Two Days Orientation Programme for Young NMIT Faculty

Members during 01st and 02nd August 2017

NITTE MEENAKSHI INSTITUTE OF TECHNOLOGY

(An Autonomous Institution Under Visvesvaraya Technological University, Belgaum)

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Day to day proceedings

12. Outcome Based Education (OBE) with an exercise on CO, PO calculations, attainment and analysis

13. Gurukul software: Facts and Impact (Hands on Session)

Annexure A- List of Participants

Annexure B- List of Resource Persons

Annexure C- Actual Schedule of the Program

ACKNOWLEDGEMENTS

Program Coordinators
Dr. Santhosh L.G
Dept. of Civil Engg.
Mr. Sudeep Shetty
Dept. of EEE.
Mr. Harish.L.
Dept. of Mech Engg.
Mr. Girish
Dept. of ECE.
Mr. Manjunath B.A
Dept. of ISE.

Program Director
Dr. Sudheer Reddy
Professor & HOD,
Dept. of Mechanical Engg.

1. INTRODUCTION

Faculty Development is one of the key functions of NMIT and hence it has been ensuring that all the new incoming faculties are oriented to NMIT's academic ambience soon after their joining the college and from time to time they are exposed to refresher programs not only inside the college but also the other programs organized at state and national levels. In autonomous system, faculty plays a vital role in the success of Outcome Based Education. The understanding and implementation of OBE in all aspects is very essential to meet the requirements of accrediting bodies such as NBA, NAAC. The program will be organized by the Department of Mechanical Engineering. The department has faculty with a blend of academic and industry experience. The department has conducted several programs pertaining to faculty development workshops on Research Methodology, Pedagogy etc.

Title of the Programme

Two Days faculty orientation Programme for young NMIT faculty members

Duration of Program

The orientation program is for two days.

Venue - New seminar hall of NMIT

Nature of the program

This is an orientation programme geared to acquaint the newly joined faculty members regarding the Structure, Functions and Structure-Function relations and in that the role of teachers in Institution building, academic system, research initiatives and professional ethics. This facilitates the faculty to adopt the best practices and try innovations in teaching, learning and evaluation processes which facilitates the overall performance of the students.

The main objective of the programme is to welcome the young, new comers to the NMIT academic fraternity and make them feel comfortable with the academic and non academic community of NMIT and introduce them to the "DOs" and DON'T DOs" in addition to teachers' Roles and Responsibilities and Professional Ethics

The other objectives of the program are:

- To introduce the teachers to the NMIT Human Resource facilities and how they can make use of the same under the autonomous structure;
- To acquaint teachers to the NMIT Institutional and professional ethics, work culture, infrastructure and other facilities in addition to curricular, co-curricular and extra-curricular activities;
- To inspire and motivate them to enable them to contribute to NMIT prestige and Status.
- To acquaint them to the mentorship scheme and enrich knowledge on Student Mentoring
- To make the faculty conversant with Outcome Based Education system
- To motivate the faculty in taking up Interdisciplinary Research.
- To explore the best practices in teaching & learning

3. NATURE OF THE PROGRAMME

This is an orientation programme geared to acquaint the newly joined faculty members regarding the Structure, Functions and Structure-Function relations and in that the role of teachers in Institution building, academic system, research initiatives and professional ethics. This facilitates the faculty to adopt the best practices and try innovations in teaching, learning and evaluation processes which facilitates the overall performance of the students.

Orientation to Technical Departments

Topic: Department of Aeronautical Engineering

Date: 1st Aug 2017   **Time:** 10:30 AM to 10:50 AM

Resource Person: Mr. Vankatesh K

About NMIT

NitteMeenakshi Institute of Technology (NMIT) is an Autonomous Institution affiliated to the Visvesvaraya Technological University (VTU), with the approval of UGCNMIT got accredited by the National Board of Accreditation [NBA] under Tier-1 status (for 4 Programs) and Grade-A status by National Assessment and Accreditation Council [NAAC - UGC].

NMIT is the youngest engineering college in the country to be conferred the prestigious Autonomous Status by UGC/Govt. of Karnataka, New-Delhi in the year 2007. NMIT is the only unaided private engineering college in Karnataka State to be selected by the Govt. of India for World Bank Funding under TEQIP Phase II-Subcomponent 1.1 in the year 2011.

About Department of Aeronautical Engineering

Aeronautical engineering Department has been started in our college with the intake of 60 students from the academic year 2011-2012. The department of Aeronautical Engineering is one of the most challenging fields of engineering with a wide scope for growth. This field deals with the study of new technology in the field of aviation, space exploration and defense systems. Aeronautical engineering trains students in designing, construction, development, testing, operation and maintenance of both commercial & military aircraft.

- Department has got Permanent Affiliation from VTU for Five years(2017-2022)
- Ref:VTU/Aca-OS/PmntAffl/2017-18
- Department has successfully uploaded the NBA SAR report.

Vision and Mission of the Department

Vision

To develop technically competent Aeronautical Engineers of the highest academic standards to meet the national and global requirements of industry and society.

Mission

To impart quality education in Aeronautical Engineering through top-class teaching – learning process, well-designed curricular& co-curricular activities and state-of-the-art infrastructure

To inculcate ethical values and develop innovative ideas to meet ever changing global requirements through industry-institute interaction and interdisciplinary research

Program Educational Objectives

PEO-1

- Graduates will be successful professionals in the field of Aeronautical Engineering and allied areas.

PEO-2

- Graduates will exhibit skills to work individually and as part of the team with ethics.

PEO-3

- Graduates will pursue higher studies, research and adapt to a world of constantly changing technologies.

Program Specific Outcomes (PSOs)

PSO1

- Graduates will be able to design and analyze various aircraft materials and structures.

PSO2

- Graduates will be able to develop solutions for various aerodynamic, propulsion and control systems used in aircrafts.

Faculty Information

Sl No	Faculty Name	Designation
1	Dr. S VENKATESWARAN	Professor and HOD
2	Dr. KISHORE BRAHMA	Adjunct Professor
3	Mr. MAHENDRA M A	Assistant Professor
4	Mr. HARISH H V	AssociateProfessor
5	Mr. NISHANT DESAI	Assistant Professor
6	Mr. SRIKANTH HV	Assistant Professor

7	Mr. SIDDALINGAPPA P K	Assistant Professor
8	Mr. VINOD L	Assistant Professor
9	Mr. SRIDHAR	Assistant Professor
10	Mr. PRASHANT MANVI	Assistant Professor
11	Mr. VENKATESH KUSNUR	Assistant Professor
12	MR.VINAYAK	Assistant Professor
13	Mr. SANTOSH HOSUR	Assistant Professor

FACILITIES

- In addition to the laboratories and R&D facilities already available in NMIT, our department has established additional infrastructures, like:
- Aircraft Propulsion Lab
- Aircraft Energy Conversion Lab
- Aerodynamics Lab (wind tunnel facility)
- Aircraft Structures Lab

Sl No	Name of Author	Title of Book	Name of The Publisher
1	Mr.ChetanyrappaMr. Ashwin C GowdaMr. Harish H V	Mechanical Measurements & Metrology	Sunstar Publisher
2	Mr.SanthoshNagarajaDr. Aswatha MMr. Praveen Kumar S	Machine Tools & Operations	Subhash Publications
3	Dr. Balachandra P ShettyMr. Mahendra M A	"Elements of Aeronautics Multiple Choice Questions"	Interline Publisher, Bangalore
4	Mr. MayurAnvekar	Aircraft Propulsion	Prentice-Hall of India Pvt.Ltd

5	Mr. MayurAnvekar	Experimental study of Kerosene based Pulse Detonation Engine	LAP Lambert Academic Publishing

Funded Research Projects

Sl.No.	Financial Year	Name of Faculty (Principal Investigator)	Name of the Funding agency	Title of the Project	Sanctioned order no.	Sanctioned date	Amount Received In Rs
1	2016-17	HARISH H V	KSCST	Design And Fabrication Of Alternative Propulsive System For Marine Vehicle		March 2017	7,500
2	2015-16	SRIKANTH H V	KSCST	A Study On Effect Of Cold Flow Improvers On Crystalliztion Of Kinetics Of Biodiesel And Its Effects On Engine Operation	39S_B_BE_066	23rd March 2016	7,000
		SANTHOSH N	TEQIP	Development And Characterisation Of Composite Materials	TEQIP - SMP - 07	14th Jan 2016	80,000
		HARISH H V	TEQIP	Analysis Of Flow Over Compressor Blade And Through Ducts	TEQIP - SMP - 08	14th Jan 2016	1,10,000
		MAHENDRA M A	TEQIP	Fibre Reinforced Composite Laminates For Performance Improvement	TEQIP - SMP - 09	14th Jan 2016	1,35,000
		SRIKANTH H V	TEQIP	Performance Analysis Of Diesel Engine Operating On Milk Scum Based Bio Diesel	TEQIP - SMP - 11	14th Jan 2016	1,20,000
3	2014-15	MAHENDRA M A	KSCST	Design Analysis And Fabrication Of An Uav For Agricultural Applications	38S_BR_1772	12th March 2015	14,000
		SRIKANTH H V	KSCST	Enhancement Of Aerodynamic Characteristics Of Airfoil	38S_BR_1793	12th March 2015	12,000

Training & Consultancy Projects

Sl.No.	Financial Year	Name of faculty	Area	Client Organization
1	2015-present	Dr. S Venkateswaran	Process and Productivity improvement	VIL-BEML
2	2015-16	Mr. Santhosh N	Manufacturing	Saravana Foundry
		Mr. Santhosh N	Manufacturing	Modern Machine Components
3	2016-17	Mr. Harish H V	Training	VTU RC Muddenahalli

Workshops & Seminars

- The Department of Aeronautical engineering organized a seminar on 04th Oct 2016 on SPACE TECHNOLOGY IN ADVANCE STAGE.The talk was given by Dr P J Bhat-Group Director, Sr. Scientist –ISAC/ISRO. The speaker addressed the Aeronautical Engineering students on SPACE ORBITS AND TRAJECTORY. It gave a brief insight into current trends in Aerospace Technologies.

