

# **Yearly Status Report - 2018-2019**

Part A		
Data of the Institution		
1. Name of the Institution	NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY (AUTONOMOUS)	
Name of the head of the Institution	Dr. H C Nagaraj	
Designation	Principal	
Does the Institution function from own campus	Yes	
Phone no/Alternate Phone no.	08022167803	
Mobile no.	9845275240	
Registered Email	principal@nmit.ac.in	
Alternate Email	sanjay.ha@nmit.ac.in	
Address	PO Box. 6429, Yelahanka, Bangalore	
City/Town	Bangalore	
State/UT	Karnataka	
Pincode	560064	

2. Institutional Status			
Autonomous Status (Provide date of Conformant of Autonomous Status)	03-Jul-2007		
Type of Institution	Co-education		
Location	Urban		
Financial Status	Self financed		
Name of the IQAC co-ordinator/Director	Dr. Sanjay H A		
Phone no/Alternate Phone no.	08022167864		
Mobile no.	9342560303		
Registered Email	sanjay.ha@nmit.ac.in		
Alternate Email	iqac@nmit.ac.in		
3. Website Address			
Web-link of the AQAR: (Previous Academic Year)	https://nmit.ac.in/pdf/KACOGN15183-N itte%20Meenakshi%20Institute%20of%20Tec hnology,%20Bangalore- Karnataka 2017-18.pdf		
4. Whether Academic Calendar prepared during the year	Yes		
if yes,whether it is uploaded in the institutional website: Weblink:	https://nmit.ac.in/pdf/naac2/new/final- UG-ODD-and-Even-Sem- Calender-2018-19.pdf		

# 5. Accrediation Details

Cycle	Grade	CGPA	Year of	Vali	dity
			Accrediation	Period From	Period To
1	A	3.02	2014	05-May-2014	04-May-2019
2	A+	3.33	2020	08-Jan-2020	07-Jan-2025

# 6. Date of Establishment of IQAC 26-Feb-2013

# 7. Internal Quality Assurance System

Quality initiatives by IQAC during the year for promoting quality culture			
Item /Title of the quality initiative by IQAC	Date & Duration	Number of participants/ beneficiaries	
Workshop on New methodologies for accreditation in NAAC	03-Nov-2018 1	110	
Department wise review of research status	12-Nov-2018 15	308	
Department wise Academic and Administrative Audit	01-Mar-2019 6	308	
Parents meet	05-Jan-2019 1	63	
Induction program to newly joined faculty	22-Jul-2019 1	28	
<u>View File</u>			

# 8. Provide the list of Special Status conferred by Central/ State Government-UGC/CSIR/DST/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.

Institution/Departmen t/Faculty	Scheme	Funding Agency	Year of award with duration	Amount
Institution	FIST	DST	2017 1827	6000000
		<u>View File</u>		

9. Whether composition of IQAC as per latest NAAC guidelines:	Yes
Upload latest notification of formation of IQAC	<u>View File</u>
10. Number of IQAC meetings held during the year :	11
The minutes of IQAC meeting and compliances to the decisions have been uploaded on the institutional website	Yes
Upload the minutes of meeting and action taken report	<u>View File</u>
11. Whether IQAC received funding from any of the funding agency to support its activities during the year?	No

# 12. Significant contributions made by IQAC during the current year(maximum five bullets)

1. Departmental Academic and Administration Audit 2. Identifying Slow learners / Irregular students of 1st year with Action plan 3. Reviewing the Research contribution of Faculty 4. NAAC SSR preparation and Submission 5. 360 Degree

#### <u>View File</u>

# 13. Plan of action chalked out by the IQAC in the beginning of the academic year towards Quality Enhancement and outcome achieved by the end of the academic year

Plan of Action	Achivements/Outcomes	
Conduction of soft skills personality development programs for students.	Conducted by placement and training department improving the student skill set and helped them in better employability	
Academic Audit-Faculty (Department Wise)	Audit was conducted from 1st to 20th March, 2019. This helped to improve the teaching learning process, record maintenance etc.	
Review of Mentoring Process (Department Wise)	Improved quality of mentoring process	
Non-Teaching Staff Development Program	Few departments have conducted training in their respective areas in order to improve the skilset of non teaching staff.	
Final Year Project Exhibition	was conducted on 18th April 2019 for 1080 NMIT students. This event brought out the inspiring ideas and served as a platform for demonstration of best projects.	
<u>View File</u>		

# 14. Whether AQAR was placed before statutory body ?

Yes

10.11	T
Name of Statutory Body	Meeting Date
Academic Council	29-Sep-2020
15. Whether NAAC/or any other accredited body(s) visited IQAC or interacted with it to assess the functioning?	Yes
Date of Visit	25-Nov-2019
16. Whether institutional data submitted to AISHE:	Yes
Year of Submission	2019
Date of Submission	30-Jan-2019

17. Does the Institution have Management Information System ?	Yes
If yes, give a brief descripiton and a list of modules currently operational (maximum 500 words)	MyGurukul Net HRMS Login portal Praptha Accounting Management Software EasyLib

# Part B

# **CRITERION I – CURRICULAR ASPECTS**

# 1.1 – Curriculum Design and Development

1.1.1 – Programmes for which syllabus revision was carried out during the Academic year

Name of Programme	Programme Code	Programme Specialization	Date of Revision
BE	AE	Aeronautical Engineering	14/07/2018
BE	CV	Civil Engineering	14/07/2018
BE	CSE	Computer Science & Engineering	14/07/2018
BE	EEE	Electrical & Electronics Engineering	14/07/2018
BE	ECE	Electronics & Communication Engineering	14/07/2018
BE	IS	Information Science & Engineering	14/07/2018
ВЕ	ME	Mechanical Engineering	14/07/2018
Mtech	CNE	Computer Network Engineering	14/07/2018
MBA	MBA	Master of Business Administration	14/07/2018
MCA	MCA	Master of Business Administration	14/07/2018
<u>View File</u>			

# 1.1.2 – Programmes/ courses focussed on employability/ entrepreneurship/ skill development during the Academic year

Programme with Code	Programme Specialization	Date of Introduction	Course with Code	Date of Introduction
BE	Aeronautical Engineering	14/07/2018	SOLID MECHANICS 17AE34	14/07/2018
BE	Civil Engineering	14/07/2018	Quantity Surveying and Estimation 14CV72	14/07/2018

# <u>View File</u>

# 1.2 - Academic Flexibility

1.2.1 - New programmes/courses introduced during the Academic year

Programme/Course	Programme Specialization	Dates of Introduction
BE	COMPUTER SCIENCE &	14/07/2018
	ENGINEERING - Android	
	Lab, Data Analytics Using	
	Python, Advanced	
	Algorithms, Deep	
	Learning, Machine	
	Learning, Virtual Reality	
BE	ELECTRICAL AND	14/07/2018
	ELCTRONICS ENGINEERING -	
	Computer Organization,	
	Principles of communication system,	
	Electrical Engineering	
	materials, Data	
	structures, Programmable	
	logic controller, Linear	
	integrated circuits,	
	Renewable energy sources,	
	Project management and	
	finance, VLSI circuits	
	and design, Digital	
	signal Processing Lab, Power system protection	
	and industrial control	
	lab, Biosensors and	
	instrumentation, SCADA,	
	Energy audit,	
	Entrepreneurship	
	development, management	
	and IPR, Micro and smart	
	grid, Advanced Power	
	Electronics, Discrete	
	control systems,	
	Programmable logic controller, AI	
	Applications to Power	
	Systems, Reactive Power	
	Management, Reliability	
	Engineering	
BE	ELECTRONICS AND	14/07/2018
	COMMUNICATION ENGINEERING	
	- Advanced	
	Microcontroller, Advanced	
	Microcontroller Lab,	
	Machine learning for	
	pattern recognition,	
	Digital Image Processing, Software defined Radio	
BE	INFORMATION SCIENCE &	14/07/2018
	ENGINEERING - Digital	
1	I	

	Design, Digital Design Lab, Unix &Shell Programming Lab, Microcontroller, Microcontroller Lab, Network &Information Security, Big Data Lab, Blockchain Essentials & Dapps, Object Oriented Modelling & Design, Fundamentals Of Operating System	
BE	MECHANICAL ENGINEERING - Casting Science & Engineering, Material Selection In Engineering Design, Emerging Technologies In Renewable Energy, Elements Of Aeronautics, System Engineering, Matlab, Professional Practice For Mechanical Engineers - 1, Engineering Economics, Automotive Engineering -Fundamentals Aerodynamics, Hydraulics And Pneumatics, Advance SOM, Nano And Smart Material, C++ Programming For Scientific Application Development, Alternate Fuels And Energy Technologies, Automotive Engineering - 2 - Powertrain, Rapid Prototyping	14/07/2018
Mtech	COMPUTER NETWORK ENGINEERING - Mathematical Foundation for Computer Networks, Wireless Sensor &Mobile Networks, Internet of Things, Multimedia Communication Software Defined Networks, Analytical Approach for Data Networks, Information Security Lab, Research Methodology & IPR, Real Time Operating System, Vehicular Networks, Machine , Learning, Block Chain, Data Analytics, Disruptive Technologies	14/07/2018
Mtech	RENEWABLE ENERGY -	14/07/2018

	Energy, Ecology & Environment, Energy Harvesting Technologies, Power Electronics For Renewable Energy Systems, Financial Management In Energy Sector, Large Scale Grid Integration Of Renewable Energy Sources, Waste Energy Conversion, Intelligent Techniques In Renewable Energy, Alternative Fuels, Security And Privacy In Smart Grids, Research Methodology & IPR	
Mtech	MACHINE DESIGN - Mechanics Of Composite Materials, Mechatronics System Design, System Engineering, Materials Selection For Mechanical Design, Robotics & Industrial Automation, Multibody Dynamics, Fatigue Creep & Fracture, Micro Electro Mechanical Systems, Product Lifecycle Management, Research Methodology & IPR, Design Engineering Lab- I, Design Engineering Lab- II	14/07/2018
Mtech	THERMAL POWER ENGINEERING - Exergy Analysis of Thermal Systems, Steam and Gas Turbines, Advanced Thermal Storage Technologies, Advanced Optimization Techniques, Nuclear Energy Conversion, Thermal Power Station - 1, Convective Heat and Mass Transfer, Modeling and Simulation of Thermal Systems, Numerical Methods in Thermal Engineering, Viscous Fluid Flow, Micro/Nano scale heat transfer, Design of Non- conventional energy plants, Experimental Methods in Thermal Engineering, Cryogenic Engineering, Power Plant	14/07/2018

	Practice and Control, Modelling & Simulation Laboratory, Research Methodology & IPR -Self Study				
BE	CIVIL ENGINEERING - Highway Materials, Construction Equipment and Management, Highway Equipment and Management, Construction Methodology and Practices-I(CMP-I)	14/07/2018			
<u>View File</u>					

1.2.2 – Programmes in which Choice Based Credit System (CBCS)/Elective Course System implemented at the College level during the Academic year.

