rao	Ph.D.	Spectroscopy	Associate professor	13	Nil
		M.Sc	Chemistry			
2	Dr. Aravinda T	PhD	Organic Chemistry	Asst. Prof.	04	Nil
3	Ms. Sowmya shree A S	M.Sc	Chemistry	Asst. Prof.	02	Nil
4	Ms. Sadhana H Upadhya	M.Sc	Organic Chemistry	Asst. Prof.	1.6	Nil
5	Ms. Ganavi H S	M.Sc	Organic Chemistry	Asst. Prof.	01	Nil
6	Dr. M.S. Raghu	PhD	Pharmaceutical analysis	Asst. Prof.	0.6	Nil

### Mathematics

1	Dr. Indira R	Ph.D	Bio Fluid Mechanics	Professor	15	2
2	Ms.Revathi.B.R	M.sc. Maths		Assistant Professor	22	
		(Ph.D)	Fluid Dynamics			
3 17	Mr. Dhananjaya Murthy	M.sc.maths		Assistant Professor	14	
		(Ph.D)	Graph Theory			
4	Mrs.Sumasree.P	M.sc. maths		Assistant Professor	12	
5	Mrs.Padmavathi.R	M.sc. maths	Fluid Dynamics	Assistant Professor	12	



		(Ph.D)	Fluid Mechanics			
6	Mrs.Chandrakala S	M.sc. maths		Assistant Professor	12	
		(Ph.D)	Graph Theory			
7	Mr.Jagadeesha S	M.sc. maths		Assistant Professor	6	
		(Ph.D)	Fluid dynamics			
8	Mrs.Rashmi B.R	M.sc. maths		Assistant Professor	5	
9	Ms.Priyanka N B	M.sc. maths		Assistant Professor	5	
10	Ms.Sujatha.N	M.sc. maths	Fluid Mechanics	Assistant Professor	3	
		(Ph.D)				
11	Mrs.Sushma M Puranik	M.sc. maths		Assistant Professor	2	
12	Mr.Sumanth Bharadwaj H S	M.sc. maths	Numerical methods	Assistant Professor	0.5	
13	Sreekala C K	M.sc. maths		Assistant Professor	6	
14	Sreegowrav	M.sc. maths		Assistant Professor	2	

### Humanities

1	Mr. Srinivas A	M.A (Ph.D)	English	Asst. Prof.	4	
2	Mrs. Nagarathna	M.A. M.Phil	English	Asst. Prof.	8	
3	Ms. Radha	M.A	English	Asst. Prof.	1	
4	Mrs. Vandana Rai	M.A Ph.D	Political Science Political Science	Asst. Prof.	10	Nil
5	Mrs. Akshatha	M.Sc	Environmental Science	Asst. Prof.	5	Nil
6	Dr. Varalakshmi Naik	Ph.D	Japanese studies	Asst. Prof.	3	Nil

7	Dr.Challaiah	Ph.D	Agriculture	Asst. Prof.	30	
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**8. Percentage of classes taken by temporary faculty – programme-wise information:** NA

**9. Programme-wise Student Teacher Ratio:** NA

**10. Number of academic support staff (technical) and administrative staff: sanctioned and filled:**

1 & 2

**11. Number of faculty with ongoing projects from a) national b) international funding agencies and c) Total grants received. Mention names of funding agencies and grants received project-wise.:**

VGST & 20 Lakhs Jyothi.G.B (physics) + 3.0 Lakhs under VTU (Maths) Dr.Indira

**12. Departmental projects funded by DST-FIST; DBT, ICSSR, etc.; total grants received:** 3.0 Lakhs under VTU (Maths)+ 20 Lakhs (Physics)+4.5lakhs(chemistry)

**13. Research facility / centre with:**

- **state recognition:** VTU (Chemistry & Maths) & Mysore University (Maths)
- **national recognition** : NA
- **international recognition:** NA

**14. Publications:**

\* **number of papers published in peer reviewed journals (national / international):** 65

\* **Monographs** : NA

\* **Chapter(s) in Books:** NA

\* **Editing Books** : NA

\* **Books with ISBN numbers with details of publishers** : NA

\* **Number listed in International Database (For e.g. Web of Science, Scopus, Humanities International Complete, Dare Database - International Social Sciences Directory, EBSCO host, etc.):**

NA

\* **Citation Index – range / average** : NA

\* **SNIP:** NA

\* **SJR:** NA

\* **Impact factor – range / average** : 0.5-1.85

\* **h-index** : NA

**15. Details of patents and income generated** : NA

**16. Areas of consultancy and income generated:** NA

**17. Faculty recharging strategies:** NA

**18. Student projects** : NA

- percentage of students who have done in-house projects including inter-departmental
- percentage of students doing projects in collaboration with industries / institutes

**19. Awards / recognitions received at the national and international level by:** NA

- Faculty
- Doctoral / post doctoral fellows
- Students

**20. Seminars/ Conferences/Workshops organized and the source of funding (national / international) with details of outstanding participants, if any.**

ISTE-Ramanujan workshop on mathematics and its application funded by ISTE

**21. Student profile course-wise:** NA

**22. Diversity of students:** NA

**23. How many students have cleared Civil Services, Defense Services, NET, SLET, GATE and any other competitive examinations?** NA

**24. Student progression:** NA

**25. Diversity of staff**

<b>Percentage of faculty who are graduates</b>	
<b>of the same parent university</b>	NA
<b>from other universities within the State</b>	96.33%
<b>from other universities from other States</b>	3.67%

**26. Number of faculty who were awarded Ph.D., D.Sc. and D.Litt. during the assessment period.**

NIL

**27. Present details about infrastructural facilities**

- a) Library : NA  
b) Internet facilities for staff and students : YES  
c) Total number of class rooms : 12  
d) Class rooms with ICT facility : NIL  
e) Students' laboratories : 5  
f) Research laboratories : 1

**28. Number of students of the department getting financial assistance from College:**

NA

**29. Was any need assessment exercise undertaken before the development of new program(s)? If so, give the methodology: NA**

**30. Does the department obtain feedback from?**

**a. Faculty on curriculum as well as teaching-learning-evaluation? If yes, how does the department utilize it?**

- Preparation of curriculum by the faculty in consultation with senior faculty.
- DUGC consists of senior faculties who discusses about prepared curriculum.
- BOS will have faculties at deferent cadre who gives suggestion about curriculum.