Topical Transcend in Aerospace Technologies - 5 Day Workshop (Sept 2016)

- This workshop imparted knowledge on diverse topics of interest such as propulsion, aircraft material, stability and control techniques. Dr. V. Ganesan professor emeritus department of Mechanical Engineering IIT Madras was the chief guest
- National Workshop on Topical Transcend in Aerospace Technologies was conducted for 5 days from 19-09-2016 to 23-09-2016.

Departmental Forum Falcon

FALCON Aero Club is a student body of the department for career development and enhancement of intrapersonal skills of the students. FALCON organizes industrial visits, guest lectures, Aero modeling Workshops and many inter-college technical events like RC plane flying, water rocket demonstrations, and paper presentations on advanced aeronautical technologies, glider competitions and many other special events.Eminent Scientists from top organizations like NAL, IISc, IITs, ISROetc are invited regularly for giving Guest lecture.

Invited lecture series organized by FALCON

Sl No	Date	Speaker	Topic
1	31 March 2017	Lt. Gen (Retd). Dr. V J Sundharam	Micro and Nano Systems
2	24th Feb 2016	Prof. A Raghunandan, Alumni of IISc Bangalore	Applications of thermodynamics for unifying approach
3	23rd Feb 2016	Mr.ParimalPriyadarshi, Brainstorming Labs LLP Bangalore.	Bridging gap between Academia and the industry
4	26th Feb 2016	Mr. Roland Lancelet, Director, Roland & Associates Pvt. Ltd. Bangalore	Employability & Skill expectations of the industry

Prospects of Aeronautical Engineering

The growth of the domestic and international economy naturally boosts the aerospace sector. Optimism also stems from the growth of air passenger traffic by 20%, after being limited to single-digit growth for several years".

Our country's size demands a robust civil-aviation system. Further, the need for effective defense systems will require in-country production of aviation defense systems. As the potential in these sectors is yet to be realized, tremendous opportunity exists."

Maintenance of all aircrafts from various parts of the world will be carried out at Nagpur and Bangaluru, instead of Singapore shortly.

Future Prospects in India and Karnataka

- India's Offset policy, which prescribes 30% of all deals above 300 Crores to be reinvested into the country, are obliging aerospace partners to set up subsidiaries, enter into joint ventures or outsource design, components, sub-systems, accessories to the Indian aviation industry.

- Offsets can thus play the role of a catalyst in development of aerospace MRO(Maintenance, repair and Overhaul) and manufacturing activity by providing an added incentive to global aerospace majors and their suppliers who are already seeing sense in putting up a strong presence in India.

- The effective implementation of such an offset policy coupled with an attractive FDI policy can hasten the pace of indigenization.

- As a State, Karnataka has the resources to be a centre of aerospace excellence /cluster of creativity, where it can endeavour to gain global notice for program management, engineering, maintenance, material and information systems support and offer overhaul services to rotary and all fixed-wing aircraft.

- Rationalization of some features of the existing policy regime will go a long way in assisting indegenisation and absorption of new technologies.

Topic: Department of Civil Engineering

Date: 1st Aug 2017   **Time:** 10:50 AM to 11:10 AM

Resource Person: Mrs. Prathima G

Feel Proud to be Civil Engineers!

About Dept of Civil Engineering

NMIT is an Autonomous Institute under NITTE Trust, Department of Civil Engineering was started in the year 2009 and Fifth batch of Graduates joined the industry in April 2017. Intake of Civil Engineering in UG was 60 in 2009 and is increased to 120 in 2013. Post Graduation in Structural Engineering was started in 2013 with an intake of 24. Civil Dept. is a recognized Research Centre for PhD programme by VTU, Belgaum

Vision of NMIT

• 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 of NMIT:

• 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 & 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.

Vision of the Civil Dept:

•To be one among the topnotch Civil Engineering departments in India, create Centre of Excellence, to provide globally competent Civil Engineering graduates serving the needs of the society and sustainable development.

Mission of the Civil Dept:

• Mission1:

   To integrate a system, conducive for teaching and continuous learning, research, consultancy and developmental activities, through excellent teaching, research and state-of-the-art infrastructure.

•Mission2:

   To impart professionalism among students, through Industry Institute Interaction.

• Mission3:

   To imbibe leadership quality, professional ethics, environmental consciousness and social responsibilities, to serve the society through co-curricular and extra-curricular activities.

Laboratory facilities:

Environmental Lab

Basic Material Testing Lab & Concrete and Highway Engg. Laboratory

Surveying Laboratory & CADD Laboratory

Hydraulic Laboratory & Geotechnical Laboratory

Exclusive Labs for PG in Structural Engineering

Structural Engineering Laboratory& Structural Dynamic laboratory

STADD-Pro, Revit, Ansys and ETABS Softwares

Department of Civil Engineering has

  ✖ 31 faculty members with 7 PhD holders
  ✖ Faculty members are Master Degree holders and are from various fields of specialization and 9 PhD Research Scholars .

Various fields of specialization:

Geotechnical Engineering
Bridge Engineering
Structural Engineering
Structural Engineering – Bridge Engineering
Transportation & Highway Engineering
Hydraulics & Water Resources Engg + Structural Engineering
Environmental Engineering

Members of BOS:

Name	Description	Designation
Dr. Bharathi Ganesh	Professor & HOD	Chairperson
Col. Ramachandra B V	Dean – Civil Dept	Member(I)
Dr.N Balasubramanyam	Dean – Academics, Acharya Institute of Technology, Bangalore	Member –(External - VTU Nominee)
Dr. Manamohan R kalgal	Tech Adviser, Ultratech Cements Ltd. Bangalore	Member (External)
Dr. G S. Srinivasa Reddy	Director, KSNDMC, Yelhanka, Bangalore	Member (External)
Dr. H N Ramesh	Professor, UVCE & Director – P & D, Bangalore University	Member (External)
Dr. S V Dinesh	HOD, Civil Dept, SIT Thumkur	Member(External-Academia)
Dr.Ramesh Babu,	Director, CPRI, Bangalore	Member – R & D Organisation
Mandeep Pandey	Research Scholar, IISc, Bangalore	Member (Alumni)

Industry institute interaction:

Faculty members are Life members of various Professional Body based on their area of specialisation
•*ICI*   -*I*ndian *C*oncrete *I*nstitute - KBC
•*ACCE*   - *A*ssociation of *C*onsulting *C*ivil *E*ngineers*(I)*
•*INSTRUCT*   -*Ins*titute for Man Power *Tr*aining of Con*stru*ction *T*rades And Management
•*INSDAG*   -Institute Steel Development and Growth
•*IASE*   -*I*ndian *A*ssociation of *S*tructural *E*ngineers
•*NWSF*   -*N*ational *W*omen *S*cience *F*orum of India
•*IWW*   -*I*ndian *W*ater Works *A*ssociation
•*IGS*   -*I*ndian *G*eotechnical *S*ociety
•*ASCE*   - American Society of Civil Engineers

Internship & placement:

INTERNSHIP & PLACEMENT

Research Activities:

- Thermal Power Plant Waste in Mortar and Concretes as Fine Aggregates – Dr. Bharathi Ganesh
- Pond Ash – Feasibility of using it as Fine aggregates in concrete-Dr. Pranesh N
- Uptake of heavy metals by plants from college sewage water-Dr.Vidhyavathi
- Geology – Oceanology-Dr. Ramachandra Reddy
- Analysis of Effect of Land fills on Soil Strata using GIS-Dr.Santhosh L G
- Packing Density Approach – Assessment of Properties of Concret-Dr.R Nagendra
- Removal of Fluoride using Adsorbents-Ms.Rashmi H R
- C & D waste in Pavement for Sustainable Road Inrastructure-Ms Prathima G
- Geogrids applications for Soil Stabilization-Mr.JaiRaj
- Effect of Galloping over Transmission Tower-Mr.Shreyas
- Study on Geopolymer Concrete & its Durability Parameters–Mr.Prashanth N

Publications:

- Research Papers published –43
- Conference Papers Published-52
- M. Tech Projects guided-49
- U G Projects guided-238
- Research Scholars-09
- New Research Structures lab includes loading frame, Shake table

- Ultrasonic pulse velocity instruments and Rebound hammer.
- Faculty of the department guiding PhD Student-5 + 1 + 2

Topic: Department of Computer Science & Engineering

Date: 1st Aug 2017 **Time:** 11:20 AM to 11:40 AM

Resource Person: Mrs. Archana Naik

1. Vision and Mission of the Department
Vision: To be a center of excellence in the field of Computer Science and Engineering, imparting sustainable quality education along with ethical values.
Mission: The department of Computer Science and Engineering is dedicated to prepare its students for excellent professional career and higher studies by providing fundamental knowledge of basic sciences and principles of Computer Science and Engineering with conducive teaching-learning and research environment, inculcating entrepreneurship and leadership skills, enabling them to serve the engineering profession and society.
To achieve the established vision and mission the department continuously thrives to maintain the best practices in teaching learning.
Hiring, nurturing, and retaining outstanding and enthusiastic faculty who strengthen our existing expertise, while positioning us to be in front of emerging research areas of the discipline
- Constantly updating our curriculum to incorporate innovations in ever-changing CS&E technology.
- Attracting the best students for undergraduate program , while continuously strengthening our undergraduate program with the latest developments in the field.