Name of programmes adopting CBCS	Programme Specialization	Date of implementation of CBCS/Elective Course System
No Data Entered/Not Applicable !!!		

# 1.3 – Curriculum Enrichment

1.3.1 – Value-added courses imparting transferable and life skills offered during the year

Value Added Courses	Date of Introduction	Number of Students Enrolled	
FLIGHT TRAINING PROGRAM	01/08/2018	30	
Blockchain and its Potential Applications	01/08/2018	68	
Android Application Development for Embedded Systems	01/08/2018	5	
<u>View File</u>			

# 1.3.2 - Field Projects / Internships under taken during the year

Project/Programme Title	Programme Specialization	No. of students enrolled for Field Projects / Internships
BE	Aeronautical Engineering	99
BE	Civil Engineering	228
BE	Computer Science & Engineering	104
BE	Electrical & Electronics Engineering	52
BE	Electronics & Communication Engineering	467
BE	Information Science & Engineering	208
BE	Mechanical Engineering	345
MBA	Master of Business Administration	145
MCA	Master of Computer Applications	108

Mtech	Computer Network Engineering	10

#### 1.4 - Feedback System

1.4.1 – Whether structured feedback received from all the stakeholders.

Students	Yes
Teachers	Yes
Employers	Yes
Alumni	Yes
Parents	Yes

1.4.2 – How the feedback obtained is being analyzed and utilized for overall development of the institution? (maximum 500 words)

#### Feedback Obtained

A well-structured feedback mechanism has been developed by the institute for Curriculum development and teaching learning process. The feed back is collected from all the stake holders namely, students, parents, faculty, and alumni. The feedback collected is analyzed and action is initiated at the appropriate levels. The main purpose of this policy is to collect the stakeholders' perceptions on the effectiveness of the curriculum and TLP. The feedback is taken at the end of the academic year. The collected feedback is analyzed for curriculum development and Teaching Learning Process (TLP). The feedback collected will be in two areas of the institutes curricular concerns: the structure, operation, and impact of a course offered. Feedback is collected by the students at the end of the academic year. Feedback from parents is collected during parent teacher meeting which is held once a year. The suggestions through mentor- parent meeting is also be forwarded to the coordinators for necessary implementation. The feedback from the employers on the students' performance and the curriculum based on the industrial needs is obtained through the Training and Placement Cell. Subsequently, the information is disseminated to the concerned departments. The alumni who are the members of various boards / committees such as BOS, IQAC provide their feedback at these forums which is considered for possible implementation. The feedback thus obtained from them is utilized in the process of the curriculum enrichment. The feedback collected is evaluated at the departmental level at a 5-point scale. The Departmental Undergraduate Committee will analyze the data and prepare a report to incorporate the feedback, by taking into the confidence of Faculty for change in syllabus and TLP in association with Program Assessment Committee and Departmental Advisory Committee. The change in Curricula and TLP will be forwarded to BOS for necessary action and approval.

#### CRITERION II – TEACHING- LEARNING AND EVALUATION

#### 2.1 - Student Enrolment and Profile

#### 2.1.1 – Demand Ratio during the year

Name of the Programme	Programme Specialization	Number of seats available	Number of Application received	Students Enrolled
Mtech	Structural Engineering	24	2399	24
MCA	Master of Computer Applications	120	60	57

MBA	Master of Business Administration	120	8522	114
ВЕ	Electrical & Electronics Engineering	60	35190	60
BE	Civil Engineeering	120	18166	113
BE	Information Science & Engineering	180	93455	180
BE	Computer Science & Engineering	180	95509	180
BE	Aeronautical Engineering	60	9787	60
BE	Electronics & Communication Engineering	180	93319	180
BE	Mechanical Engineering	180	18151	179
		<u>View File</u>		

#### 2.2 - Catering to Student Diversity

2.2.1 – Student - Full time teacher ratio (current year data)

Year	Number of students enrolled in the institution (UG)	Number of students enrolled in the institution (PG)	Number of fulltime teachers available in the institution teaching only UG courses	institution	Number of teachers teaching both UG and PG courses
2018	4387	486	255	25	28

### 2.3 – Teaching - Learning Process

2.3.1 – Percentage of teachers using ICT for effective teaching with Learning Management Systems (LMS), Elearning resources etc. (current year data)

Number of achers on Roll	Number of teachers using ICT (LMS, e- Resources)	ICT Tools and resources available	Number of ICT enabled Classrooms	Numberof smart classrooms	E-resources and techniques used
308	278	18	89	5	13

View File of ICT Tools and resources

View File of E-resources and techniques used

2.3.2 – Students mentoring system available in the institution? Give details. (maximum 500 words)

NMIT is having an effective mentoring system to emphasize towards enhancement of the institutional ambiance to better serve the needs of an ever-changing and dynamic learning community. The Institute is having the following administrative setup for effective mentoring. ? Mentor ? Class teacher ? Department level mentor coordinator ? HOD ? Professional counselor ? Institute academic committee Each faculty will be the mentor of a group of 15 to 20 students. As far as possible department will maintain same mentor for the same group of students till their graduation. Other than mentor class teacher also provide additional support to the students. Department level mentor coordinator will coordinate all the activities related to mentoring in consultation with

HoD. On the need basis HoD will counsel the student and parent. Department may refer the student to professional counselor on need basis. The institute academic committee will discuss mentoring related issues at least twice in a semester during its meetings and revise/ upgrade the system if necessary. Responsibilities of Mentor: • Meet the group of students at least twice a month. • Continuously monitor, counsel, guide and motivate the students in all academic matters. • Guide the student on how to address stress related issues. • Advise students regarding choice of electives, project, summer training etc. • Contact parents/guardians if situation demands e.g. academic irregularities, negative behavioral changes and interpersonal relations, detrimental activities etc. • Advise students in their career development/professional guidance. • Intimate HOD and suggest if any administrative action is called for. • Maintain a brief but clear record of all discussions with students. • Maintain a detail progressive record of the student. • Refer the students to meet professional counselor on need basis. • Post comments / suggestions to the students in the website link of GURUKUL. The link to this online portal can be accessed through the college website www.nmit.ac.in. • Students and parents can access the portal using username and password. • Keep contact with the students even after their graduation. Responsibilities of Mentee: ? Actively listen and contribute to the conversations. ? Understand mentor will not have all of the answers- be willing to look up them up. ? Acknowledge weaknesses but build on strengths. ? Accept and reflect on constructive criticism. ? Don't shy away from difficult conversations. ? Periodically evaluate progress and reassess the relationship. ? Be punctual.

Number of students enrolled in the institution	Number of fulltime teachers	Mentor : Mentee Ratio
4873	308	15.82

#### 2.4 - Teacher Profile and Quality

#### 2.4.1 – Number of full time teachers appointed during the year

No. of sanctioned positions	No. of filled positions	Vacant positions	Positions filled during the current year	No. of faculty with Ph.D
308	308	Nill	28	85

2.4.2 – Honours and recognition received by teachers (received awards, recognition, fellowships at State, National, International level from Government, recognised bodies during the year)

Year of Award	Name of full time teachers receiving awards from state level, national level, international level	Designation	Name of the award, fellowship, received from Government or recognized bodies
2018	Dr. Saroja Devi H.	Professor	CSI TechNext India 2018, Best Faculty - Published Research - where papers have been accepted in high ranking/indexed journals
2018	Dr H.C. Nagaraj	Principal	Fellow of the Institution of Electronics and Telecommunication Engineers
2018	Dr.Rajesh N	Associate Professor	Commendation from Chief Minister of Karnataka and Deputy director general of NCC
2018	Dr. Sanjay H A	Professor	INNOVATE INDIA- Change the World, Texas Instrumentation

			AWARD in	
			Appreciation for	
			Fostering an	
			Ecosystem Bridging	
			Government,	
			Industry and	
			Academia	
View File				

#### 2.5 – Evaluation Process and Reforms

2.5.1 – Number of days from the date of semester-end/ year- end examination till the declaration of results during the year

Programme Name	Programme Code	Semester/ year	Last date of the last semester-end/ year- end examination	Date of declaration of results of semester- end/ year- end examination
BE	AE	1st Sem	19/12/2018	31/12/2018
BE	CV	1st Sem	19/12/2018	31/12/2018
BE	CS	1st Sem	19/12/2018	31/12/2018
BE	EE	1st Sem	19/12/2018	31/12/2018
BE	IS	1st Sem	19/12/2018	31/12/2018
BE	ME	1st Sem	19/12/2018	31/12/2018
BE	AE	3rd Sem	19/12/2018	31/12/2018
BE	CV	3rd Sem	19/12/2018	31/12/2018
BE	CS	3rd Sem	19/12/2018	31/12/2018
BE	EE	3rd Sem	19/12/2018	31/12/2018
		<u>View File</u>		

2.5.2 – Average percentage of Student complaints/grievances about evaluation against total number appeared in the examinations during the year

Number of complaints or grievances about evaluation	Total number of students appeared in the examination	Percentage
3	4846	0.06

### 2.6 - Student Performance and Learning Outcomes

2.6.1 – Program outcomes, program specific outcomes and course outcomes for all programs offered by the institution are stated and displayed in website of the institution (to provide the weblink)

https://www.nmit.ac.in/autonomous-scheme-syllabus.html

# 2.6.2 – Pass percentage of students

Programme Code	Programme Name	Programme Specialization	Number of students appeared in the final year examination	Number of students passed in final year examination	Pass Percentage
AE	BE	Aeronautical Engineering	66	65	98.48
CV	BE	Civil Engineeering	139	135	97.12

CS	BE	Computer Science & Engineering	233	228	97.85	
EC	BE	Electronics & Communicat ion Engineering	198	190	95.96	
EE	BE	Electrical & Electronics Engineering	70	66	94.29	
IS	BE	Information Science & Engineering	142	138	97.18	
ME	BE	Mechanical Engineering	207	198	95.65	
MBA	MBA	Master of Business Adm inistration	107	106	99.07	
MCA	MCA	Master of Computer Applications	57	52	91.23	
VLSI	Mtech	VLSI Design & Embedded Systems	8	7	87.50	
	<u> View File</u>					

### 2.7 - Student Satisfaction Survey

2.7.1 – Student Satisfaction Survey (SSS) on overall institutional performance (Institution may design the questionnaire) (results and details be provided as weblink)

https://nmit.ac.in/pdf/naac2/new/360%20Degree%20Survey%20Report\_2018-19.pdf

### CRITERION III - RESEARCH, INNOVATIONS AND EXTENSION

# 3.1 - Promotion of Research and Facilities

3.1.1 – The institution provides seed money to its teachers for research

Yes	
Name of the teacher getting seed money	
Mr. Pavan B S	
<u>View File</u>	

3.1.2 - Teachers awarded National/International fellowship for advanced studies/ research during the year