**b. Students on staff, curriculum as well as teaching-learning-evaluation and what is the response of the department to the same?**

Yes on staff. If the feedback is low, HOD and principal inform the faculty about the same.

Alumni are part of BOS, who gives suggestion on as teaching-learning – evaluation. Valid inputs will be considered by the departments.

**c. Alumni and employers on the programmes and what is the response of the department to the same?**

NA

**31. List the distinguished alumni of the department (maximum 10) : NA**

**32. Give details of student enrichment programmes (special lectures / workshops / seminar) with external experts.**

NA

**33. List the teaching methods adopted by the faculty for different programmes.**

- Tutorial approach
- Problem solving

**34. How does the department ensure that programme objectives are constantly met and learning outcomes monitored?**

Problem solving

**35. Highlight the participation of students and faculty in extension activities:**

- The College has started and supported various clubs / associations to sensitize the faculty and students on Institutional Social Responsibilities. Some of the social outreach clubs which have created an impact on the students' campus experience are as follows:
  - i) National Cadet Corps
  - ii) National Service Scheme
  - iii) Rotaract Club of "NMIT – Bengaluru"
  - iv) Youth Wing of Red Cross Society
  - v) Literary Forum

**Some of the activities arranged through these clubs are**

- Awareness programs of social responsibilities
- Blood donation camps
- NSS & NCC Camps
- Organ Donation camps
- Distributions of School furniture, Text books & stationeries to Govt Schools in the neighbouring villages
- Literacy Programs

The Faculty of the department actively involved in the said activities.

**36. Give details of "beyond syllabus scholarly activities" of the department. :**

NA

**37. State whether the programme/ department is accredited/ graded by other agencies. Give details:**

VTU (Maths)

**38. Detail any five Strengths, Weaknesses, Opportunities and Challenges (SWOC) of the department**

Strengths	Weaknesses	Opportunities	Challenges
<ul style="list-style-type: none"> <li>• Flexible course curriculums supporting current trends in mathematics and application based.</li> <li>• Good relations between teachers and students</li> <li>• Faculty have registered and are engaged in research leading to Ph.D</li> <li>• Faculty are supportive of each other and collegial</li> <li>• A strong focus on quality teaching with a faculty that excels in teaching students at all levels</li> <li>• The department is strongly student centered and focused</li> <li>• Tutorial approach is used in order to help weak students</li> </ul>	<ul style="list-style-type: none"> <li>• Inadequate research culture emanating from the initial “developmental” focus.</li> <li>• Low proportion of PhD holders among academic staff.</li> </ul>	<ul style="list-style-type: none"> <li>• Enhanced Learning, for widening the reach, and improving the effectiveness of Engineering Education.</li> <li>• New opportunities for tie ups between department and academic institutes like IISC, etc</li> <li>• Research environment for students</li> </ul>	<ul style="list-style-type: none"> <li>• Increased class size decreases faculty ability to serve students</li> <li>• Limited faculty rewards and recognition</li> <li>• Low faculty retention</li> </ul>

**39. Future plans of the department.**

- To develop innovative methods teach and improve mathematical ability of students who are academically weak
- To involve more faculties in research activities.

## **Post-accreditation Initiatives**

If the college has already undergone the accreditation process by NAAC, please highlight the significant quality sustenance and enhancement measures undertaken during the last four years. The narrative may not exceed five pages.

**NOT APPLICABLE**

## **Declaration by the Head of the Institution**

I certify that that the data included in this Self-Study Report (SSR) are true to the best of my knowledge.

This SSR is prepared by the institution after internal discussions, and no part thereof has been outsourced.

I am aware that the Peer team will validate the information provided in this SSR during the peer team visit.

Signature of the Head of the institution  
With seal:

Place: Bangalore  
Date: 29-11-2013



## ANNEXTURE A

### List the Major papers presented in National/International Conferences or Journals (2009 onwards)

#### Electrical and Electronics Engineering

1. Dr. H.M. Ravikumar Micro level energy planning for rural area of Malnad region Ciit International journal of programmable device circuits and systems, July /vol 4/11/2012
2. Dr.H.M.Ravikumar Comparison of discrete wavelet transform (DWT),lifting wave let transform (LWT) stationary wavelet transform (SWT) And S transform in power quality analysis European journal of scientific research Vol.39/4/2010
3. Dr.H.M.Ravikumar Comparison of DWT ,LWT,SWT,S-transform and classification and chracterisation of power quality events using LWT International journal on electronics & electrical engineering (IJEET),2010,ISSN 0974-2042 code:IJEET/WINTER/2009/011/03
4. Sanjeev K Nayak and DNGaonkar Fuzzy Logic Controlled Microturbine Generation System for Distributed Generation Application National System Conference-2010 (NSC-2010), At National Institute of Technology Karnataka, Surathkal, Mangalore-575025, INDIA.
5. Sanjeev K Nayak and D N Gaonkar Modeling and Performance Analysis of Microturbine Generation System for Distributed Generation A Review IEEE International Conference on Energy Technology, Case Western University, USA. 25<sup>th</sup>-26<sup>th</sup> May 2011
6. Sanjeev K Nayak and D N Gaonkar Combined Model of Fuel cell and Microturbine Generation System for Distributed Generation, IEEE-PES-ISGT-International Conference on Smart Grid and Tecchnology-, Jeddah, Saudi Arabia.17<sup>th</sup>-21<sup>st</sup>- December 2011
7. Santohosh Kumar A, D N Gaonkar and Sanjeev K Nayak Performance Study of Grid Connected Fuel Cell Based Distributed Generation System with Ultracapacitor IEEE-PES-ISGT-International Conference on Smart Grid and Tecchnology- Jeddah, Saudi Arabia.17<sup>th</sup>-21<sup>st</sup>- December 2011.
8. Sanjeev K Nayak and D N Gaonkar Coordinated voltage control in 3 phase unbalanced distribution system with multiple regulators using Genetic Algorithm International Conference on Advances in Energy Engineering, (ICAEE-2011),25<sup>th</sup>-28<sup>th</sup> December 2011, Bangkok, Thailand.
9. Sanjeev K Nayak and D N Gaonkar Fuzzy Logic Controlled Microturbine Generation System for Distributed Generation International Journal of Energy and Procedia, Elsevier, Science Direct, Vol, 14, 2012, pp. 1213–1219.
10. Sanjeev K Nayak and D N Gaonkar Modeling and Performance Analysis of Microturbine Generation System for Grid connected and Islanded mode of