2. About the Department

Program	Intake	Academic Year
BE	Started with 60	2001-02
	90	2002-03
	120	2004-05
	180	2012-13
M Tech	Started with 18	2008-09
	36	2011-2012
Research	PhD under VTU	

Program	PhD under University of Mysore	

3. Teaching Faculty
- The department has high competent faculty involving
    - 5 Professors
    - 7 Associate Professors
    - 30 Assistant Professors
- 5 faculty members are having PhD and 15 faculty members are pursuing their PhD
- The department is Headed by Dr Thippeswamy MN
- Dr Jharna Majumdar is handling MTech Program

The department is been accredited by NBA-AICTE in June 2010 for 3 years and in June 2014 for 3 years. The department has submitted compliance report in July 2017.

4. Faculty Research Interest
The Faculty of the Department are involved in wide area of research through which they are guiding the students in doing the project and publish papers. Following table gives the research areas in which faculty are working.

Sl No.	Research Areas	No. of Faculty
1	Artificial Intelligence/ Machine Learning/ Smart Computing	3
2	Wireless & Sensor Networks/ IoT/ Cloud Computing	23
3	Image Processing/Robotics/Human Computer Interaction	1
4	Database Management/ Data Mining/ Big Data Analytics/ Business Intelligence	9
5	Software Engineering/ Programming Language/ Operating System	10
6	Computer Vision, Graphics and Visualization	1
7	Network Security & Cryptography	9

- Currently projects worth Rs 1.23 Lakhs is ongoing in the department, from external finding agency and Projects worth Rs 17.27 Lakhs is completed by the faculty during academic year 201-17 funded by SEED money under TEQUIP II.
- There are 8 patents applied , 13 patents published and 1 patent granted for the faculty till date from the department.
- 38 Papers have been published by the faculty in well known journals and conferences in the AY 2016-17

5. Teaching Learning

Outcome based teaching learning process is followed , using Bloom's Taxonomy. The course outcome are set at the beginning of the course based on the Program Outcomes defined by NBA . The attainment of Course outcomes and Program outcomes are evaluated based on the student's performance in different assessment methods

- Department also offers a new course "Robotics Engineering- LEGO Mindstorms & TETRIX" in self-financed robotics lab, as an opportunity to learn robotics. Top 20 students of the department are trained in this program and other interested are trained with a nominal fees.
- Course Projects/ programming Assignments have been incorporated in programming subjects to improve the programming skills of students
- Regular Syllabus updating is done based on feed back from Alumni and Industry experts
- Wipro has trained few faculty members on the Java Programming course as per the company requirements, so that students can be trained.
- Infosys has introduced 2 courses which are offered to the students to bridge the gap between the academic and industry.

6. Faculty Responsibility

- Continue to improve in effective teaching-learning.
- Take an active role in Research and Development Activities
- In par with present day requirement for research and industry.
- Mentors and advisors to assigned set of students throughout their time in NMIT.
- Take an active role in curriculum and program development.
- Participate in co curricular and extra curricular activities organized in the department and college level

7. Activities in the Department

- Faculty Colloquium
    - Conducted every month
- Workshop/FDP/Seminar
    - For faculty and students
- Project Exhibition
- Parent –Teacher Meeting
- Summer Training

ANUSANDHANA- Bi annual peer reviewed journal aims to publish state-of-the-art research articles pertaining to the emerging areas of Science, Engineering and Management

8. Student organized activities in the Department

- CRYPTEC- student branch association
    - AREETHA- Biannual news letter
- Technical talks/ Seminar
- Student chapter for CSI/IE
- Fresher's day celebrations

- Teacher's day celebrations

Farewell to the outgoing students

Topic: Department of Electrical & Electronics Engineering

Date: 1ˢᵗ Aug 2017   **Time:** 12:00 PM to 12:20 PM

Resource Person: Mrs. Vasudha Hegde

➢ Introduction of Department of Electrical & Electronics Engineering by Dr. HM Ravikumar , HOD, E&EE welcoming all the newly joined faculty.
➢ Ms. Vasudha Hegde -Resource person
- Vision , mission and PEO's of the department
- Year of Inception   : 2001
- Programs :
  B.E. in Electrical and Electronics Engg   : 60
  M.Tech in Renewable Energy   :   24
- The department is accredited by NBA of AICTE.,New Delhi(2009 1nd 2014)
- The Dept. offering an M.Tech course in Renewable Energy which is first of its kind under VTU affiliated colleges (started in the AY 2015).
- The department has fully equipped state of art Laboratories and highly qualified faculty.
- The department is recognized as a research center by VTU in the year 2012 and offers M.Sc (by research) and Ph.D programs.
- FACULTY DETAILS
  Number of Teaching Faculty   :16
  Number of faculty with Ph.D   :02
  Number of Faculty perusing Ph.D   :06
- CURRENT RESEARCH AREAS OF FACULTY
  ✓ Renewable Energy Systems –Analysis and Design
  ✓ MEMS and Bio Sensors
  ✓ Robotics and Fuzzy Systems
  ✓ Hardware Neural Networks in Power System
  ✓ Power Electronic Converters
- A well equipped Lab set up is available for the faculty who are working in Renewable Energy area.
- Currently, four faculty members are utilizing this facility for their research work.
- Well equipped Power Electronics Lab, set up under MODROBS, is used by two faculty for their research.

- The Computer Lab of the dept. has PSCAD software required for the students and faculty working for Ph.D.
- P G Course offered and Syllabus framed as per guide lines given by Govt. of India under National Climate Plan & Jawaharlal Lal Nehru National Solar Mission (JNNSM) & MNRE
- Students of UG and PG have excelled in co curricular and extracurricular activities.
- The students are placed in core companies like BOSCH,KPIT, ERICSON along with software companies like Wipro, Infosys, Tech Mahindra, Capgemini etc.
- The department has continuously conducting FDP, Seminars and workshops etc.
- Dept. has strong Alumni base and they are spread over the globe engaged in Higher Education and R & D activities.
- The future plan of the department are
  - ▶ To develop RE lab into a centre of excellence.
  - ▶ All labs to be powered through RE sources.
  - ✓ RE lab should become a centre for research. and consultancy in interdisciplinary areas.
  - ✓ In the next five years, at least 5 more faculty are expected to complete their doctorates.
  - ✓ Motivating all UG and PG students to take up live projects and research.
  - ✓ Planning to install Bio-Gas plant in college campus.

Topic: Department of Information Science and Engineering

Date: 1st Aug 2017   **Time:** 12:20 PM to 12:40 PM

Resource Person: Mr. Aditya Shastry.

1) **About the Department:**
   The department was established in 2001. Currently, the department offers
- 4-Year Bachelor of Engineering (B.E) programme in Information Science and Engineering with an intake of 180 students
- 2-Year M.Tech programme in Computer Network & Engineering with an intake of 18 students
- PhD programme.
   B.E - Information Science & Engineering Programme has been accredited by National Board of Accreditation (NBA) under the Tier-1 scheme (Equivalent to Washington Accord).Research Centre (VTU) status was granted in the year 2011-2012. Permanent affiliation has been granted by VTU till the year 2022 -23.The department has 29 dedicated and well qualified faculty members who choose to be part of a learning community whose primary mission is to teach under-graduates and post-graduates. Currently the department is headed by Dr Sanjay H A (PhD from IISc).

2) **Infrastructure:**

- Department has 7 laboratories for its exclusive use. These laboratories have, Computers with the latest configuration, UPS, AC.Equipment required for conducting EC & LD Lab and Microprocessors Lab.All computers are connected with a 100 Mbps network.Laboratories are equipped with licensed and open source software.Computing Resources of the Research and Project Laboratories are accessible via Wi-Fi.
- Labs are open 24x7 to facilitate research and project work.A project laboratory has been exclusively provided for the final year B.E. students.Department has Advanced Computing Research Lab and Centre for Smart Thing for the benefit of faculty, post-graduate and under-graduate students.
- Several faculty members live in the campus and attend to the needs of the students even after working hours.The Department has a Library for its post-graduate and under-graduate students.
3) **Departmental committees:**
   Board of Studies (BOS), Departmental Undergraduate Committee (DUGC), Board of Examiners (BOE), Advisory Committee (AC), Program Assessment committee (PAC).