Туре	Name of the teacher awarded the fellowship	Name of the award	Date of award	Awarding agency
International	Mr. Harish Kumar L	Ph.D International Fellowship	23/07/2018	University of Malaya, Malayasia
International	Mr. Rachith S N	Ph.D International Fellowship	26/11/2018	University of Hasselt, Belgium
National	Dr. Vinyas Mahesh	Post Doctrate Fellowship	26/08/2019	Indian Institute of Science, Bangalore
International	Dr. Shefali Jagwani	Partial grant for Research	22/10/2018	Nitte Meenakshi Institute of Technology
International	Dr.Jairaj	Partial grant for Research	25/03/2019	Nitte Meenakshi Institute of Technology
International	Dr.Bharathi Ganesh	Partial grant for Research	08/04/2019	Nitte Meenakshi Institute of Technology
<u>View File</u>				

# 3.2 - Resource Mobilization for Research

3.2.1 – Research funds sanctioned and received from various agencies, industry and other organisations

Nature of the Project	Duration	Name of the funding agency	Total grant sanctioned	Amount received during the year
Major Projects	548	GTRE- Defence Research and Development Organisation - DRDO	9.96	9.96
Major Projects	1095	Department of Science and Technology (DST- TIDE	46	5.8
Major Projects	1825	Department of Science and Technology (DST) - FIST	60	30
	_	<u>View File</u>	_	

3.2.2 – Number of ongoing research projects per teacher funded by government and non-government agencies during the years

22

# 3.3 - Innovation Ecosystem

3.3.1 - Workshops/Seminars Conducted on Intellectual Property Rights (IPR) and Industry-Academia Innovative

# practices during the year

Title of workshop/seminar	Name of the Dept.	Date		
PCB Design and Fabrication (Under Mega Series 3)	ECE	14/02/2019		
Android App Development For Embedded Systems (Under Mega Series 3)	ECE	14/02/2019		
Faculty Development Program on Research Methodology	ECE	19/02/2019		
2 days Workshop on SPSSECE	ECE	25/03/2019		
View File				

# 3.3.2 - Awards for Innovation won by Institution/Teachers/Research scholars/Students during the year

Title of the innovation	Name of Awardee	Awarding Agency	Date of award	Category
Design and fabrication of fixed wing UAV operating in air and underwater environment	Mr. Vinod L, rajath shetty, Mr. Pavan Kalyan, Mr. Peddireddy omkar reddy, Mr. Madhu Pujar	Karnataka State Council for Science and Technology	27/06/2019	Design and fabrication of fixed wing UAV operating in air and underwater environment
SAEINDIA Southern Section Aero Design Challenge	Shourya Gupta, Mayur Mohale, Mahashana Bhat, Guruprasad, Justin, Jnanesh Kamath, Bhaskar B N	SAEINDIA Southern Section	21/07/2019	SAEINDIA Southern Section Aero Design Challenge
		<u>View File</u>		_

# 3.3.3 - No. of Incubation centre created, start-ups incubated on campus during the year

		<u>'</u>	<u> </u>	<u> </u>				
Incubation Center	Name	Sponsered By	Name of the Start-up	Nature of Start- up	Date of Commencement			
COE - Aerospace	Mr. Saumya Ranjan	Nitte Meenakshi Institue of Technology	Verge Motors	Electric Hybrid Scooter	18/12/2018			
Iignis Innovation Center	Sabari Prabhakar	Nitte Meenakshi Institute of Technology	Globsol Innovations Lab Pvt. Ltd	Design and manafcaturin g of medical devices	14/01/2019			
	No file uploaded.							

# 3.4 - Research Publications and Awards

# 3.4.1 – Ph. Ds awarded during the year

Name of the Department	Number of PhD's Awarded
Electrical and Electronics	2

Engineering	
Mechanical Engineering	2
Electronics and Communication Engineering	2
Computer Science and Engineering	5
Master of Business Administration	5
Information Science and Engineering	1
Mathematics	2

# 3.4.2 - Research Publications in the Journals notified on UGC website during the year

	Number of Publication	Average Impact Factor (if any)
Aeronautical Engineering	4	0.86
Civil Engineering	4	1.75
Computer Science and Engineering	12	1.54
Electrical and Electronics Engineering	4	1.08
Electronics and Communicatoion Engineering	9	1.31
Information Science Engineering	6	0.56
Mechanical Engineering	33	1.88
Basic Sciences	7	1.90
Master of Business Administration	1	7.21
	Engineering Civil Engineering Computer Science and Engineering Electrical and Electronics Engineering Electronics and Communicatoion Engineering Information Science Engineering Mechanical Engineering Basic Sciences Master of Business Administration	Engineering  Civil Engineering  Computer Science 12 12 12 12 12 12 12 12 12 12 12 12 12

# 3.4.3 – Books and Chapters in edited Volumes / Books published, and papers in National/International Conference Proceedings per Teacher during the year

Department	Number of Publication
MCA	1
MBA	1
Basic Sciences	3
Information Science and Engineering	10
Civil Engineering	9
Electrical and Electronics Engineering	12
Electronics and Communication Engineering	11
Computer Science and Engineering	35

Aeronautical Engineering	Nill			
Mechanical Engineering	1			
<u>View File</u>				

# 3.4.4 - Patents published/awarded during the year

Published Published	201941005350	24/05/2019
Published		
	201941015289	24/05/2019
Published	201841006773	28/06/2019
Published	201941024082	18/06/2019
Published	201941024083	18/06/2019
Published	201841033894	10/09/2018
Published	201841033897	10/09/2018
	Published  Published  Published  Published	Published 201941024082  Published 201941024083  Published 201841033894

No file uploaded.

3.4.5 – Bibliometrics of the publications during the last academic year based on average citation index in Scopus/Web of Science or PubMed/ Indian Citation Index

Title of the Paper	Name of Author	Title of journal	Year of publication	Citation Index	Institutional affiliation as mentioned in the publication	Number of citations excluding self citation	
No Data Entered/Not Applicable !!!							
<u>View File</u>							

# 3.4.6 - h-Index of the Institutional Publications during the year. (based on Scopus/ Web of science)

Title of the Paper	Name of Author	Title of journal	Year of publication	h-index	Number of citations excluding self citation	Institutional affiliation as mentioned in the publication
IoT based control and	Monica M., Yeshika B.,	Internat ional Conference on Recent	2018	6	11	Department of Informa tion

automation of smart irrigation system: An automated irrigation system using sensors, GSM, Bluetooth and cloud technology	Abhishek G.S., Sanjay H.A., Dasiga S.	Innovation s in Signal Processing and Embedded Systems, RISE 2017				Science and Engine ering, Nit teMeenaksh i Institute of Technol ogy, Bangalore, India Info rmation Science and Engine ering, Nit teMeenaksh i Institute of Technol ogy, Bangalore, India
Simple f abrication of reduced graphene oxide -few layer MoS< inf>2 nanocomp osite for enhanced e lectrochem ical perfo rmance in supercapac itors and water puri fication	Raghu M.S., Yogesh Kumar K., Rao S., Aravinda T., Sharma S.C., Prashanth M.K.	Physica B: Condensed Matter	2018	6	16	Department of Chemistry, Nitte Meenakshi Institute of Technology Bangalore5 60064, India Department of Chemistry, School of Engineerin g and Tech nology, Jain Unive rsity, Bangalore, 562112, India Department of Mechanical Engineerin g, School of Enginee
Finite element evaluation of free vibration characteri	Vinyas M., Kattimani S.C.	Composite Structures	2018	6	22	Department of Mechanical Engineerin g, Nitte

11	I	<b>I</b> 1	I	1	Age and all of the
stics of m					Meenakshi
agneto-ele					Institute
ctro-					of Technol
elastic re					ogy,
ctangular					Yelahanka,
plates in					Bangalore
hygrotherm					560064,
al environ					India
ment using					Department
higher-					of
order					Mechanical
shear defo					Engineerin
rmation					g,
theory					National
					Institute
					of
					Technology
					Karnataka,
					Surathkal,
					India
			View File		

# 3.4.7 – Faculty participation in Seminars/Conferences and Symposia during the year

Number of Faculty	International	National	State	Local
Presented papers	126	67	Nill	Nill
Attended/Semi nars/Workshops	4	67	40	42
Resource persons	1	11	3	20

View File

# 3.5 - Consultancy

# 3.5.1 – Revenue generated from Consultancy during the year

Name of the Consultan(s) department	Name of consultancy project	Consulting/Sponsoring Agency	Revenue generated (amount in rupees)	
Dr. Veda S N	Segregation of strands in Hemp fiber	Namarata Hemp Co Pvt. Ltd	10	
Dr. Sudheer Reddy	Thermal Camera Imaging System	Tonbo Imaging Pvt Ltd, Chikkayellappa Tower II, 1st C Main Rd, Jakkasandra Extension, Koramangala, Bengaluru, Karnataka 560034	0.15	
Dr.Bharathi Ganesh	Karnataka Police Housing (Technical and Logistic Support)	Nitte Meenakhi Institute of Technology Yelahanka Bangalore	3.25	
	<u>View File</u>			

# 3.5.2 - Revenue generated from Corporate Training by the institution during the year

Name of the Consultan(s) department	Title of the programme	Agency seeking / training	Revenue generated (amount in rupees)	Number of trainees
Dr Vinayaka	GATE crash course	GOODWILL GATE2IIT	67500	27
Dr Thippeswamy M N , Mr. Honnappa, Mr. Bhargav	Airline Service Executive	PMKVY	79560	25
Mr Vikram	Lathe Operator	PMKVY	168300	25
Ms Savitha	Assistant Fashion designer	PMKVY	136000	25
No file unleaded				

No file uploaded.

#### 3.6 - Extension Activities

3.6.1 – Number of extension and outreach programmes conducted in collaboration with industry, community and Non- Government Organisations through NSS/NCC/Red cross/Youth Red Cross (YRC) etc., during the year

Title of the activities	Organising unit/agency/ collaborating agency	Number of teachers participated in such activities	Number of students participated in such activities
Blood Donation	Rashtrothana and Rotary	5	400
Candle Light March	NCC / Rotary Club	5	69
Cleanliness Drive	NCC / Gram Panchayat Gantiganahalli	4	54
Blood Donation Camp	NCC / NSS / Rotract / YRC	5	40
Rally on Surgical Strike Day	NCC	3	73
No file uploaded.			

3.6.2 – Awards and recognition received for extension activities from Government and other recognized bodies during the year

Name of the activity	Award/Recognition	Awarding Bodies	Number of students Benefited
Social Service	Best Institution Awrd	Karntaka-Goa Directorate	80
Republic Day Camp 2020	Gold medal SD Army Best cadet- Karnataka Goa directorate, Chief ministers commendation	National Cadet Corps, Karnataka state government	80
	No file	uploaded.	

No file uploaded.