- Distributed Generation International Journal of Distributed Energy Resources, Germany.
11. Sanjeev K Nayak and D N Gaonkar Modeling and Control of Fuel cell and Microturbine Based Hybrid Distributed Generation System International Journal of Electric Power Systems Research, Elsevier, Science Direct.
  12. Veena S, Veda Sandeep Nagaraja, S.L.Pinjare An ASIC Implementation of a Neuron, 34<sup>th</sup> National Systems Conference, 10-12<sup>th</sup> December 2010.
  13. Veena S., Veda Sandeep Nagaraja, S.L.Pinjare, Design and Implementation of a 4:2:2:4 Neural Network Architecture, International Conference on Frontiers of Computer Science, August 7- 9<sup>th</sup> 2011.
  14. Maya K N & Vasudha Hegde Control Strategies for HVDC–Connected Offshore Wind Farm NCRTE'11 held at M S Engineering College, Bangalore Oct2011.
  15. V.M.Parthasarathy, Sachin Uapre Nuclear power-Pros & cons, NCRTE11 National conference on power system 148-153/ OCTOBOR, 2011.
  16. V.M.Parthasarathy, Sachin Uapre Northern grid blackout-a case study National conference on power system 23-28/ October, 2012.

## **Information Science & Engineering**

1. Kavya. B.S., Sandhya S.V, Sanjay. H. A, “**CPU- Based Map Reduce Frameworks: Performance Evaluation**” Poster Presentation at International Conference on High Performance Computing (HiPC), Goa, India, December 2010
2. Ashwini J P, Sushma M and Dr. Sanjay H A, “**Queuing Delay Aware Path Selection Algorithm As Extension to OSPF**” in International Conference on Networking and Computer System (ICNCS, 2011)(IEEE) held at ViIT, Kanyakumari, India in the month of April, 2011
3. K. Aditya Shastry & Chandrashekhar.B.N "**Ellipsoid Based Collision Detection for Virtual Reality Applications**" International Conference on Computer Science & Engineering at RLJIT Bangalore Sept 17th and 18th 2010
4. PrasantaGogoi, B. Borah and D.K. Bhattacharyya, “**Supervised Anomaly Detection using Clustering based Normal Behavior Modeling**”, International Journal of Advances in Engineering Sciences, Vol 1 No. 1 (March, 2011), pp 12-17, ISSN: 2231-0347.
5. Mohan Murthy M K, Sanjay H A, Ashwini J P , “**Pricing Models And Pricing Schemes Of IaaS Providers: A Comparison Study**” in 2012 International Conference on Advances in Computing, Communications and Informatics,(ICACCI-2012), 3 – 5 August 2012, Chennai, India.(ACM)
6. Mohan Murthy M K,Ameen, Sanjay H A, Yaseer , “**Software Licensing Models and Benefits in Cloud Environment: A Survey** ” in International Conference on Advances in Computing -ICAdC2012, July 4-6, 2012, Bengaluru, India
7. PrasantaGogoi and B. Borah and D. K. Bhattacharyya, “**Network Anomaly Detection Using Unsupervised Model**”, International Journal of Computer Applications (Special Issue on Network Security and Cryptography) , Vol. NSC, No. 1, pp 19-30, December, 2011, Published by Foundation of Computer Science, New York, USA.
8. Deepika K M, “**Design of Fuzzy Inference System for Estimating the Flight Controlled Dynamics**”, in International Conference on Recent Trends in Information Processing and Computing held at Malaysia on November 2011(Springer)
9. Ameen, M.N.; Sanjay, H.A.; Patel, Y., "**A service provisioning and managing framework for Platform as a Service in educational cloud**", 2nd IEEE International Conference on Parallel Distributed and Grid Computing (PDGC), 2012 , vol., no., pp.262,267, 6-8 Dec. 2012 doi: 10.1109/PDGC.2012.6449829
10. Mohan Murthy, Sanjay H A “**Profit Driven Framework For Provisioning Resources To User Applications In Cloud Environment**”, Poster Presentation at International Conference on High Performance Computing (HiPC), Pune, India, December 2012