4) Innovative Projects: (2014-16)

Name of the faculty	Project Title	Project Type Research/Consultancy	Funding Agency	Amount	Duration
Dr. Sanjay H A Ashwini J P	Framework for Dynamic Resource Allocation & Efficient Scheduling Strategies to Enable Cloud for HPC Applications	Research	DIT	15.26 Lakhs	2 years (2013-14to 2014-15)
Dr. Sanjay H A Dr.Chandrasekaran K	Educational Cloud: Cloud based learning platform	Research	VTU	5.6 Lakhs	3 years (2012-13 to 2014-15)
Dr. Sanjay H A Sanket S Salvi	Development of a Software to Demonstrate "DO IT YOURSELF RWH tool	Consultancy	UNESCO & KSCST	1.5 Lakhs	1 Year (2015-16)
Dr. Sanjay H A Mr.Sanket S Mr.Thimmaraju	Call Manager	Consultancy	JNCASR	50,000	3 months (2015-16)
Dr. Sanjay H A Dr.Mukunda P G Mr.SankarDesiga	SMOG – Air Pollution Controller	Research	IEDC	1 Lakh	1 year 2015-16
Mr.Preetham N Ms.Kshema Raphael	πPad- The NXT gen tab with booting feature	Research	IEDC	1 Lakh	1 year 2015-16
Chandrashekhar B N	Balancing of Web	Research	TEQIP	1 Lakh	1 Year 2016-17

	Application workload using Hybrid Computing (CPU-GPU with CUDA architecture)				
Manjunatha B A	Intrusion Detection using Data Mining Technique	Research	TEQIP	50,000/-	1 Year 2016-17
SanketSalvi	Indian Sign Language Translator Gloves	Research	TEQIP	50,000/-	1 year 2016-17
	Designing a prototype smart water tank.	Consultancy	VOICE NGO, NEW Delhi	50,000/-	1 year 2016-17
Pramod Jain SanketSalvi	Smart Agriculture Eco-System	Research	TEQIP	1.45 Lakhs	1 Year 2016-17
Dr. Sanjay H A Sanket S Salvi	Designing a prototype Smart No Parking Sign Board	Consultancy	Ulphi Technologies , Bangalore	50,000	1 year 2016-17
SanketSalvi	Road Health Analysis using crowd sourcing	Innovative Project	Unisys, Bangalore	1 Lakh	1 year 2016-17
Dr Sanjay H A	Multimodal data security framework	Innovative Project	Department of ISRO, Allahabad	50,000	1 year 2016-17

5) **Publications and patents:**

Around 100 papers are published in reputed journals and conferences by faculty and students of ISE department.3 patents are filed. 1 patent by Mrs.Ashwini JP and Dr Sanjay H A has been published

6) M.TECH - COMPUTER NETWORK ENGINEERING (CNE):

The Department of Information Science and Engineering introduced a PG program in Computer Network Engineering with an intake of 18 students in the year 2012. The Program is approved by AICTE and Government of Karnataka and is affiliated to Visvesvaraya Technological University (VTU), Karnataka. As an autonomous program, the curriculum has been revised by keeping in view the industry requirements and involving the experts from Industry in BOS and Academic Council. The following Boards/Councils/Committees have been formed to design the outcome based curriculum: Board of Governance, Academic Council., Board of Studies, Departmental Post Graduate Committee and Department Advisory Body.

Facility & Infrastructure: A dedicated Research laboratory "Advance Computing Lab" with High Performance (HPC) Servers and Workstations are available over Wired/Wi-Fi on a 24x7 basis for PG students and PhD registrants. In addition department has "Center for smart Things" which will support for research in the area of Internet of Things.

Areas of Research: Students have opportunities to participate in projects related to, but not limited to Cloud computing, parallel computing, Grid computing, Internet of Things, Wireless sensor networks, Mobile Ad Hoc networks and Distributed computing.

On-going Projects: Students undergoing Internship programs/projects in reputed organizations viz

Batch	Number of students underwent Internship Programme/Academic Projects	Organizations/Industries
2014-16	11	CDAC, KSCST, CAIR, ISTRACK, CSIR, Tech Chefs Software Private Limited, Tech Arrosoft Solutions India Private Limited, Pyrumas Software Private Limited, CSIR-4PI, The Media ANT.
2013-15	6	IISc (Bangalore), CDAC, Software AG, NAL
2012-14	5	IISc (Bangalore), HP, CDAC,

7) **DOCTORAL PROGRAMS:** Research Scholars undergo their Doctoral ProgrammesinParallel Computing, Hybrid Computing, Cloud Computing, Grid Computing, Performance Modelling, Data Mining, Network Security. Currently there are 9 phd scholars and 2 phd guides in the department.

o **INDUSTRY INTERACTION:** The Department is interacts with reputed Industries and Organizations on academic and research activities. Students are interacting with Industry through Internship Program/Projects.CDAC and DELL- R&D designs experiments for Distributed Computing Lab, ARM designs experiments for Micro Processor Lab, DELL-Services involved in design of JAVA & J2EE Lab, Interaction with KPTCL for the research funded project, Interacting with Nvidia for setting up of infrastructure for Hybrid Computing and also for faculty development, Infosys Campus Connect for Curriculum development, Wipro-Mission 10X for faculty development and EMC2 for curriculum development.

8) WORKSHOP / TRAINING CONDUCTED (2014-17)

1	5 Days Hands-on Workshop on "Web App Development using Angular JS"	16th – 20th Jan, 2017
2	4-Days hands on workshop on "Android and Hybrid App development" Supported by TEQIP-II (Sub Component 1.1)	4th-7th Oct 2016
3	2-Days workshop on "Python for Data Analytics with Hands-on"	Aug 26th – 27th , 2016
4	5 Days Hands-on Workshop on "Internet of Things (IoT): Architecture, Challenges & Applications"	Jan 2016
5	2-Days Hands-On Workshop on "Android Application Development"	June 2015
6	" Two Day Hands – OnWorkshop on Python"	Mar 13th& 15th, 2015
7	"A Five Day Workshop on Hybrid Computing and Its Applications with Hands-on" in collaboration with NVIDIA and Dell R&D.	Aug 5-9, 2014
8	ISTE 2 week workshop on Cyber Security	July 10-20, 2014
9	ISTE 2 week workshop on Computer Programming	June 16-21, 2014

9) DEPARTMENTAL FORUM

Sangyartham, which means 'Collaborative progress', is the techno-cultural wing of the Department of Information Science. Both UG & PG students and Faculty of the department are actively involved in the activities organized through this forum. The department has been extremely supportive, both in terms of co-curricular and extra-curricular activities, making Sangyartham one of the college's most vibrant department associations today. Following forums were formed to improve the Practical/Inter-personal Skills

Information Science Task Force – ITF: ITF is a student driven body mentored by faculty with the mission of "Learn, Collaborate and Prosper". The main aim of the ITF is to provide the platform to the students to excel in emerging areas.Domains in ITF are:IoT (Internet of Things), Android App Development, Web Development, Cloud Computing, Data Analysis and Cyber Security.

Information Science Cultural Society –ICS: The ICS aims at harnessing all round talents of each student of the department. It serves as a platform for students to showcase their innate abilities.Following activities were conducted for the year 2015-16:Technical Talks by Experts from reputed Industries / R & D organizations, Hands on training/Workshops in the emerging areas, Technical events such as Paper presentation, Technical Quiz, on spot Programming, Technical Debate, Student Colloquium talk, Hackathonetc, Non-Technical events such as Cricket, Tennis, Tug of war, Lagori, Kabbadi, Video Games, Nail art, Back heal penalty etc, Fresher's/Farewell/Teachers day and Publishing of Departmental Bi-Annual Newsletter "INFORIUM".

10) ACHIEVEMENTS & AWARDS

International Recognition

o To promote matters of mutual academic interest, NMIT has signed a MoU with North Dakota State University (NDSU) which is a renowned Land Grant Research University. NDSU is located in Fargo in the State of North Dakota, USA. Under the banner of this MoU there are internship opportunities for NMIT students.

o Ms.Amruthavarshini, Dept. of ISE, has been selected to do her Internship cum project work at NDSU. The internship will be for a six month period starting from January 2017. Amruthavarshini will have a unique global exposure in learning and execution of advanced technologies.Ms.AmruthaVarshini, Final year student of ISE, has successfully completed paid Internship Programme in US based company "KORE FABRIK".

National Recognition

SL No	Name	Event	Date
1	AkritiTyagi VinaydeepKaur M Kritika PratimaKumari	Unysis Cloud 20/20, Bangalore. 2nd Runners Up, Prize – Rs. 1 Lakh, Total Participants - 1271	6th and 7th April 2017
2	Sarang Parikh Anurag Singh Amith Keerthana T S Shaisundar Niharika	Smart India Hackathon 2017, Department of ISRO, Allahabad 2nd Runners Up, Prize – Rs. 50,000. Total Participants – 7500+	1st – 4th April 2017

SL No	Name	Event	Date
3	YareeshaHeera Madhuri K Murthy Sravanti Ponnappa Shabri Swapnil	Finalists at Smart India Hackathon 2017, Department of Studies and Aid for Disables. Hyderabad Total Participants – 7500+	1st – 4th April 2017
4	SabariPrabaaker R Priyanka S PranithHengavalli AdityaSethi Anurag Sarang Parikh	ISGW (India Smart Grid Week)-2017, New Delhi 2nd Runners Up, Prize – Rs. 50,000.	23rd -25th January 2017

11) STUDENT PLACEMENT:

o The students of the department have been consistently getting placed in reputed companies with good packages.Extensive interaction with industry resulting in close to 90% Placement.Highest CTC offered to ISE students-Rs 18 Lakhs.