# 3.6.3 – Students participating in extension activities with Government Organisations, Non-Government Organisations and programmes such as Swachh Bharat, Aids Awareness, Gender Issue, etc. during the year

Name of the scheme	Organising unit/Agen cy/collaborating agency	Name of the activity	Number of teachers participated in such activites	Number of students participated in such activites
Blind Fold Walkathon -awareness on eye donation and motivate them to pledge for the same.	CAMBA and SAKSHAM,	Blind Fold Walkathon	5	200
Blood Donation Camp	NCC / Red Cross Society	Blood Donation Camp	3	220
cancer awareness program	The NSS unit of NMIT in association with CYTECARE hospital, Bangalore	cancer awareness program	2	60
Swachh Bharat at NMIT	NCC / NSS	Swachh Bharat at NMIT	3	50
Cleanliness Drive	NCC	Cleanliness Drive	2	54
Drug Awarness Program	GOK	Drug Awarness Program	2	115
Youth Awarness Program	NSS	Youth Awarness Program	3	20
Blood donation	Rotract	Blood donation	5	400
		No file uploaded	1.	

#### 3.7 - Collaborations

# 3.7.1 - Number of Collaborative activities for research, faculty exchange, student exchange during the year

Nature of activity	Participant	Source of financial support	Duration	
Research	Shefali Jagwani- NMIT, Gyanendra Kumar Sah-ATI MOTORS PVT LTD, Dr L Venkatesha-BMSCE	Nitte Meenakshi Institute of Technolgy	90	
Research	Akhil S NMIT ,K M Swathantra NMIT with UNISYS Mentors	UNISYS	365	
Research	Bibek NMIT,Pavithra NMIT with NETSCOUT mentors	NETSCOUT	365	
<u>View File</u>				

3.7.2 – Linkages with institutions/industries for internship, on-the- job training, project work, sharing of research

facilities etc. during the year

Nature of linkage	Title of the linkage	Name of the partnering institution/ industry /research lab with contact details	Duration From	Duration To	Participant
Internship	Research Organization Linkage for Internship	IISc	18/06/2018	09/07/2018	GURUKARTHIK C.D
Internship	Indutry Linkage for Internship	BOSCH	01/06/2018	24/07/2018	VAISHNAVI K S
Internship	Govt. Organization Linkage for Internship	BEL	30/05/2018	28/06/2018	MEGHANA S
Internship	Indutry Linkage for Internship	A2B2 IT SERVICES	02/06/2018	20/07/2018	CHANDANA S
<u>View File</u>					

3.7.3 – MoUs signed with institutions of national, international importance, other institutions, industries, corporate houses etc. during the year

Organisation	Date of MoU signed	Purpose/Activities	Number of students/teachers participated under MoUs
Toyota Kirloskar Motor Pvt Ltd	14/09/2019	Webinar on Electric Vehicle Battery and Motor sizing Automotive Engineering Electives was introduced based on the iputs from Toyota Kirloskar Motors.	35
UNISYS	19/09/2018	Admission to Unisys employees at NMIT Evaluation of Ideathon and Hackathon	78
American Society of Civil Engineering - India Section - Southern Region.	26/06/2019	Technical Training	200
HyCube Works	02/10/2019	Project Work Virtual Industrial Exhibition Online Webinar on Rapid Prototyping	90

Workshop on
Additive
Manufacturing Rapid
Prototyping subject
was introduced and
syllabus was framed
using inputs from
Hycube Works.
Centre for Advanced
Mechatronics have

View File

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

# 4.1 - Physical Facilities

4.1.1 - Budget allocation, excluding salary for infrastructure augmentation during the year

Budget allocated for infrastructure augmentation	Budget utilized for infrastructure development	
1350	540.3	

#### 4.1.2 - Details of augmentation in infrastructure facilities during the year

Facilities	Existing or Newly Added		
Campus Area	Existing		
Class rooms	Existing		
Laboratories	Existing		
Seminar Halls	Existing		
Classrooms with LCD facilities	Existing		
Seminar halls with ICT facilities	Existing		
Video Centre	Existing		
Value of the equipment purchased during the year (rs. in lakhs)	Newly Added		
Number of important equipments purchased (Greater than 1-0 lakh) during the current year	Newly Added		
Classrooms with Wi-Fi OR LAN	Existing		
<u>View File</u>			

#### 4.2 – Library as a Learning Resource

### 4.2.1 – Library is automated {Integrated Library Management System (ILMS)}

Name of the ILMS software	Nature of automation (fully or patially)	Version	Year of automation
кона	Fully	19.05	2001

# 4.2.2 - Library Services

Library Service Type	Exis	ting	Newly	Added	To	tal
Text Books	43455	8187797	2227	467087	45682	8654884
Reference	5800	4930000	200	96000	6000	5026000

Books						
e-Books	25157	7202000	Nill	Nill	25157	7202000
Journals	130	4000000	84	378216	214	4378216
e- Journals	1	5553415	Nill	2705000	1	8258415
Digital Database	1	370000	Nill	Nill	1	370000
CD & Video	2000	6000	Nill	Nill	2000	6000
Library Automation	1	150000	Nill	35000	1	185000
Weeding (hard & soft)	Nill	Nill	Nill	Nill	Nill	Nill
Others(s pecify)	Nill	1200000	Nill	136000	Nill	1336000
	<u>View File</u>					

4.2.3 – E-content developed by teachers such as: e-PG- Pathshala, CEC (under e-PG- Pathshala CEC (Under Graduate) SWAYAM other MOOCs platform NPTEL/NMEICT/any other Government initiatives & institutional (Learning Management System (LMS) etc

Name of the Teacher	Name of the Module	Platform on which module is developed	Date of launching e- content		
Manjunatha L	Ansys Tutorial For Civil Engineering	PowerPoint/OneNote xSplitter/VideoCutt er/Youtube/GoogleMe et	11/08/2018		
Mrs. Archana Naik	Computer Networks	Impartus	27/08/2018		
Mrs. Sridevi H R	Electric Circuit Theory	Impartus	27/08/2018		
Mrs. Pratima G	Engineering Mechanics	Impartus	01/09/2018		
Dr. Kiran Aithal	Computer Aided Engineering Drawing	Impartus	01/09/2018		
Dr. N. G. Goudru	Discrete Analysis	Impartus	03/09/2018		
Mr. Girish G K	Network Analysis	Impartus	11/09/2018		
Dr. Hitha D Shetty	Engineering Physics	Impartus	06/02/2019		
Mr. Ravindranath	Basic Electronics	Impartus	25/02/2019		
Mr. Sriram Mukunda	Elements of Mechanical Engineering	Impartus	08/07/2019		
<u>View File</u>					

# 4.3 – IT Infrastructure

4.3.1 – Technology Upgradation (overall)

Туре	Total Co mputers	Computer Lab	Internet	Browsing centers	Computer Centers	Office	Departme nts	Available Bandwidt h (MBPS/ GBPS)	Others
Existin g	1639	1215	1500	30	152	40	202	200	0
Added	0	0	0	0	0	0	0	200	0
Total	1639	1215	1500	30	152	40	202	400	0

4.3.2 – Bandwidth available of internet connection in the Institution (Leased line)

400 MBPS/ GBPS

#### 4.3.3 - Facility for e-content

Name of the e-content development facility	Provide the link of the videos and media centre and recording facility
Impartus: Leading Video Platform for Lecture Capture and Live Online Courses	https://a.impartus.com/login/#/
PowerPoint/OneNote xSplitter/VideoCut ter/Youtube/GoogleMeet	https://www.youtube.com/playlist?list=P LxTKIR49WBrcer08qCMkT0KaystL550E6

#### 4.4 - Maintenance of Campus Infrastructure

4.4.1 – Expenditure incurred on maintenance of physical facilities and academic support facilities, excluding salary component, during the year

Assigned Budget on academic facilities	Expenditure incurred on maintenance of academic facilities	Assigned budget on physical facilities	Expenditure incurredon maintenance of physical facilites
961	799.81	1995	533.55

4.4.2 – Procedures and policies for maintaining and utilizing physical, academic and support facilities - laboratory, library, sports complex, computers, classrooms etc. (maximum 500 words) (information to be available in institutional Website)

NMIT campus is spread over 22.3 Acres of land with 92,580 Sqm of built up area for teaching/learning facilities. We have a total of 88 classrooms, 4 seminar halls, 95 well-equipped labs, an auditorium and an open-air theater. These are provided with ICT facilities such as LCD Projectors, Computers, Audio Systems, Wi-fi, Student management system etc. Lecture capturing rooms, Smart class rooms and English language laboratories are catering to the needs of the students. Class rooms are well furnished and ventilated with an area of about 77 Sqm. We have total of 1639 computers in the institute. The college has BSNL leased line (1:1) connectivity of 400 Mbps, also the entire campus is Wi-Fi enabled. The existing physical infrastructure is used beyond regular college hours for conducting online examinations, placement training sessions, intercollegiate competitions and for activities of various clubs and societies dedicated to Music, Dance, Art, Theatre, Photography, Cultural activities, Literature, Hostels' Association, NCC, NSS, ROTRACT, Youth Wing of RED CROSS society etc. The lecture capture room equipped with Impartus Lecture Capture system is utilized by the teachers, and the captured videos are shared with the students. NMIT library is housed in a spacious building spanning 1300 Sqm. The library resources have been completely computerised with the application of KOHA- Integrated Library Management Software along with Bar code system. Apart from comprehensive collection of books the library also offers various vital services like Plagiarism checking, Current Awareness Services, Newspaper Clipping Service, Reference Services and information regarding examinations

etc. The campus has a multi-purpose track, a hockey ground, facilities for cricket, basketball, volleyball, shuttle badminton and throw-ball. We have facilities for indoor sports such as table tennis, carrom, chess etc. The college has hosted several University level tournaments such as VTU Bangalore North zone inter collegiate Basketball Men Tournament, VTU Bangalore North zone and inter zone volleyball tournaments etc. Separate multi-purpose gyms for male and female students with a range of sophisticated equipment are also provided and students are encouraged to use these facilities. A dedicated facility for Yoga and Meditation is also provided to the students. NMIT has BSNL telephone landline connection connecting the entire campus. The college has a fleet of 33 buses which are regularly operating for providing transport facilities to all the staff and students from different corners of Bangalore city. The college has a well-equipped and properly maintained medical centre, Cafeteria and six other eateries, Two ATM centres, water purifiers with RO technology, fire extinguishers, rain water harvesting system, adequate electric power backup systems, spacious parking facilities and a sewage treatment plant. Well established measures are existing and implemented within the Institute for the maintenance and use of its Physical, Academic and Support facilities. The high standard of maintenance ensures quality education and an inclusive teaching learning experience to its faculty and students at NMIT.