11. Mohan Murthy M K,Ameen, Sanjay H A, Yaseer , “**Prediction Based Dynamic Configuration of Virtual Machines in Cloud Environment**”, International Symposium on Cloud and Services Computing (IEEE) held at NITK Karataka at December 2012.
12. PrasantaGogoi, M.H. Bhuyan, D.K. Bhattacharyya and J.K. Kalita, “**Packet and Flow Based Network Intrusion Dataset**”, 5th International Conference on Contemporary Computing (IC3-2012), ISSN: 1865- 0929, CCIS 306, pp. 315--327. Springer, Heidelberg (October, 2012).
13. PrasantaGogoi, B. Borah and D. K. Bhattacharyya, “**Network Anomaly Identification using Supervised Classifier**”, Informatica, an International Journal of Computing and Informatics, the Slovenian Society Informatika (accepted) print ISSN: 0350-5596, web ISSN: 1854-3871
14. Ashwini J P, Divya C and Sanjay H A, “**Efficient Resource Selection Framework to Enable Cloud for HPC applications**” in International Conference on Computing and Communication to be held in Jawaharlal Nehru National Institute of Technology, Allahabad.September 2013
15. Ashwini J P, Sushma M and Sanjay H A, “**Queuing Delay Aware Path Selection Algorithm As Extension to OSPF**” in International Conference on Networking and Computer System (ICNCS, 2011)(IEEE) held at ViIT, Kanyakumari, India in the month of April, 2011
16. M. K. Mohan Murthy, H. A. Sanjay, J. P. Ashwini, “**Pricing models and pricing schemes of IaaS providers: a comparison study**”, proceedings of the International Conference on Advances in Computing, Communications and Informatics, Pages 143-147, ACM, 2012.
17. Ashwini J P, Divya C and Sanjay H A, “**Efficient Resource Selection Framework to Enable Cloud for HPC applications**” in International Conference on Computing and Communication to be held in Jawaharlal Nehru National Institute of Technology, Allahabad.September 2013
18. Manjunath B A, Dr. Prasanta Gogoi, “**Network Intrusion Detection: A Detail Survey**” in International Conference on ICECIT to be held at SIT, Tumkur on November 22<sup>nd</sup> & 23<sup>rd</sup>, 2013.
19. PrasantaGogoi, B. Borah and D. K. Bhattacharyya and J.K Kalita,”**A Roughset Based Effective Rule Generation Method for Classification with an Application in Intrusion Dection**”, International Journal of Security and Networks (IJSN), Inderscience, Vol.8, No.2, pp 61-71, August, 2013
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10. H.R.Dhananjaya, P.C.Pandey, J. Nagabhushanam, Zaina Ibrahim, "New nine node Lagrangian quadrilateral element based on Mindlin Reissner theory using IFM", *Structural Engineering and Mechanics–An International Journal*, Vol 41, No 2. 2012,. pp.205 -229

11. H R Dhananjaya, T R Madhavan, "A study on flexural behavior of pre-tensioned pre-stressed fiber concrete rectangular beams with fly ash", *Anusandhana-Journal of Science, Engineering and Management*, Vol. 1. No.2, 2012, pp 09- 17
12. Paper on "Inclined Rectangular Weir-Flow Modelling" In the National journal of Earth Science India, Vol 4(II), April, 2011
13. Paper on "Inclined Trapezoidal Weir-Flow Modelling" In the International journal of Advanced Engineering and Technology, Vol (II) / Issue IV/ 2011"
14. Paper on "Generalized head discharge – inclination relationship for flow through inclined triangular weir" In the national journal of applied hydrology, Vol XXIV No.1& 2 2011, PP 86-95.
15. Paper on "Flow through non coplanar rectangular horizontal slots" In the International journal of Emerging Technologies in computational and Applied Science ,5(5),June-August,2013,pp 457-461.
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"Ultimate power production by utilizing methane gas resources from municipal solid waste", *Midas Touch International Journal of commerce, Management & Technology*, Vol 2, No.1, January 2014, ISSN:2320-7787, Page 262-265

## II List of Papers published in National / International Conferences / Seminars:

### **Dr. H.R.Dhananjaya:**

1. H.R.Dhananjaya (2000), "Computerization Of Indian Standard Codes For Concrete Mix Design", Proceedings of National Seminar on *Quality Assurance and Reliability in Structures (QUARS-2000)*, 16-17 June 2000, ACCE, Coimbatore.
2. H.R.Dhananjaya, J.Nagabhushanam, P.C.Pandey(2001), "Application Of Integrated Force Method For Plate Bending Problems", Proceedings of *International Conference on Civil Engineering, ICCE-2001*, Indian Institute of Science, Bangalore, 23-25 July, 2001, pp. 230-239.
3. H.R.Dhananjaya, P.C.Pandey, J.Nagabhushanam(2001), "Rectangular Plate Bending Elements Based On Mindlin-Reissner Plate Theory For Integrated Force Method", Proceeding of *National Seminar on Advances in Structural Engineering* , Sri Venkateshwara University, Tirupati, 21-21 December, 2001, pp. 53-61.
4. H.R.Dhananjaya (2002), "Computer Aided Design Of Post Tensioned Pre-Stressed Concrete T- Beams For Bridges And Industrial Structures", Proceedings of National Seminar on *Recent Challenges in Civil Engineering,(RCCE-2002)*, 21-22 June 2002, pp.73-92.
5. H.R.Dhananjaya, P.C.Pandey, J.Nagabhushanam(2003), "Kirchhoff Theory Based Four Node Rectangular Plate Bending Element For Integrated Force Method", Proceeding of National Conference on *Developments in Engineering and Technology (DIET-2003)*, Kakatiya Institute of Technology and Science, Warangal, (AP), 23<sup>rd</sup> March, 2003, pp. I45-I49.