Reputed Recruiters: Microsoft, Yahoo India, Wipro, Infosys, Dell, IBM, Akamai, Mu Sigma, Huawei, L&T InfoTech.

Higher Studies: The department is proud of our alumni who are pursuing their higher studies in some of the prestigious universities around the world.Indiana University Bloomington, University of Texas, Dallas, University of Texas, Arlington, Syracuse University, Bits, Pilani, University of Manchester, University of Melbourne, University of Oxford, University of Albany, International institute of Information Technology, Bangalore, Institute of New Jersey University, Illinois Institute of Technology, San Diego State University, New York University and Rochester Institute of Technology and others.

Topic: Department of Mechanical Engineering

Date: 1st Aug 2017   **Time:** 01:30 PM to 01:50 PM

Resource Person: Mrs. Smruthi Rekha Sen

The Department of Mechanical Engineering started in the year 2002 with an intake of 60 students. The intake was increased to 120 for the academic year 2009-10 and further increased to 180 during the academic year 2012-13.

Presently the department comprises of 45 faculty members. The mechanical department team is a blend of faculty from diversified fields. Some have worked in IITs and others in defense R&D labs and the industry. The department has seven PhDs who have done their research work in IITs and NITs. Seventeen more are pursuing their PhDs at esteemed institutes in India.

Permanent affiliation was given to our college in the year 2006 by Visvesvaraya Technological University, Belgaum. The department was recognized, in the academic year 2008-09, to be one of the R&D centers under VTU. In 2010 VTU approved MTech in Thermal Power Engineering and later, in 2013, approved the MTech in Machine Design.

The Department has established two Centers of Excellence and one Advanced Lab.

- o   Center for Computational Fluid Dynamics
- o   Center for Design Engineering and Process Simulation
- o   Advanced Manufacturing Lab

The center for Computational Fluid Dynamics (CFD) provides students and faculty opportunities to work in the area of computational simulation of design problems related to fluid flow and heat transfer. Most of the problems and projects use the Navier Stokes code RANS3D, developed in-house by Dr Sekhar Majumdar, for computation of turbulent flows in complex configuration. Most of the research results have been published in reputed journals and conferences.

The Center for Design Engineering and Process Simulation (CDEPS) provides facilities for 3-dimensional modeling, design, analysis and optimization of mechanical structures using the high-end software tool CATIA-V6. Training programs are conducted for students in both the modeling and simulation software.

The Advanced Manufacturing Lab comprises of high-tech equipment for faculty to carry out their PhD work and for UG & PG students to carry out their final year projects. Seven of our faculty members have secured their doctoral degree based on work executed in the Advanced Manufacturing Lab under the able guidance of Dr P G Mukunda who has worked in IIT Kharagpur for 40 years.

The department has completed three projects worth, valued at Rs 40 Lakhs, for the Naval Research Board (NRB) and Visveswaraiya Technological University (VTU).

The Department encourages students to carry out multi-disciplinary and innovative projects during their final year. Many of the projects have got accolades from the industry and the Govt. Of Karnataka. In 2013 the former higher education minister Mr. R. V. Deshpande sanctioned Rs. 5 Lakhs for an Innovation club after being impressed with the innovative final year UG projects. One project that stands out is the suitcase vehicle designed for the disabled.

A highlight of the Department is the fourteen Innovative Entrepreneurship development cell (IEDC) projects that have been awarded to the department.

The department has established a very good rapport with the industry. The curriculum is designed in consultation with reputed industries. The department arranges industrial visits for students. Students visit exhibitions such as the IMTEX at Peenya to better appreciate practical aspects of the subject.

The department organizes workshops for both faculty and students to make them understand and know the latest technology used in the industry. Scientists from Defense labs and R&D labs and industry experts are invited to give guest lectures for the students.

Topic: Department of Chemistry

Date: 1st Aug 2017   **Time:** 01:50 PM to 02:00 PM

Resource Person: Dr. Raghu

List of Faculty members

Sl. no	Faculty	Designation	Qualification	Experience
1.	Dr. Srilatha Rao	Professor and Hod	M.Sc, Ph.d	16
2.	Dr. Aravind T	Associate Professor	M.Sc, Ph.d	07
3.	Dr. Raghu M S	Assistant Professor	M.Sc, Ph.d	04
4.	Ms Sowmyashree A S	Assistant Professor	M.Sc	05
5.	Ms. Sadhana H Upadhya	Assistant Professor	M.Sc	05
6.	Ms. Ganavi H S	Assistant Professor	M.Sc	04
7	Dr. M S Thakur	Adjunct Faculty	M.Sc, Ph.d	32

Faculties/ Pursuing PhD

Ms. Sadhana H Upadhya, Cleared her PhD Entrance Test under Visweswarayya Technological University, Belagavi.

Name of Guide: Dr. M S Thakur

Mrs Sowmyashree A S, Registered for PhD

Mr. Sagar K S joined as JRF under Dr. Aravinda T, DST Sponsored Project and going to register for PHD under VTU.

Area of specialization:

Dr. Srilatha Rao: Synthetic Chemistry, Polymer membranes for water   purification.

 Dr. Aravinda T: Synthesis of transition metal pseudo peptides, Catalysis, nanomaterials and DNA studies.

Dr. Raghu M S: Synthesis of graphene based composites for supercapacitors, adsorption and biological studies.

Dr. Thakur M S: Synthesis of nano materials for biomedical applications, sensors.

Mrs. Sowmyashee A S: Nano materials for Water purification

Ms. Sadhana H Upadhya: Synthesis of nanomaterials for Glucose degradation from fruit juices.

Ms. Ganavi H S: Synthesis of nanomaterials for biomedical applications.

Sponsered Projects Completed/Ongoing

Dr. Srilatha Rao:

Completed VTU Sponsored Project on "**Synthetic, Spectral and crystal studies of some Benzamides and their Biological Activities" of Rs 4.5 lakhs**

TEQIP Sponsored Project titled **"Fabrication of polymer- graphene nanomembrane for As and NA removal" is ongoing of Rs. 1.4 Lakhs.**

Dr. Aravinda T:

DST sponsored project title **"Evolvement of metal oxide nanoparticle as a catalyst: Therapeutic advantages of transition metal pseudo peptides in organic process and DNA studies"** is ongoing of Rs. 45 lakhs.

Dr. Raghu M S:

VGST Sponsered project entitled **"Novel graphene- polymer based hybrid nanostructures: fabrication, characterization and applications as next generation of high performance super capacitors & Batteries"** is ongoing of Rs. 6.0 lakhs.

Dr. Thakur M S:

Completed following Sponsored projects:

1. Development of Immuno-bioreactor based biosensors for the analysis of pesticides and herbicides in water. Funded by INDO-SWISS Collaborative project (SDC-DBT) 2000-2005.**Phase 1**.

2. Development of Immuno-bioreactor based Biosensor for Detection of Pesticides in Water and Environment. Funded by Indo-Swiss 2005-2008.**Phase 2**.

3. Biosensors based on the action of transport proteins Funded by S**wedish   Research Council,** 2006-2009.

4. Aptamer based biosensing for the detection of Food Toxins, Indo-Spanish Joint Programme for Technological Co-operation in Biotechnology.Funded by DBT-India, CIFGA-CSIR-CFTRI collaboration, 2013-2016.

Mrs. Sowmyashee A S

Completed Project titled "Biodiesel production from Gyrocarpus-An Alternative Fuel" under TEQIP of Rs. 1.1 lakh.

Ms. Sadhana H Upadhya

Completed Project titled Synthesis of Polymer membranes for removal of Fl^{-1}" under TEQIP of Rs. 1.2 lakh.

Ms. Ganavi H S

Completed Project titled "Synthesis of Nanoparticles for the biomedical applications" under TEQIP of Rs. 0.9 lakh.

Major Equipments available in the Department

Equipment available with	Model, Make & year of purchase
Digital weighing balance	Shimadzu, 2016
Ultrasonicator	Wensar, 3.5 lt capacity, 2016
Ultracentrifuge unit	Wensar, 4X50 ml capacity, 2016
Vaccum oven	Aspire Inc, 2016
Muffle furnace	Shimaden/SR1/2014
UV-Visible spectrophotometer	Shimadzu
Incubator	Magman
FT-IR Spectrmeter	Thermo-Fisher
Rota-vapor	IKA-India
Muffle Furnace	**Shimdan**

Other minor equipments like Magnetic stirrer, UV-cabinet, Hot plate, Hot-air oven etc available.

Number of Publications: 150

Topic: Department of Mathematics

Date: 1ˢᵗ Aug 2017   **Time:** 02:00 PM to 02:10 PM

Resource Person: Dr. Chandrakala

About Department of Mathematics

Department of Mathematics has been established since 2001. Offers Engg. Mathematics I, Engg. Mathematics –II, Engg. Mathematics – III, Engg. Mathematics IV, Discrete mathematical Structures, Graph theory and Advanced Numerical Methods for B. E students. The Department has research centers recognized by VTU and Mysore University. Department has been actively engaged in research in the field of fluid mechanics, Numerical methods, Partial differential equation and Graph theory. About 25 papers have been published in international journals and 20 papers have been presented in national and international conferences during 2010-2017. Three faculty members have obtained Ph. D during 2013 – 15. 7 faculty members are pursuing their Ph. D under different universities. A project titled A Generalized Mathematical Modeling Of Separation Process By Membrane Filtration With Effects Of Membrane Fouling sanctioned under VTU and completed.