https://www.nmit.ac.in/facility-library.html

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

#### 5.1 - Student Support

### 5.1.1 - Scholarships and Financial Support

	Name/Title of the scheme	Number of students	Amount in Rupees			
Financial Support from institution	NMIT Fee waiver	863	69162871			
Financial Support from Other Sources						
a) National	OBC/BC/SITARAM JINDAL/PRIME MINISTER/DEFENCE CHILD	1503	44174927			
b)International	NIL	Nill	0			
	<u>View File</u>					

# 5.1.2 – Number of capability enhancement and development schemes such as Soft skill development, Remedial coaching, Language lab, Bridge courses, Yoga, Meditation, Personal Counselling and Mentoring etc.,

Name of the capability enhancement scheme	Date of implemetation	Number of students enrolled	Agencies involved
Soft Skills for the Management professional	29/03/2019	95	Dr. Malini, Department of MBA, NMIT
Aptitude Training	30/08/2018	837	Comp Name -Quantech origin Con No -9972029788
Language Lab - Communicative English	06/08/2018	59	Staff, Department of English
Induction Program - 2018	06/08/2018	1015	Mr.THOMAS JOHN ROSE, Wise Force

			Mission, Bangalore -Dr.Neha Jain and Team, NMIT, Bangalore-64 Dr.Bahnurekha Reddy, Director, Placement about the process of placement challenges, training
International Yoga Day	21/06/2019	108	Mr. Hemanth Kumar N, Dept. of Mechanical Engineering, NMIT
Drug awareness programme for students	12/09/2018	200	NSS, NMIT
IoT and Analytics	12/10/2018	50	Mr. Rajeev Arora, CTO Director, Sensorise Digital Services Pvt. Ltd., Mob: 9448072907, Email: rajeev.arora @sensorise.net
ANDROID APP AND LABVIEW	15/02/2019	55	Girish G K, Department of ECE, NMIT
Basic Thermodynamics	25/08/2018	39	Mechanical Department ,Dr.Madhusudhan 08022167831
Personal Counselling	13/08/2018	18	Dr. Vijaya Shetty S, Faculty, NMIT

5.1.3 – Students benefited by guidance for competitive examinations and career counselling offered by the institution during the year

Year	Name of the scheme	Number of benefited students for competitive examination	Number of benefited students by career counseling activities	Number of students who have passedin the comp. exam	Number of studentsp placed
2018	GATE Crash Course	28	Nill	8	Nill
2018	C- Programming training for placement purpose	26	Nill	12	Nill
2019	GATE 2019 Exam Preparation	40	Nill	15	Nill

2018	Guidance for competative Examination - Indian Economy	18	Nill	18	Nill	
2018	Guidance for competative Examination - GATE preparations and few tips	25	Nill	25	Nill	
2018	Guidance for competative Examination	18	Nill	18	Nill	
2018	Career Counselling	Nill	70	Nill	25	
2018	Career Counselling	Nill	180	Nill	40	
	<u>View File</u>					

5.1.4 – Institutional mechanism for transparency, timely redressal of student grievances, Prevention of sexual harassment and ragging cases during the year

Total grievances received	Number of grievances redressed	Avg. number of days for grievance redressal
7	7	6

# 5.2 - Student Progression

# 5.2.1 – Details of campus placement during the year

On campus			Off campus		
Nameof organizations visited	Number of students participated	Number of stduents placed	Nameof organizations visited	Number of students participated	Number of stduents placed
Nuclei and other companies	1016	863	Accenture and other companies	350	131
<u>View File</u>					

# 5.2.2 – Student progression to higher education in percentage during the year

Year	Number of students enrolling into higher education	Programme graduated from	Depratment graduated from	Name of institution joined	Name of programme admitted to
2018	1	BE	AE	Concordia University - USA	M.Engg - Aerospace
2018	1	BE	ECE	IIT - Gandhinagar	M.Tech PhD
2018	1	BE	ISE	Texas A M	M.S

#### <u>View File</u>

5.2.3 – Students qualifying in state/ national/ international level examinations during the year (eg:NET/SET/SLET/GATE/GMAT/CAT/GRE/TOFEL/Civil Services/State Government Services)

Items	Number of students selected/ qualifying			
GATE	20			
GRE	31			
TOFEL	21			
Any Other	34			
<u>View File</u>				

5.2.4 - Sports and cultural activities / competitions organised at the institution level during the year

Activity	Level	Number of Participants		
VTU Mens Volleyball Tournoment 34	State	200		
Annadyanta Technical Fest 34	National	600		
Annadyanta Cultural Fest 34	National	1100		
Anaadyanta Adhiveshana Management Fest 34	National	150		
VTU womens Throwball Tournoment 34	State	210		
VTU Mens Basketball Tournoment 34	State	75		
<u>View File</u>				

# 5.3 - Student Participation and Activities

5.3.1 – Number of awards/medals for outstanding performance in sports/cultural activities at national/international level (award for a team event should be counted as one)

Year	Name of the award/medal	National/ Internaional	Number of awards for Sports	Number of awards for Cultural	Student ID number	Name of the student
2018	1st Posi tion- NUKKAD, BITS Pilani Goa Campus	National	Nill	1	1NT17IS177	Tashwin S
2018	2nd Posi tion-Word Games AND 3rd Positi on-Glimpse of the Amps	National	Nill	2	1NT15IS016	Arjun Kini
2018	2nd Posi tion- Western Solo	National	Nill	1	1NT14IS039	Joanna

	Singing					
2018	1st Posi tion-Theme Dance AND 2nd Positi on-Choreo Nite	National	Nill	2	1NT16IS160	Prajwal V
2018	2nd Posi tion-Word Games	National	Nill	1	1NT15EC011	Aishwarya Rao
2018	3rd Posi tion-31st junior national netball ch ampionship	National	1	Nill	1NT18IS188	yogeshwari A
<u>View File</u>						

5.3.2 – Activity of Student Council & representation of students on academic & administrative bodies/committees of the institution (maximum 500 words)

NMIT has created a platform for active participation of the students in various academic administrative bodies leading to the development and quality enhancement of the Institute. Students' Council is an active and dynamic body driven by the students and mentored by the Faculty. The objective of the students' council is to give students an opportunity to develop leadership qualities through organizing and participating in various co-curricular/extracurricular/Extension activities. Students' Council comprises of Class Representatives, Faculty Coordinators, Physical Director, Placement Officer, HODs, Principal. Office Bearers will be elected by the members of the student council. Under students' council we have several bodies for conducting various activities viz. • Cultural Committee o Anaadyanta o Art Club o Music Club o Theatre Club o Dance Club o Photography Club • Sports Committee • Placement Committee • Technical Committee • Foreign Students Committee • Literary Forum • NSS • NCC • Rotract Club • Youth Wing of Red Cross Society • Hostel Committee • Chiguru- Kannada Association Each of the above will be headed by Student Convenor Co-Convenor mentored by Faculty-Convenor. Under these bodies, students will involve in planning various activities/promotion of these activities inside outside the Institute/Interacting with the benefactors for the annual Techno-Cultural Fest/Event Management/Editing News Letter and College Magazine/Organizing awareness camps/extension activities/etc. In addition to the Institutional Level Bodies, every department has various clubs, student chapters under various professional organizations to manage department level technical activities namely: 1. The Indian Society for Technical Education (ISTE) Students' Chapter 2. Institution of Engineers (IE) Students' Chapter 3. Institution of Electronics and Telecommunication Engineers (IETE) Students' Chapter 4. The Aeronautical Society of India Students' Chapter 5. Association of Consulting Civil Engineers (India) Students' Chapter 6. Indian Concrete Institute (ICI) Students' Chapter 7. The Indian Society of Heating, Refrigerating and Air Conditioning Engineers (ISHRAE) Students' Chapter 8. Fluid Power Society of India (FPSI) Students' Chapter 9. Society of Automotive Engineers (SAE) Students' Chapter 10. The American Society of Mechanical Engineers (ASME) Students' Chapter 11. National Entrepreneurship Network (NEN) Students' Chapter and so on. Students are represented in various academic administrative Bodies/Committees like: 1. Internal Quality Assurance Cell (IQAC): Student members in IQAC help to disseminate the quality policies adopted by the institution among the student community and also help in

communicating the student view point while taking any quality policy decision.

2. Departmental Undergraduate Committee (DUGC)/ Board of Studies (BoS): DUGC/
BoS invite UG students on academic related matters / revising the curriculum.

3. Program Assessment Committee (PAC): Students actively participate in evaluating program effectiveness and proposing necessary changes. 4. Departmental Advisory Body (DAB): Students actively participate in the DAB to fulfil outcome based education requirements. 5. Class Committee: Class representatives along with a few active students are a part of the Class Committee which monitors the teaching/learning processes of the class.

#### 5.4 – Alumni Engagement

5.4.1 – Whether the institution has registered Alumni Association?

Yes

NMIT Alumni Association creates and maintains an enduring connection between the Institute and its alumni. Collaborating with an extremely dedicated Office Bearers, the Association works to enrich strong bonds between alumni, students and the Institute. Association works to keep alumni informed, and create a network enabling them to remain engaged with their alma mater. NMIT Alumni Association has been functioning since 2006. Every year, the institute along with the office bearers of Alumni Association conduct an alumni meet to interact with students and faculty and to get to know the latest developments and achievements of the College/Alumni. During the alumni meet, alumni share their feedback and suggestions which help toimprove curriculum, facilities, placement, training etc leading to huge improvement in these areas. Alumni are invited to the institute during workshops/ programs where they share their knowledge among the students/faculty. An exclusive networking Web and Mobile App (www.alumni.nmit.ac.in /Almashines Alumni) has been created by partnering with a company named AlmaShines, thus 4333 alumni are connected to their alma mater. The portal is a focal point of contact among alumni to interact and network with each other as well as with the alma mater. The alumni can get information about the institute, fellow classmates, students, faculty, conferences, alumni meets, featured alumni, success stories of alumni using this portal. The alumni are actively supporting the institute by posting job/ internship opportunities to the current students/ other alumni who can apply through the Portal. The alumni association of the Institute is a conglomeration of entrepreneurs, professionals and bureaucrats catering to the society in various sectors. The institute as of now has an Alumni Chapter at the parent institute but proposes to host Alumni Chapters across the globe (New Delhi, USA, Dubai Europe etc). In the near future, we want to make the Alumni Association a strong pillar of the institute so that it will serve to help in development of all the stakeholders related to the institution. Alumni network by itself is one of the best professional networking platforms available today. Hence it has been proposed in the Internal Quality Assurance Cell (IQAC) that certain identified alumni will be paired with current students for technical mentoring which will enhance technical skills of the students.. Being an autonomous institute, Alumni have been playing an active role in the design of curriculum and the syllabus by being members of Board of Studies (BoS) of their respective departments. Various committees like IQAC, Advisory committees, etc involve alumni for the development and quality enhancement of the institute. The institute regularly interacts with the Alumni to benchmark best practices and implement them wherever necessary. Alumni are contributing significantly with paid membership of Rs. 1000/- to the alumni association. In 2014, few of the Alumni have contributed towards tuition fee for one of the economically weak students. Recently, couple of Departments have started the Annual Project Exhibition Competition with financial support by the Alumni.