6. H.R.Dhananjaya, J.Nagabhushanam, P.C.Pandey(2003), "Conforming Four Node Rectangular Plate Bending Element Based On Kirchhoff Theory For Integrated Force Method", Proceedings of *National Conference on Developments in Engineering, Technology and Management*, Adhiyamaan Engineering college, Hosur, 8-9 September 2003, pp. 3.10-3.22.
7. H.R.Dhananjaya, P.C.Pandey, J.Nagabhushanam(2003), "Mindlin-Reissner Theory Based Bilinear Quadrilateral Plate Bending Element For Integrated Force Method", Proceedings of All India Seminar on *Emerging Trends in Structural Mechanics and Composites (ETSMC-2003)*, National Institute of Technology, Rourkela, 1-2 November 2003, pp.375-386.
8. H.R.Dhananjaya, P.C.Pandey, J.Nagabhushanam (2003), "Application of Integrated Force Method for Symmetrical Laminated Composite Plates", Proceedings of All India Seminar on *Emerging Trends in Structural Mechanics and Composites (ETSMC-2003)*, National Institute of Technology, Rourkela, 1-2 November 2003, pp.387-396.
9. H.R.Dhananjaya, B.M.Ananthayya(2004), "Flexural Behavior Of Pre-Tensioned Pre-Stressed Concrete Rectangular Beams With Fly Ash", proceedings of National Workshop on *Advances In Materials And Mechanics Of Concrete Structures*, Indian Institute of Technology Madras, Chennai - 600 036, 02 - 03 July 2004, pp. 105 – 112
10. H.R.Dhananjaya, Rajesh Anil Mathias(2004), "Flexural Behavior of Post-tensioned Pre-stressed Concrete Rectangular Beams with Fly ash", Proceedings of National Conference on *Recent Advances in Structural Engineering (RASE-2004)*, Jawaharlal Nehru Technological University, College of Engineering, Ananthpur, 9<sup>th</sup> September, 2004, pp. 125 – 133.
11. H.R.Dhananjaya, Ashwin Shailesh L. Rego(2004), "Flexural Behavior of Post-tensioned Pre-stressed Concrete Rectangular Beams with Fly ash and Iron ore Tailings", Proceedings of National Conference on *Recent Developments in Materials and Structures(REDEMAT – 2004)*, National Institute of Technology, Calicut, 02 – 03 December 2004, pp. 475 – 480
12. H.R.Dhananjaya(2004), "Computer Aided Optimum Design of Post-tensioned Pre-stressed Concrete Box Girders for Bridges and Industrial Structures", Proceedings of the International Conference on *Current Trends in Aqueducts, Road, Rail and Marine Bridges*, Organized by National Bridge Research and Development Center(NBRDC), Hyderabad, 20 – 22 December 2004, pp. 205 – 223.
13. H.R.Dhananjaya and T.R. Madhavan,(2005), "Flexural Behavior of Pre-tensioned Pre-stressed Fiber Concrete Rectangular Beams with Fly ash", Proceedings of International Conference on *Advances in Concrete Composites and Structures(ICACS – 2005)*, Structural Engineering Research Center(SERC), Chennai, 6 – 8 January, 2005, pp. 381 – 388.
14. H.R.Dhananjaya, P.C.Pandey and J. Nagabhushanam(2005), "Mindlin-Reissner Theory Based Four Node Rectangular Laminated Composite Plate Bending Element Using Integrated Force Method", Proceedings of National Conference on *Recent*

- Developments in Structural Engineering(RDSE – 2005)*, Manipal Institute of Technology, Manipal, 29 – 30 August 2005, pp. 109 – 116
15. H.R.Dhananjaya, J. Nagabhushanam and P.C.Pandey, “Automatic Generation of Plate Bending Finite Element’s Equilibrium and Flexibility Matrices Using Integrated Force Method”, *Proceedings of National Conference on Recent Developments in Structural Engineering(RDSE – 2005)*, Manipal Institute of Technology, Manipal, 29 – 30 August 2005, pp.67 - 73
  16. H.R.Dhananjaya, A.K.Nisam, “Flexural Behavior of Post-tensioned Pre-stressed Fiber Concrete Rectangular Beams with Fly ash”, *Proceedings of National Conference on Recent Developments in Structural Engineering(RDSE – 2005)*, Manipal Institute of Technology, Manipal, 29 – 30 August 2005, pp. 247 – 252
  17. H.R.Dhananjaya, P.C.Pandey and J. Nagabhushanam, “Mindlin-Reissner Theory Based Twelve Node Serendipity Rectangular Plate Bending Element Using Integrated Force Method”, *Proceedings of International Conference on Structural Engineering Convention (SEC – 2005)*, December 14 – 16, 2005, Indian Institute of Science, Bangalore.
  18. H.R.Dhananjaya, T.R.Madhavan, and A.K.Nisam “Flexural Behavior of Pre and Post-tensioned Pre-stressed Fiber Concrete Rectangular Beams with Fly ash”, *Proceedings of National Conference on Concrete Technology for Future (NCCTF-2006)*. KEC, Erode, April 21 – 22, 2006, pp. 664 – 671,
  19. H.R.Dhananjaya, P.C.Pandey, J Nagabhushanam, Bimal Mohan “Mindlin\_Reissner Theory Based 9-Node Lagrangian Quadrilateral Plate Bending Element Using Integrated Force Method”, *Proceedings of International Conference on Computational Mechanics and Simulation(ICCMS-06)*, Indian Institute of Technology Guwahati, 8-10, December 2006. pp. 1017 – 1024.
  20. H.R.Dhananjaya, J. Nagabhushanam and P.C.Pandey “ Application of Integrated Force Method to Laminated Composites”, *Proceedings of the International Conference on Computational Mechanics and Simulation(ICCMS-06)*, Indian Institute of Technology Guwahati, 8-10, December 2006, pp 63 – 71.
  21. H.R.Dhananjaya, P.C.Pandey and J. Nagabhushanam, “Closed form solutions of equilibrium and flexibility matrices for rectangular plate bending elements using Integrated Force Method”, *Proceedings of the International Conference on Recent Developments in Structural Engineering (RDSE – 2007)*, Manipal Institute of Technology Manipal, 30 August – 01 September 2007. pp. 256 – 275.
  22. H.R.Dhananjaya, P.C.Pandey, J. Nagabhushanam & Raveendra Achary N, “Laminated composite plates – A review of recent articles”, *Proceedings of the International Conference on Recent Developments in Structural Engineering (RDSE – 2007)*, Manipal Institute of Technology Manipal, 30 August – 01 September 2007. pp. 356 – 363.
  23. H.R.Dhananjaya, P.C.Pandey, J. Nagabhushanam, & Raveendra Achary N, “Mindlin-Reissner theory based eight-node quadrilateral plate bending element for Laminated Composites using IFM”, *Proceedings of the International Conference on*