Faculty Details:

There are 14 fulltime faculty out of which 5 are Ph.D holders, 6 have registered for Ph.D.

S.No.	Name of the Faculty	Designation
1	Dr. Indira R	Professor and Head
2	Dr. B.R Revathi	Associate Professor
3	Dr. Dhananjayamurthy B.V	Associate Professor
4	MS. SumaShree .P	Assistant Professor
5	Dr. Chandrakala S.B	Assistant Professor
6	Dr. Padmavathi R	Assistant Professor
7	Mr. Jagadeesha S	Assistant Professor
8	Mrs. Rashmi K.R	Assistant Professor
9	Mrs. Sushma M Puranik	Assistant Professor
10	Mrs. Sreekala C K	Assistant Professor
11	Mr. Sreegowrav K R	Assistant Professor
12	Mrs. Swathi H.R	Assistant Professor
13	Ms. Pallavi G	Assistant Professor

The department of mathematics has a research center recognized by VTU, Belgaum
Recognized guide: Dr. Indira R
Research scholars at Research Center, Dept of Mathematics, NMIT:

(a) Ph.D Awarded :

SL.NO.	Name	University	Title of the Thesis
1	Jayaprakash	VTU	Flow of Newtonian and non-Newtonian fluid in doubly connected region
2	Gangadhariah	VTU	Rayleigh Benard convection with through flow

(b) Candidates Pursuing Ph.D:

SL.NO.	Name	University	Title of the Thesis
1	Puneeth Kumar (Submitted)	VTU	Flow of Newtonian and non-Newtonian fluid in doubly connected region
2	Jagadeesha .S	VTU	Mathematical Modelling of drug delivery
3	Venkataswamy	VTU	Mathematical Modelling of drug release system
4	Rashmi R	VTU	Non- Newtonian fluid flow and mass transfer in an annular region
5	Priyanka N B	VTU	Mathematical modeling of bio heat transfer

List of Faculty members pursuing their Ph.D in other centers:

(a) Pursuing

SL. NO.	Name	University	Title of the Thesis
1	Sreekala	VTU	Study of MHD and couple

			stress on rough porous slider bearing – a couple stress fluid model
2	Sreegaurav	VTU	Mathematical modeling of forced convection with reference to bio-heat transfer
3	Pallavi G	BU	

Research Projects :

SL.No	Title of the project	Name of the PI	Sanctioned Project year	Amount
1	A Generalized Mathematical Modeling Of Separation Process By Membrane Filtration With Effects Of Membrane Fouling	Dr. Indira R	Submitted to VTU	3.00 lakhs

List of Publications:

1. Indira R,Gangadhariah Y H, Suma S P, I S Shivakumara Effect of throughflow and variable gravity field on thermal convection in a porous layer, *Int. Journal of Engg. Science and Technology (IJEST)*. Vol.3, No.10, pp.7658-7671, 2011

2. Indira R, Jayaprakash M C, Pulsatile flow of Newtonian fluid in doubly connected region *ATAM*, vol 4, no.3, Pp 147-154, 2011

3. Indira R, Jayaprakash M C, Effect of velocity slip on Flow of a Newtonian fluid flow in doubly connected regions, *IJMSEA,* vol 5, no. III, Pp 403-410 , May 2011

4. Indira .R, Uma Devi . B, Dinesh P.A., Vinay C. V, Two phase flow in doubly connected region, *IJMSEA*, vol 5, no.2, 2011, pp 181 - 191

5. Indira R, Gangadhariah Y H, Suma S P, I S Shivakumara, Effect of internal heat generation on the onset of Marangoni convection in a fluid layer overlying a layer of an anisotropic porous medium, *Transp. Porous Med.* (Springer), Vol.92, pp.727-743, 2012.

6. Indira R, Gangadhariah Y H, Suma S P, I S Shivakumara Through flow effects on penetrative convection in superposed fluid and porous layers, *Transp. Porous Med.* (Springer), Vol.93, No. 3, 2012

7. Indira R,Jagadeesha S, Solute transfer in a power law fluid flow through permeable tube, ATAM, vol. 5 no. 7, 2012

8. Indira R, Puneeth Kumar D N, Mathematical modeling of convective diffusive mass transfer with applications to stent based drug delivery, ICM, Kochi (International Conference) 2013.

9. Indira R, Jayaprakash M C, Effect of wall absorption on dispersion in an annular flow of couple -stress fluid, ICM, Kochi (International Conference), 2013

10. Indira R, Jayaprakash M C, Effect of couple stresses on the Natural Convection of Heat and Mass transfer in a vertical channel with asymmetric wall temperature and concentration, IJEIT, VOL3, ISSUE 1, 2013.

11. Indira R, Padmavathi R, C V Srikrishna, Dual mixed convection flow of a couple stress fluids in a vertical channel, Math. Sci. Int. Res. Jl, Vol. 2 Issue 2, 2013

12. Indira .R, Uma Devi . B, Dinesh P.A., Vinay C. V, The effect of couple stress on hydrodynamic rotating flow, Mathematical Problems in Engineering, Accepted for publication.

13. Dhananjaya Murthy B V, G.Deepak, N.D.Soner, Total Co-Independent Domination in Graphs, applied Mat. Sci, Vol 6, 2012

14. Dhananjaya Murthy B V, G.Deepak, N.D.Soner, Independent Transversal Equitable Domination in Graphs, International Mathematical Forum, Vol. 8, 2013 no. 743-751.

15. Dhananjaya Murthy B V, G.Deepak, N.D.Soner, Connected domination polynomial of a graph, IJMA, 4(11), 2013, 90-96.

16. Dhananjaya Murthy B V, G.Deepak, N.D.Soner, Further Results in Connected Domination Polynomial of a graph, AJMSA, Vol. 2, No. 1, Jan-Jun 2014.

17. Dr. Padmavathi R, Effect of couple stresses on the Natural convection of Heat and Mass transfer in a vertical channel with asymmetric wall temperature and concentration, Int. J. of Engg. and Innovative Tech, ISO 9001:2008, Vol. 3, Issue 1, 2013

18. B. R. Revathi, P.G Siddheshwar, Effect of gravity modulation on weakly nonlinear stability of stationery convection in a dielectric liquid, J. of World academy of Science, Engg. and Tech., Vol 73, 2013.

19. B. R. Revathi, P.G Siddheshwar, Effect of gravity modulation on weakly nonlinear stability of stationery convection in a dielectric liquid, ICCAM (International Conference), 2013

20. Chandrakala S.B, K.Manjula, Clique Partition of Transformation Graphs , , International J.Math. Combin. Vol.1(2016), 91-96.

21. Chandrakala S.B, K.Manjula, Cordiality of Transformation Graphs of Cycles, International Journal of Mathematics Research, Volume 8, Number 2 (2016), 71–83.

22. Dhananjaya Murthy B.V, Degree Polynomials of some special classes of Trees, International Journal of Innovation in Science and Mathematics, Vol 5, Issue 3, 2017 ISSN No. 2347-9051.

23. Sreekala.C.K., Tasleem Fathima, Hanume Gowda The effect of MHD and couplestress fluid on the performance characteristics of wide slider bearing with an exponential and secant film profile-A comparative study, International journal of mathematical archive-

7(5),2016,141-150 ISSN 2229-5046

24. Sreekala.C.K, Tasleem Fathima, Hanume Gowda Comparison between the performance characteristics of porous plane and parabolic sliders in the presence of transverse magnetic field lubricated with conducting lubricant additives, International journal of current research vol 8, issue 07, pp: 34008-34018, 2016. ISSN: 0975-833X

25. Sreekala.C.K , Tasleem Fathima, Hanume Gowda Effect of surface roughness on plane slider bearing lubricated with couplestress fluid in the presence of transverse magnetic field., IJESEC, vol-6, issue no:8, 2016,issn 2321-3361

26. Sreekala.C.K , Tasleem Fathima, Hanume Gowda, Stochastic Reynolds Equation of diverse shaped wide composite Slider Bearing with the combined effect of MHD and Couplestress , International Journal of Scientific Research in Mathematical and Statistical Sciences, Vol.4, Issue.2, April 2017

27. Puneeth Kumar and Indira Ramarao, Effect of Rotation on Convective Diffusive Mass Transfer in a Magnetically Conducting Fluid, IJISM, accepted

Topic: Department of Physics

Date: 1st Aug 2017   **Time:** 02:10 PM to 02:20 PM

Resource Person: Mrs. Jyothi G B

Department and Faculty Details :

We have two courses, Engineering Physics and Engineering Physics Lab taught by the departmental faculty. These courses are common to all the braches of engineering.

The department is recognized as the research centre under VTU, Karnataka. Under this centre, one research scholor is persuing for Ph.D.

Currently there are 9 faculty members working in the department.The department is headed by Dr.S.Abdul Sattar, who is also the I year co-ordinator.