6638

5.4.3 – Alumni contribution during the year (in Rupees) :

1374000

5.4.4 - Meetings/activities organized by Alumni Association:

Annual Alumni Meet organised on 09/03/2019 at Institute Level i.
 Distinguished alumni were invited to speak about their success story ii. We
have an MOU with Almashines which is an online platform used to connect alumni.

# **CRITERION VI – GOVERNANCE, LEADERSHIP AND MANAGEMENT**

#### 6.1 - Institutional Vision and Leadership

6.1.1 – Mention two practices of decentralization and participative management during the last year (maximum 500 words)

Decentralized education promises to be more efficient, better reflect on local priorities, encourage participation of all stakeholders, improve learning outcomes and quality of teaching. To achieve this, the institution has decentralized the whole working of the institution thus making the mechanism transparent at all levels such as Management, Administration, Financial and Academic activities. The Governing council (GC) is the highest authority to implement and monitor the rules regulations and to delegate the powers to various bodies like Academic Council (AC), Internal Quality Assurance Cell (IQAC), Boards of Studies (BOS), Board of Examiners (BOE) and Finance committee and to look into the activities and smooth functioning. The two practices of decentralisation and participative management during the year 2018-19 are: 1.

Effective implementation of Outcome Based Education (OBE). At the Departmental/Institutional level the following committees has been established for the effective implementation of OBE: - a. Class Committee b. DUGC/DPGC c. Programme Assessment Committee (PAC) d. Departmental Advisory Committee (DAC) e. BOS f. BOE g. IQAC - Academic and Administrative Audit Committee NMIT practices a culture of participative management, by involving faculty members, students, alumni and employers in various administrative roles in academic and

non-academic committees. The above said committees are having all internal/external stakeholders for the transparent and effective implementation of OBE. 2. Effective functioning of Student council. To support and monitor the co-curricular and extra-curricular activities of the students, institute has the following committees/roles: - a. Student council b. Unnat Bharat c. NCC d. NSS e. GEEKMYHAM - Technical Committee f. Cultural Committee g. Anaadyanta - Committee for National level fest h. Sports Committee i. Dance club j. Theatre club k. CHIGURU kannada association l. Music club m. Photography club n. Art club o. Foreign student's association p. Student welfare officer q. Various clubs at the departmental level The above committees are having both faculty and student members who participate in effective implementation of various co-curricular and extra-curricular activities.

6.1.2 – Does the institution have a Management Information System (MIS)?

Yes

#### 6.2 - Strategy Development and Deployment

6.2.1 – Quality improvement strategies adopted by the institution for each of the following (with in 100 words each):

Strategy Type	Details
Admission of Students	Improving the institutional branding by getting accredited by NAAC and NBA.      Improving institutional

	branding by scoring better ranks in NIRF, ATAL and other private ranking agencies. • Improving institutional branding by Participating in AICTE - CII survey. • Recruiting faculty members having Ph.D from reputed institutions like IISc/IIT/NITs. • Establishing state of art centre of excellence/skill development centre. • Improvement in placement of students with high salary package.
Industry Interaction / Collaboration	The institute has: - • Consultancy projects with and without financial benefits. • MoUs with industries. • Industry internships and projects. • Partial delivery of courses by industry experts. • Industrial visit. • Establishment of Industry supported labs.
Human Resource Management	• Biometric system to monitor the Staff Entry / Exit time on daily basis. • Annual Faculty Performance appraisal system is in place. • Orientation program is conducted for all newly recruited faculty members. • Involvement of 100 faculty in NAAC, NBA, NIRF, AICTE - CII survey and ATAL ranking for innovations. • Regular Faculty Staff empowerment programmes conducted. • Financial assistance for publishing research papers in Scopus/WOS indexed conferences/journal and attending FDPs.
Library, ICT and Physical Infrastructure / Instrumentation	The library resources have been completely bar Coded and automated using a dedicated software KOHA. Apart from comprehensive collection of books the library also offers various vital services like:- • Plagiarism checking (Project reports and Ph.D thesis) • E-Books and E-Journals service. • Digital Library. • Current Awareness Magazine service • Newspapers Clipping Service • Reference Services and information regarding examinations. • We have a total of 88 classrooms/ Tutorial Rooms and 95 well-equipped laboratories with advanced ICT facilities. • Lecture capturing rooms, Smart classrooms, English language laboratory, seminar halls, auditorium and open-air theatre are catering to the needs of the students.
Research and Development	Regarding Research and Development, the following were initiated: - • Establishment of COE (Aerospace IOT). •

	Reviewing the Research contribution of Faculty • Financial assistance for publications/patents • Introduction of IPR cell • Deputation of faculty for Ph.D with financial aid. • Reduction of teaching workload for faculty who are involved in COE's. • Seed money for young researchers. • New collaboration with industries. • Collaborations with foreign universities and NET sister institutes.
Examination and Evaluation	• Design of Rubrics for evaluating various learning activities like course project, case study, assignments etc. • Design of Rubrics for evaluating day-to-day laboratory experiments. •  Assessment of learning levels of the students using student management software based on the Blooms Taxonomy. • GATE based aptitude test. • Different phases of rubrics evaluation as a final year project review. • Bar coding/OMR technologies are used in the conduct, evaluation and processing of results. • Review Moderation of the answer scripts by experienced faculty.
Teaching and Learning	• Partial delivery of courses by industry experts. • Peer learning. • Students were asked to enrol for MOOCS apart from the regular courses and weightage for the same as a learning activity component. • Introduction of practical based learning activity. • Introduction of Industry based case studies. • Course-Project based learning.
Curriculum Development	Quality improvement initiations taken by the Institute/Departments are: - • Curriculum revision • Introduction of    new electives • Introduction of    Integrated/Hybrid courses • Introduction of Professional practice    courses/Industry based Electives •    Introduction of MOOC Electives •    Introduction of MOOC references

# 6.2.2 – Implementation of e-governance in areas of operations:

E-governace area	Details		
Planning and Development	• My-Gurukul		
Administration	My-Gurukul		
Finance and Accounts	• HRMS Web Portal • Praptha • NACS • Niketa • Axis pay		
Student Admission and Support	• My-Gurukul • Koha Software (Open Source) • Almashines • Direct Verify • Impartus		

Examination	• My-Gurukul
-------------	--------------

# 6.3 - Faculty Empowerment Strategies

6.3.1 – Teachers provided with financial support to attend conferences / workshops and towards membership fee of professional bodies during the year

Year	Name of Teacher	Name of conference/ workshop attended for which financial support provided	Name of the professional body for which membership fee is provided	Amount of support
2019	vasudha Hegde	Twrds Registration Fee For Confere nceadvances In Electrical And Computer Technologies 20 19(icaect-2019) /vasudha Hegde	NA	7500
2018	Siddalingappa PK	NA	Society of Automotive Engineer	1915
2019	Dr Aditya Shastry K	4th International Conference on Communication and Electronics Systems (ICCES 2019)	NA	6500
2019	Dr chaitra HV	AIDE-19( Aritificial Intelligence and Data Engineering)	NA	4000
2018	Siddalingappa PK	Aerovision- Trends in Aeronautical Engineering	NA	66541
2018	Dr Bharathi Ganesh	International Conference on Sustainable Energy and Green Technology organized by SEEGT 2018 Conference, Malaysia	NA	25000
2018	Mahesh Kumar C L	International Conference on Recent Advances in Materials and Manufacturing Technologies	NA	7500

		organized by MLRITM Hydearabad		
2018	Muralidhara H	International Conference on Recent Advances in Materials and Manufacturing Technologies organized by MLRITM Hydearabad	NA	7500
2018	Jairaj C	International Conference on Recent Advances in Materials and Manufacturing Technologies organized by MLRITM Hydearabad	NA	7500
2018	Joy Lavinya	FDP on Machine Learning organised by Cambridge Institute of Technology, Bangalore	NA	3000
		<u>View File</u>		

6.3.2 – Number of professional development / administrative training programmes organized by the Colleges for teaching and non teaching staff during the year

Year	Title of the professional development programme organised for teaching staff	Title of the administrative training programme organised for non-teaching staff	From date	To Date	Number of participants (Teaching staff)	Number of participants (non-teaching staff)
2018	FDP on PRODUCT Design Analysis Using ANSYS Workbench and APDL	NA	16/07/2019	20/07/2019	22	Nill
2018	NA	SKILL DE VELOPMENT HANDS ON TRAINING	02/07/2019	10/07/2019	Nill	25
	<u>View File</u>					

# 6.3.3 – No. of teachers attending professional development programmes, viz., Orientation Programme, Refresher Course, Short Term Course, Faculty Development Programmes during the year

Title of the professional development programme	Number of teachers who attended	From Date	To date	Duration
5 Day Faculty Development program on Product Design engineering using Fusion 360	1	03/01/2019	07/01/2019	5
FDP on "Salesforce Essentials for Business Specialists" at NMIT Bengaluru ,conducted by ICT Academy.	2	20/05/2019	24/05/2019	5
		View File		

# 6.3.4 – Faculty and Staff recruitment (no. for permanent recruitment):

Teac	hing	Non-te	aching
Permanent	Full Time	Permanent	Full Time
308	308	220	220

# 6.3.5 - Welfare schemes for

Teaching	Non-teaching	Students
i eacility	14011-teaching	Students
<ul> <li>Free Transportation facility to all the faculty.</li> <li>Subsidized medical insurance scheme.</li> </ul>	<ul> <li>Free Transportation facility to all the non- teaching staff.</li> <li>ESI scheme for non-teaching</li> </ul>	• Accidental Health Insurance. • Institutional Scholarships / Fee
PF and Gratuity	staff. • PF and Gratuity	concession. • Financial
benefits. • Subsidized rent for staff members staying in staff quarters • Loan facility from the VIVIDDHODESHA Multi- purpose Co-operative Society • Maternity Leave of 182 days with full salary. • Study Leave for higher studies. • Financial assistance for	benefits. • Loan facility from the VIVIDDHODESHA Multi-purpose Co- operative Society. • Subsidized rent for non- teaching staff members staying in staff quarters. • Maternity Leave of 182 days with full salary. • Concession in tuition fees for	assistance for Projects.  • Financial assistance for Co-curricular and extra-curricular activities.
<pre>publishing research   papers. • Financial assistance to attend FDPs   / Workshops / Training   programs. • Seed Money   for young faculty to     pursue research. • Reduction in workload for</pre>	children of employees for primary, secondary and higher education under the institutions of NET.	

the faculty working in Research Centres. • Half Pay leave for ladies to cater to their infants. • Concession in tuition fees for children of employees for primary, secondary and higher education under the institutions of NET.