- Recent Developments in Structural Engineering(RDSE – 2007)*, Manipal Institute of Technology Manipal, 30 August – 01 September 2007. pp. 364 – 373.
24. H.R.Dhananjaya, J. Nagabhushanam, P.C.Pandey & Surjith N.K, “Functionally graded materials and structures – A review”, Proceedings of the *International Conference on Recent Developments in Structural Engineering (RDSE – 2007)*, Manipal Institute of Technology Manipal, 30 August – 01 September 2007. pp. 448 – 455.
25. H.R.Dhananjaya, J. Nagabhushanam, P.C.Pandey & Surjith N.K, “Mindlin-Reissner theory based bilinear functionally graded plate bending element using Integrated Force Method”, Proceedings of the *International Conference on Recent Developments in Structural Engineering(RDSE – 2007)*, Manipal Institute of Technology Manipal, 30 August – 01 September 2007. pp. 456 – 464.
26. H.R.Dhananjaya, P.C.Pandey, J. Nagabhushanam, “Analysis of functionally graded plates using Integrated Force Method”, Proceedings of the *International Conference on Multi-scale Modeling and Simulation (ICMMS – 2008)*, Indian Institute of Science Bangalore Manipal, 2-4 January 2008.
27. H.R.Dhananjaya, P.C.Pandey, J. Nagabhushanam “*Mindlin-Reissner theory based new 16-node rectangular plate bending element using Integrated Force Method*”, Proceedings of the International Congress on Computational Mechanics and Simulation (ICCMS-2009), at Indian Institute of Technology Bombay, Mumbai, 1-5 December 2009, pp: 157-158.
28. H.R.Dhananjaya, Vinod kumar V V, Sunil M L “Cost effective Concrete using Lime sludge and fly-ash”, Proceedings of the National Conference CCERP-2012, Manipal Institute of Technology, Manipal, pp 1225.
29. H.R.Dhananjaya, Sunil M L, Vinod kumar V V, “Cost effective Concrete using copper slag and fly-ash”, Proceedings of the National Conference CCERP-2012, Manipal Institute of Technology, Manipal, pp 1236.

**Mr. Ananthayya M.B.:**

1. “*Flexural Behavior of Pre-Tensioned Pre-Stressed Concrete Rectangular Beams with Fly Ash.*” National Workshop on Advances in Materials and Mechanics of Concrete Structures, 02-03 July, 2004 Indian Institute of Technology Madras. Chennai,
2. “*Inclined trapezoidal weir – Flow modeling*”- National Conference on Advances in metrology at central manufacturing technology institute Bangalore, 16<sup>th</sup>, 18 February 2011.
3. “*Flow modeling over inclined triangular weir - A new approach*” - National Conference on Emerging trends in Engineering and technology on 28<sup>th</sup> and 29<sup>th</sup> Jan 2011 at B.Y.Patil College of Engineering and technology at Maharashtra.
4. “*Behaviour of fiber reinforced concrete*” National Conference on ‘Emerging Trends in Engineering and technology’ on 12<sup>th</sup> March 2011 at Sanjivani Vision 2011 held at college of Engineering, Kopergaon, Maharashtra

5. “*Experimental Investigation For Flow Through Stepped Horizontal Rectangular Slots*” National Conference on Recent Developments in Civil Engineering, Held at VVIET Mysore, April 8-9,2011
6. “*Experimental Investigation For Flow Through Stepped Vertical Orifice*” National Conference on Recent Developments in Civil Engineering, Held at VVIET Mysore, April 8-9,2011
7. “*Analysis of flow through Stepped weir*” National Conference on Recent Developments in Civil Engineering, Held at VVIET Mysore, April 8-9,2011
8. “*Comparison of Flow Through Rectangular weir With Positive and Negative Inclinations*” National Conference on Recent Developments in Civil Engineering, held at VVIET Mysore, April 8-9,2011
9. “*Flow Analysis of For Triangular weir With Positive and Negative Inclinations*” National Conference on Recent Developments in Civil Engineering, held at VVIET Mysore, April 8-9,2011
10. Special- Linear Proportional weirs, National conference on “*Hydraulics, Water Resources, Coastal and Environmental Engineering*” HYDRO-2009 at CWPRS, Pune, December 17-18,2009.
11. “*Behaviour of fiber reinforced concrete with iron ore tailing under cyclic compressive stresses*”- National Conference at knowledge Utsav a national conference on 28 Aug. 2010 at Jain college of Engineering, Bangalore.
12. “*Flow modeling over inclined rectangular weir – A new approach*” - National Conference on HYDRO 2010 at M.M. Engineering College, M.M. University Mullan, Hariyana
13. “*Impact of Impounding water of Peragodu Reservoirs on Fluoride Concentration of Ground water at Bagepali Town*” International Conference held at N M A M I T, Nitte, South Canara district, Karnataka, on 4<sup>th</sup> & 5<sup>th</sup> May 2011.
14. “*Discharge Measurements Using non coplanar horizontal slots*” International Conference on Technology Management for Green Environment (ICTMGE-2013) held during 19 to 23rd Sept 2013 at VTU Regional center Mysore.
15. “*Discharge Measurements Using Vertical Notch*” International Conference on Technology Management for Green Environment (ICTMGE-2013) held during 19 to 23rd Sept 2013 at VTU Regional center Mysore.

**Ms. Archana Nayak:**

1. “*Treatment of pharmaceutical waste water by coagulation process*”, National conference on sustainable technologies at Vellore Institute of Technology, Tamil Nadu

**Ms. Radhika V. Gaikwad:**

1. “*Seismic response of steel pole*”, National Conference on Contemporary Civil Engineering Research & Practics,CCERP-2012, 20-21 April 2012, Manipal Institute of Technology, Manipal



**Mr. Nanjundi Prabhu:**

1. “*Identification of ground water potential zone in hard rock terrain*”, National Integrated water, waste water & isotope hydrology, 25-27 July 2013, UVCE, Bangalore University, Bangalore

**Ms. Rashmi H.R.:**

1. “*Ultimate power production by utilizing methane gas resources from municipal solid waste*”, International Conference on Technology Management for Green Environment (ICTMGE-2013), 19-21 September 2013, VTU Regional Center, Mysore
2. “*Use of plastic waste to improve the properties of concrete*”, National Conference “Indian Congress on curbing e-waste”, 9<sup>th</sup> November 2013, Archarya Institute of Technology, Bangalore