We have two faculty mwmbers,who have completed their Ph.D. Two faculty members are pursuing their Ph.D.

Research Activities

- **Thin films for Photovoltaics**: We are working on All-Oxide solar cells, where in each and every layer of solar cell is an oxide material. We choose Cu_2O as the p-type, ZnO as intrinsic and Al:ZnO as n-type layers
- **Nanomaterials (nano particles, nano rods, nano tubes) Synthesis:** To study the effect of light trapping from the nanostructures on the solar cell when the monolithic coating is replaced by these nanostructures
- **Photo-acoustics** for Formaldehyde detection.
- **Air Engine Debris monitoring**

Sponsored Projects:

(1) **Title: Fabrication and Characterization of Polymer-nano composites for MEMS Applications**
   Cost: Rs.40,00,000
   Agency: Vision Group on Science and Technology (VGST), Govt. of Karnataka
   Status: Completed
   Principal Investigator: Dr. Habibuddin Shaik

(2) **Title: Fabrication of silver particle embedded optically active copper oxide and Zinc Oxide thin films for plasmonic solar cell application**
   Cost: Rs. 1,50,000.
   Agency: TEQIP.
   Principal Investigator: Dr. Habibuddin Shaik

Status: Completed

(3) **Title: Graphene-Polymer Composites : Synthesis,Characterisation and Application as Effective Electromagnetic Sheilding Material**
   Cost: Rs.50,000.
   Agency: TEQIP.
   Principal Investigator: Mrs.Hitha D.Shetty

Status: Completed

(4) **Title: Development of low cost Copper-Oxide solar cells and modules by Magnetron sputtering & Effect of silver nanoparticles incorporation on the solar cell performance**
   Cost: Rs.34,00,000
   Agency: Department of Science and Technology (DST), New Delhi
   Status: Ongoing
   Principal Investigator: Dr. Habibuddin Shaik

Facilities Available

- DC & RF Reactive Magnetron Sputtering system
- Three source activated reactive evaporation system
- Programmable CVD furnace
- Programmable Spin coating system
- Scanning tunneling Microscope (STM).
- Electro-chemical Analyzer with Impedance Spectroscope
- Solar cell characterization
- Muffle Furnace
- Atmospheric DC plasma system / Polling system
- Hot air oven
- Magnetic Stirrers with Hot Plate

Achievements:

Patents by Dr. Habibuddin Shaik

Title: Low-Cost CORONA Poling Unit for poling the polymers to enhance their piezoelectricity.

Status: Applied

Faculty members from the department have published more than 30 research papers in international and national journals, in the last 3 years. 6 research papers and one conference proceeding have been published in international and national journals during the previous academic year i.e., 2016-17.

Collaborations

    (1) University of Michigan, USA

    (2) Indian Institute of Science, Bangalore

    (3) PSG College of Technology, Coimbatore

Topic: Department of Master of Computer Applications

Date: 1st Aug 2017   **Time:** 03:10 PM to 03:20 PM

Resource Person: Mrs. Geetha priyadarshini

MCA was designed to meet the demands for qualified professionals in the field of IT. It is a program inclined towards Application Development with emphasis on Programming language and tools. The program became very popular and there was a great demand for MCA graduates. To cater to this demand the MCA program was started in our college in the year **2006 with a sanctioned intake of 60 students.**

As the demand further increased the intake was doubled to 120 in the year 2012

The department is headed by Dr. Prasad N. Hamsavath and has a faculty strength of 13 and a student faculty ratio of 15:1

The department has been accorded the autonomous status in 2016

Vision of the Department

Empowerment through Quality Education and Technical Competency with a focus on Computer Applications for development of self and society

Mission

- ***To provide quality and industry-oriented education in applied Computer Science with***

conceptual understanding and practical perception

- *To prepare students for exciting global careers in the ever-changing IT industry*

- *To provide holistic development of students*

PEO's

The core objective of the program is to prepare the students for productive careers in the software industry and academia

These are our PEO's in line with the Graduate attributes of NBA

- *To develop the students' technical skills, analytical skills and professional skills to design and develop the computer applications to meet the customer end IT industry and also adapt to every changing IT technologies*

- *To develop the students' communication skills for effective delivery of a team composed of different region and disciplines in order to be an effective and efficient leader of the team in IT/ITES industry*

- *To develop the students' social, ethical, integrity so that it can reflect its impact to the society and deliver a positive attitude to the society through their profession and behaviour.*

And the program outcomes towards which our courses are developed are

- *To equip students with core computing principles, technical, analytical and managerial abilities to compete in a global environment.*

- *To equip students with the ability to analyze and assess problems to meet users requirements.*

- *To equip students with an ability to apply design and development principles in creating software systems for diverse customers.*

- *To equip students with the ability to use research based knowledge and research methods for interpretation of data and synthesis of the information to provide valid conclusions.*

- *To equip students with the ability to use current techniques, skills and tools for computing practices*
- *Mould the students to understand the impact of professional IT solutions in societal, environmental context and of sustainable development.*
- *To equip students with an ability to analyze and interpret data to assess safety, legal,*

cultural issues and the consequent responsibilities to the professional practice.

- *To mould students as ethical, socially-committed individuals who will act with honesty and integrity and contribute to the betterment of the society.*
- *Students will have an ability to work effectively as members of multi-disciplinary teams to achieve a common goal.*
- *To equip students with communication abilities and hence develop leadership qualities and interpersonal skills.*
- *Students will have the ability to employ effective project management skills to plan and develop projects.*
- *Students will have the ability for self-improvement through continuous professional development and life-long learning*

We have a faculty strength of 13 with

1. Professor 3 Associate Professors and 9 Assistant Professors and 4 non teaching staff

Names	Qualification			Designation	Experience		
	UG	PG	Ph.D		T	R	I
Dr. Prasad Hamsavath Naik	B.Com	MCA, MTech	Ph.D (CSE)	Prof. & Head	5.02	2	8
Mrs. Geetha Priyadarshini	B. E. (EE),	MCA		Assoc. Prof.	17.02		11
Ms. Joy Lavinya	B.E(EC)	M.S		Assoc. Prof.	12.00		
Ms. Deepthi J. Shetty	B.E(IS)	MTech		Assoc. Prof.	10.09		
Ms. Sowmya H. N.	B.Sc.	MCA		Asst. Prof.	7.05		
Mr. Lakshminarayana B. N.	B.Sc.	MCA		Asst. Prof.	7.09		1.08
Mr. Mariyan Richard	BCA	MCA		Asst. Prof.	7.09		1.05
Ms. Sushitha S.	B.Sc.	MCA		Asst. Prof.	4.10		1.05
Mr. A. V. Navneeth	B.Sc.	MCA, M .Phil		Asst. Prof.	6.05		
Ms.Vijayalakshmi S. Katti	BCA	MCA		Asst. Prof.	4.10		
Ms. Sowmya K .	BCA	MCA		Asst. Prof.	4.09		1.04

Ms. Smriti Rai	B.Com	MCA		Asst. Prof.	6.07		0.10
Ms. Shweta Dhareshwar	B.Sc.	MCA		Asst. Prof.	2.10		1.06

Areas of Research in the Department

- ❑ Mobile Ad-hoc Networks -MANET
- ❑ Wireless Networks

AREAS OF EXPERTISE

- ❑ Web Domain Services
- ❑ Application Development Services
- ❑ System Programming Services
- ❑ Software Testing Services

Our faculties have published and presented papers in international journals of repute and in national and international conferences

- ➢ Dr. Prasad N. Hamsavath

  - • Journal Publications: 04
  - • International Conference: 07
  - • National Conference: 01

- ➢ Ms. Deepthi Shetty

  - • National Conference: 01

- ➢ Mr. Lakshminarayan (Registered for Ph.D. under VTU)

    Status Of PhD: Probationary registration of PhD Completed.

- International Conference : 03

- International Journal: 01

Ms. Soumya H. N. International Conference: 01

Dr Prasad is the first author for 3 text books and has been the editor for ERCICA conference proceedings published by Elsevier and Springer

Our students have done us proud with their results 8 batches of students have passed out of our department and our lucratively employed as Programers, Developers, Ssoftware Engineers and System architects in top level IT companies and consultancies like

Students are encouraged to take up projects and internships for one full semester in organizations and institutes like

We have regular workshops and training programs conducted for our students

We believe strongly in student-faculty interaction as is evident in the feedback from students

Details of Seminars / Workshops conducted by the Department

- ERCICA An annual two day International conference on "**Emerging Research in Computing, Information, Communication and Applications (ERCICA)"** was organized for **three successive years** in the month of August 2013 to 2016.