#### 6.4 – Financial Management and Resource Mobilization

6.4.1 – Institution conducts internal and external financial audits regularly (with in 100 words each)

Internal/operational audit (IA) is a voluntary appraisal activity undertaken to provide assurance over the effectiveness of internal controls, risk management and governance to facilitate the achievement of organizational objectives. IA is centred on activities like: • Monitoring the effectiveness of internal controls and proposing improvements • Investigating instances of fraud/theft • Monitoring compliance with laws and regulations of the trust • Reviewing and verifying the necessary financial and operating information • Evaluating risk management policies and procedures • Examining the effectiveness, efficiency and economy of operations and processes The annual IA is conducted independently by Chief Internal Auditor and his/her team. Objectives are defined post discussion with the management/Trustees and consulting activity is designed which has added value and improved the Trusts operations. Internal controls are checked and verified by the auditor and deficiencies are noted. The IA examines hard copy or electronic records of the transactions, ensures compliance with the management system procedures and test the effectiveness and implementation of internal controls. They evaluate the internal controls and make recommendations on improvement. The finding of the IA is discussed with the board of trustees, accounting officers and actions are taken to resolve them. External audit (EA) involves the examination of the truth and fairness of the financial statements by a Charted Accountant (CA)/external accountancy firm who is independent of the institute. EA provides a reasonable assurance to the management that the financial statements, as reported are free from material misstatements. External auditors will comply with professional auditing standards such as the International Standards on Auditing and ethical guidelines to maintain a level of quality and trust. Statutory audit is conducted annually by CA appointed by the Board of trustees. Objectives of the audit are approved by the board of trustees. Using appropriate sampling techniques the auditor performs detailed tests on selected transactions and accounts in all major accounts. Audit procedures include: • If assets of the Trust are adequately safeguarded. • Disbursements are supported by appropriate source documents • Periodic/timely reconciliations are performed of the departments statement of condition, trust • account subsidiary ledgers, commissions and fees paid to the institution • Accuracy of amounts and receipt of income from investments • Payments for services like, brokerage fees, realestate management fees, maintenance charges, and • other disbursements to source documents • Account transactions for accuracy to source documents. • Tax returns are prepared and filed within stipulated dates. Audit reports are communicated to the Board of Trustees. Also, a Finance Committee is formed by the GC to • Consider the annual budget and financial estimates of the institution and submit them to the GC for approval • Fixing limits of total recurring and non-recurring expenditure year based, on the income and resources of the institution.

6.4.2 – Funds / Grants received from management, non-government bodies, individuals, philanthropies during the year(not covered in Criterion III)

Name of the non government funding agencies /individuals	Funds/ Grnats received in Rs.	Purpose		
Anaadyanta	1388490	National Level Techno cultural Fest		
<u>View File</u>				

#### 6.4.3 - Total corpus fund generated

2835012630

#### 6.5 - Internal Quality Assurance System

6.5.1 - Whether Academic and Administrative Audit (AAA) has been done?

Audit Type	External		Inte	rnal
	Yes/No	Agency	Yes/No	Authority
Academic	Yes	External Academic Experts	Yes	Dean Academics
Administrative	Yes	M R Kamath Co.	Yes	Advisor (Management Administration)

#### 6.5.2 - Activities and support from the Parent - Teacher Association (at least three)

Feedback on curriculum.
 Placement and Internship support.
 Orientation program for 1st year students and Parents.
 Regular parent -teacher meet to discuss about the educational progress of the students.
 Suggestions regarding academic and administrative reforms.
 Parents are involved in advisory committees.

#### 6.5.3 – Development programmes for support staff (at least three)

1. Soft skill training program 2. Regular staff meetings to motivate them to have a better working environment 3. Yoga and meditation for physical and mental health 4. Technical workshop 5. Refresher course on usage of software tools 6. Personality development program

#### 6.5.4 - Post Accreditation initiative(s) (mention at least three)

1. CIE SEE Questions are framed as per Bloom's Taxonomy. Each question has been identified with levels based on thinking capabilities of the students. In few of the courses like Principles of Parallel Programming, Power System Analysis Stability, Computer Techniques in Power System, Field Theory, Data Mining, etc. open book exam has been conducted. 2. Internship has been made mandatory for UG and PG students. The duration varies from 6 weeks (short duration) to long duration of 40 weeks. UG students are encouraged to opt for long term internship during their final semester and PG students are encouraged to opt for 1-year Internship. Faculty members are being assigned to supervise and evaluate the internship carried by the student by interacting with the concerned industry. Some industries and RD organizations are paying a stipend during internship. 3. About 70 of the courses blended with ICT tools and eresources in teaching learning methods and Wi-Fi facility is provided throughout the campus to facilitate the teaching learning process. Robust MIS ERP tools are being used for campus management solution. This college is a nodal centre of IITB, Mumbai and IIT, Kharagpur to conduct online courses through NMICT, Govt. of India. 4. In order to provide multi skilling to the nonteaching faculty, the management deputes the interested non-teaching staff to various skill development training programmes during the vacation. College is also running Government of India sponsored PMKVY skill development programs,

training in KGTTI to facilitate the multi skilling activities for the people who are in need. 5. After obtaining NAAC accreditation in the year 2014, the IQAC has become proactive to improve the quality of teaching learning process. Academic and Department Audits, FDP's, 360-degree feedback, Mentoring the faculty are being done regularly. 6. The Institution provides 100 funding to the faculty members for filing the patents of their research/innovation work.

#### 6.5.5 – Internal Quality Assurance System Details

a) Submission of Data for AISHE portal	Yes
b)Participation in NIRF	Yes
c)ISO certification	No
d)NBA or any other quality audit	Yes

#### 6.5.6 - Number of Quality Initiatives undertaken during the year

Year	Name of quality initiative by IQAC	Date of conducting IQAC	Duration From	Duration To	Number of participants
2018	Identifying Slow learner s/Irregular students of 1st year with Action plan	20/08/2018	20/08/2018	25/08/2018	1015
2018	Reviewing the Research contribution of Faculty	10/10/2018	10/10/2018	11/10/2018	255
2018	Workshop on New Metho dologies for Accreditatio n in NAAC	03/11/2018	03/11/2018	03/11/2018	110
2019	Department wise Academic and Administrati ve Audit	01/03/2019	01/03/2019	01/03/2019	309

View File

# **CRITERION VII – INSTITUTIONAL VALUES AND BEST PRACTICES**

#### 7.1 - Institutional Values and Social Responsibilities

# 7.1.1 – Gender Equity (Number of gender equity promotion programmes organized by the institution during the year)

Title of the programme	Period from	Period To	Number of I	Participants
			Female	Male
Drug Awarness Program	08/02/2019	08/02/2019	40	75
Project on Breast Cancer Prediction	01/01/2019	30/04/2019	4	Nill

Using Data Mining				
International Yoga Day	15/06/2019	21/06/2019	45	20
Combined Annual Training Camp	01/07/2019	23/08/2019	118	282
Institutional training - The training is the combination of theory and practical classes, some of the topics covered are weapon training, map reading, drill, field craft- battle craft, national integration, personality development, di saster- management	04/08/2018	27/07/2019	25	45
International Women's Day Celebration	08/03/2019	08/03/2019	45	15
Cancer Awarness Program	25/08/2018	25/08/2018	152	42
Katalyst Women Empowerment Program	03/02/2019	15/02/2019	8	Nill
Seed Money Was Sanctioned To Young Female Researchers To Encourage Research Activity	06/08/2018	31/07/2019	2	2
Raksha Bandhan	25/08/2018	25/08/2018	30	40
Youth Awarness Program	04/01/2019	04/01/2019	20	30

7.1.2 – Environmental Consciousness and Sustainability/Alternate Energy initiatives such as:

Percentage of power requirement of the University met by the renewable energy sources

A major part of the electrical power requirement of the institution is met by

the Solar Rooftop Photo Voltaic System having an installed capacity of 382 kW the sanctioned load being 450 kW. The maximum limit prescribed by the state electricity board is 85 of the sanctioned load. There by the institution meets the maximum requirement specified by the Electricity board. All new lighting installations use LED bulbs resulting in significant power saving. About 44 percent of the lighting power is met by LED bulbs. The institution (power producer) and the solution provider have undertaken that they will take all possible steps to implement net-metering once the guidelines and policies of BESCOM and KERC are favorable or operate as per any arrangement that is mutually acceptable.

#### 7.1.3 - Differently abled (Divyangjan) friendliness

Item facilities	Yes/No	Number of beneficiaries
Physical facilities	Yes	2
Provision for lift	Yes	2
Ramp/Rails	Yes	2
Rest Rooms	Yes	2
Scribes for examination	Yes	1

#### 7.1.4 - Inclusion and Situatedness

Year	Number of initiatives to address locational advantages and disadva ntages	Number of initiatives taken to engage with and contribute to local community	Date	Duration	Name of initiative	Issues addressed	Number of participating students and staff
2018	35	42	01/08/2 018	365	address 1	locatio nal advan tages and disadvant ages	4631

#### <u>View File</u>

#### 7.1.5 - Human Values and Professional Ethics

Title	Date of publication	Follow up(max 100 words)	
REGULATIONS B E Degree Program (Autonomous)	01/01/2018	https://www.nmit.ac.in/ autonomous-rules- regulation.html	
Code of ethics to check malpractices and plagiarism in Research	01/01/2018	https://www.nmit.ac.in/ code-of-ethics.html	
Testing and Consultancy Rules	01/01/2018	https://www.nmit.ac.in/ Innovationentrepreneurshi p.html#	
Intellectual Property Rights (IPR) Policy (Research/ Patent/consultancy)	01/01/2018	https://www.nmit.ac.in/ Innovationentrepreneurshi p.html#	

Policy for Promotion of Research	01/01/2018	https://www.nmit.ac.in/pdf/3.1.1-Promotion-of-Research-and-Facilities.pdf
Institutional Governance Review Template	01/01/2018	https://www.nmit.ac.in/ disclosure.html
Professional code of prescribed/suggested by statutory bodies / regulatory authorities	01/01/2018	https://www.nmit.ac.in/ disclosure.html
Code of conduct for BoG and Principal	01/01/2018	https://www.nmit.ac.in/ disclosure.html

#### 7.1.6 – Activities conducted for promotion of universal Values and Ethics

Activity	Duration From	Duration To	Number of participants			
Blood Donation Camp	05/04/2019	05/04/2019	213			
Gandhi Jayanthi	02/10/2018	02/10/2018	65			
Swami vivekananda jayanthi	12/01/2019	12/01/2019	50			
<u>View File</u>						