**Mr. Jairaj:**

1. “*Behaviour of Squance Model Fooling on Soil Reinperced with Coir Geotecnics*”, Indian Geotechnical Conference (IGC-2013) on “Geotechnical Advances and Novel Geomechanical Applications (GANGA)”, 22-24 December 2012, IIT Roorkee
2. “*Effect of Length Coirfibre Strength of Line Treated Black Cotton Toil*”, Indian Geotechnical Conference (IGC-2013) on “Geotechnical Advances and Novel Geomechanical Applications (GANGA)”, 22-24 December 2012, IIT Roorkee

### III. Recognitions and awards

1. Dr H.R.Dhananjaya is listed in the prestigious book “*Who is Who in Computational Science and Engineering(WWCSE)*” published by Saxe - Coburg Publications in 2005/06. U.K
2. Dr H.R.Dhananjaya a Visiting Professor to University of Malaya, Kuala Lumpur – 050603, Malaysia

### IV Books and Monographs

1. Dr H.R.Dhananjaya has edited the Souvenir and the Proceedings of National Conference on “*Recent Developments in Structural Engineering (RDSE – 2005)*”, held at M I T, Manipal
2. Dr H.R.Dhananjaya has edited the Proceedings of International Conference on “*Recent Developments in Structural Engineering (RDSE – 2007)*”, held at M I T, Manipal

**Department of Aeronautical Engineering:**

1. Santhosh.N<sup>1</sup>, Mahamad Mudabir R, Thermomechanical Modeling and Experimental Evaluation of Friction Stir Welds of Aluminium AA6061 Alloy, International Journal of Engineering Research and Technology, Vol.2, Issue 8, August-2013, ISSN: 2278-0181.
2. Santhosh.N<sup>1</sup>, Dr.P.B.Shetty, Vinayaka.N, Srikanth.H.V, Production of Biodiesel from Milk Dairy Wash Water Scum and Study of its Characteristics, International Journal of Advanced Innovation and Research, Vol.2, Issue 8, August-2013, ISSN:2278-7844.
3. Harish.H.V, CFD Simulation and Experimental Verification of Air flow through Heated Pipe, Vol.2, Issue 7, July-2013, ISSN: 2278-7844.
4. Srikanth.H.V, Production of Biodiesel from Milk Dairy Wash Water Scum and Study of its Characteristics, International Journal of Advanced Innovation and Research, Vol.2, Issue 8, August-2013, ISSN:2278-7844.
5. 1. SANTHOSH.N<sup>1</sup>, Dr. B.K. MURALIDHARA<sup>2</sup>, PRAVEEN KUMAR S<sup>3</sup>, Flow Simulation and Characterization of Aluminum Forgings Conforming to AA 6061 Specification, 3<sup>rd</sup> International Conference on Recent Advances in Material Processing Technology (RAMPT), National Engineering College, Kovilpatti, K.R.Nagar, Tamil Nadu, India. PP 114-117, Proceedings of Conference, ISBN 978-81-904334-2-6.
6. SANTHOSH.N<sup>1</sup>, MAHAMAD MUDABIR<sup>2</sup>, Thermomechanical Modeling and Experimental Evaluation of Friction Stir Welds of Aluminium AA 6061 Alloy, International Journal of Engineering Research and Technology (IJERT), ISSN: 2278-0181, Vol. 2, Issue 8, August-2013, PP 1494-1499.
7. SANTHOSH.N<sup>1</sup>, Dr.P.B.SHETTY<sup>2</sup>, VINAYAKA.N<sup>3</sup>, SRIKANTH.H.V<sup>4</sup>, Production of Biodiesel from Milk Dairy Wash Water Scum and Study of its Characteristics, International Journal of Advanced and Innovative Research (IJAIR), ISSN: 2278-7844, Vol. 2, Issue 8, August-2013.
8. SRIKANTH.H.V<sup>1</sup>, SANTHOSH.N<sup>2</sup>, SHARANAPPA GODIGANUR<sup>3</sup>, J.VENKATESH<sup>4</sup>, Fish Oil Biodiesel as an Additive in Diesel-Ethanol Blends for a Four Stroke Single Cylinder Diesel Engine, International Journal of Engineering Research and Technology (IJERT), ISSN: 2278-0181, Vol. 2, Issue 9, September 2013, PP 1343-1352.
9. SANTHOSH.N<sup>1</sup>, VINAYAKA.N<sup>2</sup>, Dr.ASWATHA<sup>3</sup>, UDAY.M<sup>4</sup>, PRAVEENA.B.A<sup>5</sup>, Computational Analysis and Design for Precision Forging of Aluminium AA 6061 Connector, International Journal of Computational Engineering Research (IJCER), Vol. 03, Issue 9, ISSN 2250-3005, PP 36-43.

10. SANTHOSH.N<sup>1</sup>, RUDRA NAIK.M<sup>2</sup>, Dr.U.N.KEMPAIAH<sup>3</sup>, PRAVEEN KUMAR.S<sup>4</sup>, MAHENDRA.M.A<sup>5</sup>, Development and Characterization of High Performance Reinforced Carbon - Fiber and Glass – Fiber composites, Indian Journal of Advanced and Innovative Research (IJAIR), ISSN 2278-7844, Vol. 2, Issue 9, September-2013, PP 99-105.