#### 7.1.7 - Initiatives taken by the institution to make the campus eco-friendly (at least five)

Waste Management steps including: ?Liquid waste management ?E-waste management ?Green Practices ?Roof Top Solar Power Plant ?Rain Water Harvesting Nitte Meenakshi Institute of Technology (NMIT) believes in "Let's go green and keep our campus clean". NMIT'spivotal operations have very less impact on the environment as the institute is very conscious of generating less waste and recycling it by passing it through a system that enables the used material to be reused ensuring that less natural resources are consumed. Environmental initiatives like use of renewable energy, Rain water harvesting, Sewage treatment plants, Zero water discharge, No smoking zone, waste management system etc have been implemented. Environment consciousness is embodied in the heart of the college by tree plantationsfrom NSS/ NCC/Rotract/Chigaru teams every year which is the predominantmotive of the management to maintain the pristine purity and beauty of the college and also to provide a congenial atmosphere for the academic and non-academic pursuits. The institute's waste management practices are divided into two parts: 1. Liquid Waste Management 2. E-Waste Management 1. Liquid Waste Management: The liquid wastes generated in the campus includeSewage, Laboratory, Laundry, hostel and canteen effluent waste. The above waste is treated through Sewage Treatment Plant (STP) setup in the institute with a capacity of 240 KLD (Kilo Litres per Day). The entire treated water is used for watering the gardens and lawns maintained in the campus. The sludge settled in the STP is removed and is dried on drying beds and used as manure for the gardens. Therefore, the entire waste water generated in the campus is treated and reused. The laboratory waste water does not contain hazardous chemicals and periodical monitoring is done by the maintenance team. The wastewater entering the STP is tested for its characteristics like Chemical Oxygen Demand (COD), Biochemical Oxygen Demand (BOD), Total Suspended Solids (TSS), Total dissolved Solids (TDS), pH and Colour etcon a timely basis. 2. E-Waste Management: Electronic goods are put to optimum use the minor repairs are set right by the Laboratory assistants and teaching staff and the major repairs are handled by the Technical Assistant and are reused. NMIT has entered into MoU with SOGO Synergy which buys our damaged computers and other non reparable

e-waste and issues a Recycling certificate. SOGO Synergy has a State-Of-The-Art Warehouse measuring 20,000 sq. feet meant for storage, dismantling and recycling of electronic waste with the support of latest technology. The equipment which cannot be refurbished for re-use is dismantled and remanufactured into raw materials (i.e. metals, plastics, glass) to be marketed as recyclable. The company assures that the E-waste does not end up in a landfill. It is sent to an agency authorized by Karnataka State Pollution Control Board (KSCB) for disposal, which processes E-waste in a Zero dumping tech

#### 7.2 - Best Practices

#### 7.2.1 – Describe at least two institutional best practices

1. Stimulating Culture of Multidisciplinary Research Objectives of the Practice: • To inculcate culture of multidisciplinary research and innovation among UG/PG/Ph.D. Students and Faculty. • To provide platform and opportunities for students and faculty from different discipline to collaborate and share research activities and ideas • To establish Centre of Excellence in the multidisciplinary research areas by collaborating with advanced research institutes like IISc./ISRO/NAL/CAIR/ etc. In the context of Indian higher education, if the departments work independently then the solution developed may not be feasible to meet the societal/global needs. However, most of the current requirements need expertise of several disciplines. In this context, NMIT has encouraging the practice of Multidisciplinary Research. The faculty and students of different disciplines will come together to work towards a common goal. Practice: Established Multi-Disciplinary Research Centers, These centers provide advanced research facilities and training for faculty and students drawn from different disciplines, such as o Center of Small Satellite Research in collaboration with ISRO, Bangalore. o Center of Robotics Research. o Centre of Nanomaterials and MEMS in collaboration with IISc, Bangalore. o Center of Design and Process Simulation in collaboration with Dassault Systems o Center of Computational Fluid Dynamics in collaboration with NAL. o Center of Aerospace and IoT in collaboration with Dassault System PTC. 11 Labs havebeen established with a funding ofabout Rs.25 Crores. o Centre for Cyber Security IOT in collaboration with Subex Company. • Introduced Courses related to Muti-Disciplinary Research. Institute offers wide range of courses as Open Electives thus encouraging the students to acquire knowledge in various emerging domains. • Seed money for the young Faculty to pursue multidisciplinary research. • MoUs with reputed RD Organizations/Industries/Universities of India Abroad. • Department wise monthly Faculty Colloquium, to share the domain knowledge among the faculty of the department as well as other departments. • Reduction in workload for the faculty working in Research Centers for better research productivity • Financial assistance to publish research articles, filing patents and to attend FDPs/Workshops/Training programs 2. Learner Centric Teaching and Assessment: ? To seed in a clear expectation of what needs to be accomplished by the student at the end of the course/program. ? To structure Learning Teaching process catering to the students needs. ? To increase student involvement which allows them to feel responsible for their own learning, ? To uphold the standards of engineering education and to ensure that students will be prepared for professional life after they graduate. ? To decide what learning level the student would be at NMIT has successfully introduced Outcome Based Education since 2012. Institute is regularly conducting Awareness Training on OBE/ Pedagogy Training on Outcome Based Learning and Teaching (OBLT ) to the Faculty. During orientation program, student will be made aware of OBE. The Institute has effective administrative setup in the form of various committees such as DUGC, PAC, DAB, BOE, BOS, and IQAC AC to implement/monitor the Out Come Based Curricula/Teaching/Assessment. Towards the framing of Outcome Based Curricula , DUGC/BOS will refer knowledge areas proposed by Professional Body

Guidelines (IEEE/ACM/ASCE/ASME/etc), guidelines of UGC/AICTE/VTU and syllabi of premier Institution. The Institute will take feedback/input from all the stakeholders viz. Students/Faculty/Alumni/Parents/Employers. Towards the effective Outcome based Teaching/Learning, Departments will conduct Faculty Brainstorming sessions during the beginning of the semester to deliberate on Delivery Assessment Methods. Faculty has adopted course specific effective/innovative delivery methods such as • Demonstration Based Teaching • App Based Teaching • Certification Based Learning • MOOC Based Learning through SVAYAM/NPTE/UDEMY • Google Class Rooms • Tool based teaching • Lectures interspersed with discussions • Tutorials • Course Projects/ Mini Project • Main Project • Case Studies • Industrial/Site Visits • Programming Assignments • Seminars • Debates • Written Assignments • Hands on Sessions • Self study /Internship • Workshops/Invited Talks/Webinars NMIT has adopted effective direct indirect assessment methods to measure the learning outcomes. Faculty have designed effective rubrics for evaluating different Learning activities and Laboratory Experiments which result in accurate assessment of learning outcomes The Institute/Departments have adopted the following practices • MOOC Based Electives • MOOC Based References for most of the courses • Practical experiments are directly related to Real World Applications • Long term Internship • Plagiarism check for UG/PG/PhD Project Reports • Latex Based Reports • Practical Integrated Courses • Industry Driven Electives • Partial delivery of Course by Industry Experts

Upload details of two best practices successfully implemented by the institution as per NAAC format in your institution website, provide the link

https://nmit.ac.in/pdf/naac2/new/7.2.1-Best-Practices-1&2.pdf

#### 7.3 – Institutional Distinctiveness

7.3.1 – Provide the details of the performance of the institution in one area distinctive to its vision, priority and thrust in not more than 500 words

Engineering drives innovation through the development of new processes and technologies. Hence, fostering innovation is an important goal of engineering education. Promoting Innovation is also a national goal. In this line Nitte Meenakshi Institute of Technology, Bangalore has created conducive environment for Innovation Entrepreneurship which has made NMIT to stand differently among the other Engineering Institutes of India. As an Autonomous Institute, NMIT has started promoting Innovation and entrepreneurship from the year 2008. Innovation and Entrepreneurship Development Centre (IEDC) was established in the year 2010 and funded with Rs. 45 lakhs by the Department of Science and Technology (NSTEDB), New Delhi. Under IEDC, every year 5 Innovative projects were funded with Rs 5 Lakhs each. As a next step Business Incubator was established with the support of MSME (Micro, Small and Medium Enterprises), Govt. of India to provide early support to our students for incubating their innovative ideas. Further Innovation club has been established with the support of University. NMIT has also established a Campus Company- Iignis Innovation Lab which enables the students to develop societal applications and earn while learning. A good research will lead to an innovation. There is no innovation without proper research. With this vision, NMIT has established five multidisciplinary Centers of Excellence (CoE) viz Small Satellites (Supported by ISRO), Robotics, Nanomaterials MEMS, Computational Fluid Dynamics, and Design Engineering Process Simulation. NMIT is a unique Institution to establish Center of Excellence for skill development in Aerospace and IoT (CoE) in collaboration with renowned companies (Dassault systems PTC) with a funding of Rs 25 Crores which imparts high end modern technical skills and knowledge among the engineering graduates and make them 'Industry Ready'. NMIT has several sponsored research projects amounting to Rs.15 Crores sanctioned by different National Funding Agencies such as DST, DIT, ISRO, AICTE, DRDO Labs, VGST, IEEE,

VTU, UNESCO-KSCST, etc. which provides opportunities for UG/PG/PhD students to work 24X7 in these projects which will lead to Innovation. To introduce culture of Innovation during the early stage of Engineering, NMIT is the first college in India to introduce Robotics Engineering-Lego Mindstorms and TETRIX with Laboratory Course for II Year B.E Students. The course is on the lines of a few US/European Universities. Course Projects/Project Competitions/Internship have been introduced from 1st year of Engineering which will enable NMIT to inculcate Innovative thinking. Highly qualified and experienced faculty comprising of 85 Ph.Ds primarily from IISc, IITs NITs will enable NMIT to create IISc/IIT/NIT culture among its students and to practice Outcome Based Education successfully. The College is having Several Technical/Entrepreneurship promoting clubs supported by Professional Bodies such as IEEE/IE/IETE/NEN/etc. Other events where our students outperformed are: • Unisys Cloud 20/20 Contest • Bigbot League (Infosys) • DHFL Fintech challenge • Smart Odisha Hackathon • Accenture Innovation Challenge • CONSENSYS India Hackathon • Rupay Contactless Ideathon • 3M-CII Young Innovators Challenge Awards • Carl Zeiss hackathon • IoT Innovation Challenge • SAE Baha/Supra • Rally car Design Challenge • National Solar Vehicle Championship • GIISC-Reimagine Waste, Hackathon (IISc)

#### Provide the weblink of the institution

https://nmit.ac.in/pdf/naac2/new/7.3.1-Performance-of-the-institution-in-one-area.pdf

#### 8. Future Plans of Actions for Next Academic Year

• Starting of M.Tech - Data Science • Starting of M.Tech - Aerospace • Increase in intake of B.E - Electrical and Electronics Engineering from 60 to 120 students • Starting of Centre of Excellence in Power Engineering • Starting of Centre for Applied Mechatronics and Additive Manufacturing • Enhancement of Industry Institute Interaction through MOUs • Submission of NBA - SAR for B.E - Information Science and Engineering and B.E - Aeronautical Engineering • Submission of NBA - Compliance report for B.E - Mechanical Engineering and B.E - Civil Engineering for further accreditation • Action plan for collaboration with NMAMIT, NITTE for research and faculty exchange programmes.