**Department of Management Studies**

1. Senthil Kumar (2012). Talent Management: Importance, Process, Retention and Strategies for Business Organization. International Journal of Research in Commerce and Management, 2 (6), June, ISSN No: 2231-4245.
2. Harish Babu S (2012). SWOT Analysis for opening of FDI in Indian Retailing. European Journal of Business and Management, 4 (3), January, 55-65, ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online).
3. Harish Babu S (2012). The Law and the Crisis Management in a Hospital Setup vis a vis Consequences On HealthCare Delivery - A Case Study Of Jehovah's Witnesses. International Journal of Research in Commerce, Economics and Management, 2 (6), June, ISSN 2231-4245.
4. Harish Babu S (2012). Foreign Direct Investment in India and Its Economic Significance In Relation To Development of Various Sectors. European Journal of Business and Management, 3 (3), pp 227-235, ISSN 2222-1905 (Paper) ISSN 2222-2839 (Online).
5. Harish Babu S (2012). Multiple Facets of Organ Transplantation in a Tertiary Care Hospital Management, India. International Journal of Research in Commerce, IT and Management, 2 (9), September, pp 61-65, ISSN 2231-5756.
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7. Senthil Kumar (2011). Talent Management: The Key to Organizational Success. European Journal of Business and Management, 1 (2), ISSN No: 2225-0581. URL: [www.iiste.org/Journal/index.php/IEL/article/view/741](http://www.iiste.org/Journal/index.php/IEL/article/view/741)
8. Senthil Kumar (2011). Knowledge Management for E- Business performance. Sangrahana (International Bi annual Refereed Journal), 2 (1), Jan-June, ISSN No.09757724.
9. Shroff Rudramurthy Pramod and Sambatur Sridhar (2011). Study of Motivators and Demotivators affecting the Performance of Employees in the Construction Industry, The International Journal of Construction Management, 11(3), September, pp 49-66, ISSN 1562-3599; CODEN IJCMGZ.
10. J. Rath and M. Chatterjee (2011). Optimizing the Benefits of Corporate Social Responsibility (CSR) In Small And Medium Enterprises (SMEs)- An Indian Study. International Journal of Arts and Sciences, 4, (12), pp-301-322
11. J. Rath and Gurtoo A. (2012) Corporate Social Responsibility Orientation: Theorizing Oliver Williamson's Framework. Vikalpa- The Journal of Decision Makers, IIM Ahmedabad, 37 (2), pp 9-18.
12. Senthil Kumar (2012). The War for Talent – Retention Strategies in Post Economic Crisis, SAMSMRITI Journal, 6(2), July-December, ISSN No: 0976-304X.
13. Harish Babu S (2011). Entry of International Retailer in Indian Retailing. Journal of Management, II(II), July-December, ISSN: 2231-2145 .

14. Senthil Kumar (2011). Drivers of Customer Loyalty in a Retail Store Environment. Journal of Research Centre for Consumerism, Department of Business Administration, Kalasalingam University , 1-5 January, pp 2-6, ISBN: 978-81-905380.
15. Harish Babu S (2011). FDI in Indian retailing - Case of Wal-Mart, M.S.Ramiah Management Review, Vol.3, Issue 1, Jan-June, ISSN: 0975-7988.
16. Harish Babu S (2010). FDI and Management of Political Risk, Journal of Management, 01(01).
17. Sambatur Sridhar, Beena Dias and Sequeira A.H. (2010). Measuring Faculty Productivity – A Conceptual Review. AIMIT Working Paper Series, St Aloysius Institute of Management and Information Technology, Vol 1 No 1, pp 1-17, ISSN 2229-5496.
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19. Harish Babu S. (2011). A Study of Foreign Direct Investment equity inflows in India, presented at the International Conference on “Global Impact of Indian Management” organized by The Oxford College of Engineering, Bangalore on 27<sup>th</sup> & 28<sup>th</sup> April.
20. Harish Babu S. (2011). Entry of International retailers and its Impact on Indian retailing – A case of Wal-Mart, presented at the International Conference on “India Inc: challenges and opportunities” held at Don Bosco Institute of Bio-science and Management Studies, Bangalore on 3<sup>rd</sup> – 5<sup>th</sup> January.
21. Beena Dias, Sambatur Sridhar and Rowena Wright (2011). An Exploratory Study on Perceived Satisfaction with Competencies of HRD Practitioners and Its Implications. International HR Conference 2011, IES Management College & Research Centre, January 12. Proceedings Volume “Changing Dynamics of Human Resources”, pp 474-485, Excel Publishers, ISBN 978-93-80697-46-8.
22. Harish Babu (2010). Sales Associate Service Attitude – Challenges for Retailers, paper presented at the International Conference on “Management of Emerging paradigm conflicts in a Globalizing world” jointly organized by PESIT and Indiana University of Pennsylvania at PESIT campus, Bangalore on 8 - 9 January. (ISBN: 978-81-8424-594-3, Allied Publishers Pvt Ltd. Pg.338-347).
23. Harish Babu S. (2010). Driving Forces and potential Impact of Medical Tourism in India, paper presented at the International Conference on “Accelerating Economic Revival through Innovation and Reform” organized by Women’s Christian College, Chennai on 5-6, February. (ISBN: 978-93-80043-76-0, Excel India Publishers, New Delhi).
24. Harish Babu S and Senthil Kumar (2010). Ethical issues in Higher Education, paper presented at the International Conference on “Convergence of science & Engineering in Education and Research – A Global perspective in the new

- millennium” organized by Dayananda Sagar College of Engineering, Bangalore, 21-23, April.
25. Senthilkumar (2010). Talent Development in downturn Economy paper presented at the International Conference organized by Dayananda Sagar College of Engineering, Bangalore.
  26. Harish Babu S (2010). Global Recession and HR, paper presented at the International Conference on “Convergence of Science & Engineering in Education and Research – A Global perspective in the new millennium” organized by Dayananda Sagar College of Engineering, Bangalore, 21-23, April.
  27. Harish Babu S (2010). Food retailing in India - issues and opportunities, paper presented at the International Conference on “Management of Change” organized by Kristu Jayanti College of Management and Technology, Bangalore on 2 - 3 February.
  28. Prof. Shilpa Ajay and Dr. John Manohar, presented a paper titled *Technological Innovation at Workplace Not Only Makes Employee Helpful but also makes Helpless* at National Conference on Technology in Business organized by Tumkur University and East Point College of Engineering and Technology on 28<sup>th</sup> March 2013.
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## **ANNEXTURE B: Auditor's Report**