- **Total Papers received so far : 2564**

- **Total Papers published so far : 877**

IV. 2013	537	139	Elsevier
III. 2014	852	414	Elsevier
II. 2015	625	199	Springer
I.2016	550	125	Springer

Faculty members attend workshops and conferences regularly to be updated on the latest

technologies

Our students have won many accolades at many intercollegiate events

Student Name	Events	Prize Won	Event Name & College
Ashok K S & Harshith B S (II Sem)	Web Designing	Second	EPITOME 2K17 at St. St. Aloysius Institute of Management and Information Technology(AIMIT), Mangalore.
Ashwin , Palani & Pavan (Sem-IV)	Gaming	First	SHELLS 2K17 at Kristu Jayanti College,Bangalore.
Ashok K. S. & Vishwas D (Sem-I)	Web Development	First	Infotsav '16, SJCE, Mysore
Aditi Sharma, Riya Kumari, Harshith N (Sem-I) & Dhanush (Sem-III)	Mad Ads	First	
Dhanush (Sem-III) & Riya Kumari (Sem-I)	IT Quiz	Second	

Topic: Department of Master of Business Administration

Date: 1st Aug 2017   **Time:** 03:20 PM to 03:30 PM

Resource Person: Mrs. Nayana Desai

Having successfully launched its engineering programs in 2001, NMIT established its MBA program in 2004, affiliated to Visvesvaraya Technological University and approved by AICTE. The program became a notable success within a short span of time. Today NMIT's MBA program stands out amidst other MBA programs in quality of pedagogy, curriculum, learning environment, academic life, and infrastructure and placement results. What clearly distinguishes NMIT's program from others is the quality and diligence of faculty and administration in enhancing the students' learning experience. Starting with an intake of 40 students in 2004, the MBA program has now matured into a well-respected and well-received program with an approved intake of 120 students. We are proud of diversity in the student's enrolments and faculty recruitments.

During the first year of the MBA program, students learn the basic principles of business management and core courses in Marketing, Finance, and Human Resources as well as Quantitative Techniques. During the second year of the program, students specialize in two areas that include Finance, Human Resources, Marketing, Supply chain management and Business Analytics. Between the third and fourth semesters, students embark on a project in their area of specialization and complete it in the fourth semester. Placement interviews commence at the end of the third semester.

In addition to the MBA program, the Department of Management Studies offers several additional programs such as SPSS, ISO Certification programs (IRCA approved), Six Sigma Certification programs (Govt. Of .India, Ministry of MSME approved), Aptitude and Soft-Skills sessions from T.I.M.E.S, FDPs, MDPs, EDPs and Workshops on current management topics. The department undertakes industry-sponsored research projects and consulting engagements. The Department offers industry specific and function specific programs at various stages in their professional career. The Department is an approved/recognized centre by Visvesvaraya Technological University, Belagavi and University of Mysore, Mysore for guidance of Ph.D scholars.

Apart from regular class room teaching and continuous evaluation of students, our faculty members are actively engaged in a wide-spectrum of activities ranging from student's mentoring, administrative tasks at the Departmental, Institutional and University levels, guiding Project Works, advising students in the conduct of extra-curricular and co-curricular activities, being in touch with the industry, communicating with the alumni, attending conferences, workshops, seminars, MDPs and FDPs, conducting FDPs and pursuing research with focused goals. In-house training programs for faculty and "Research Colloquium Series" are conducted regularly to enhance analytical skills of faculty and research scholars.

Vision and Mission of the Department of Management Studies (MBA)

Vision:
To become a top-notch management institute recognized internationally for its excellence in creation of an intellectual capital of high thinking management professionals, entrepreneurs and socially responsible citizens.

Mission:
To nurture the future business leaders through imparting high quality value-based learning, research and practical based training that meets industry expectations.

Curriculum breakdown structure:
The curriculum of MBA is so structured to include all the courses and subjects to satisfy the requirements of a comparable MBA program at the National and International level. The course code, course title, the number of contact hours and number of credit for each course are given in the following table. The courses are grouped in the major components of the curriculum namely professional core courses, electives and specialization courses, Industry exposure and project work, seminar and soft skills for employability.

Break up of Credits for the MBA Degree Curriculum 2016 – 2018

Sl. No.:	Semester	Total No of subjects	Core / Elective / Seminar / Lab / Project Work & Internship	Credit Distribution		Total Credits	Total Credit Semest
				Credits	No.of. Subjeects		
1	I	6	6 core	4	6	24	24
2	II	6	6 Core	4	6	24	24
3	III	6	6 Electives	3	6	18	24
			1 Internship	4	1	04	
			1 Seminar	2	1	02	
4	IV	6	6 Electives	3	6	18	28
			1 Project Work	10	1	10	

Note: The student must earn a total of 100 credits for the award of MBA Degree. Hence, the student must choose electives for a total of 36 credits spread over semesters III and IV.

Faculty Profile

Sl.No	Name	Designation
01	Dr.S.Harish Babu	Professor and HoD
02	Dr.B.Janakiraman	Professor
03	Dr.Jayasmita Rath	Associate Professor
04	Dr.Senthil Kumar	Associate Professor
05	Dr.Malini.T.N	Assistant Professor
06	Prof.Kiran Kumar.N	Assistant Professor
07	Ms.Shilpa Ajay	Assistant Professor
08	Mr.Pavan.G.Kulkarni	Assistant Professor
09	Ms.Nayana.S.Desai	Assistant Professor
10	Ms.Jyothi.G	Assistant Professor
11	Mr.Devrath	Assistant Professor

Topic: Training & Placement Activities, Industry Institute Interaction

Date: 1st Aug 2017   **Time:** 03:30 PM to 03:50 PM

Resource Person: Mrs. Bhanu Rekha Reddy

The Department of Management Studies has been fulfilling the recruitment needs of the corporate sector by providing top talent. The department, driven by the employers demand, has set for itself a bench mark in management education that is commensurate with the practices of the Best Business School in India. Our infrastructure, facilities, teaching faculty and a strong alumni network enable us to offer a meaning education that satisfies corporate needs.

From the first year onwards, students are involved in corporate assignments that are integrated with the course curriculum. These assignments provide students valuable "on-the-job live experience". They are encouraged to work on various live projects and paid internships that sharpen their skills and provide high end corporate exposure.

Every year, we place almost 100% of our eligible students in reputed organizations and companies.

Industry Interaction

The Department of Management Studies focuses on management education. The interaction between our department and the industry is where issues like strategy, roles and responsibilities,

conflicts resolution, talent management are addressed. A series of sessions with industry leaders are organized along with student seminars. Faculty members attend national and international conferences. FDPs, MDPs and EDPs ensure that students and faculty have a clear understanding of the business environment. Right from the first year, our students are exposed to industrial visits, live projects and paid internships apart from placements in the final year.

The department engages and partners with CII (Confederation of Indian Industries), PIA (Peenya Industrial Association) and FKCCI (Federation of Karnataka Chamber of Commerce and Industries) to innovate and align programs.

Topic: Department of Electronics & Communication Engineering

Date: 2nd Aug 2017   **Time:** 10:15 AM to 11:00 AM

Resource Person: Mrs. Smitha G.Prabhu

The department was established in the year 2001 with intake of 60 students , with the department vision and mission being:

Vision:

To achieve academic excellence in Electronics and Communication Engineering, by applying **knowledge** of basic science and technology, thus enabling students to have enhanced opportunities in the evolving global industrial scenario.

Mission:

To institutionalize academic, engineering and ethical culture, through comprehensive educational programme that strives towards continuous improvement of quality and content.

Induce research culture by emphasizing hands on exposure and interaction with R&D Organizations / industries.

Mould the students into good leaders by motivating students to involve in co-curricular and extra curricular activities with high degree of Credibility and integrity.

Department Milestones

- 2001 : Started with the intake of 60 students

- 2006 : VTU recognized Research Center

- 2007 : Became Autonomous

- 2007 : M. Tech in VLSI Design & Embedded Systems

- 2009 : Accredited by NBA

- 2009 : UG intake has been increased to 120

- 2010 : Permitted to take students under PIO quota

- 2012 : M. Tech in Digital Communication & Networking

- 2013 : UG intake has been increased to 180

- 2014 : NAAC and NBA (Tier 1- Washington Accord) Accreditation

Strength of the department

- Faculty with 10 PhDs, 11 pursuing PhD, others with M.Tech from Industries, Research and renowned Educational Institutions.

- Well equipped Hardware/Software Laboratories

- Recognized Research center for Visvesvaraya Technological University and University of Mysore

- Have sponsored projects from IEEE, VGST, VTU, DST, IEDC

- MHRD Recognised Remote Centre for Conducting workshops through IIT, Kharagpur

- IIRS-ISRO Outreach Program Remote Centre

- Participation in Multidisciplinary Research-

- Satellite Development, MEMS & Robotics

PG Programme:

M.Tech : VLSI Design and Embedded Systems

Student intake each year: 18

Year of sanction: 2007

M.Tech : Digital Communication and Networking

Student intake each year: 18

Year of sanction: 2012

Research Areas Focused by the Department

❑ Small Satellite Design, Development and Testing

❑ MEMS Design, Fabrication

❑ VLSI Design & Simulation

❑ Bio Medical Signal Processing

❑ Wireless and Optical Fibre Communication

Sponsored Projects received by the department:

1. Design, simulation and modeling of MEMS Microphone array and signal conditioning electronics

2. Design, Fabrication and characterization of MEMS Microphone with signal conditioning circuitry for Hearing Aid Application

3. Low cost solution for Cooling Systems for Rural Areas Thermoelectric Materials

4. Neural Network for Image Compression

5. Student Satellite Project (STUDSAT)

6. Door Sensing Mobile Robot

7. Luminance Based Lighting Control

8. Pico Hydro System

9. Fiber Optic Link

10. Low Cost Solution for Automated Irrigation

11. Zero Padding OFDM Signal for cognitive Radio Network

12. Thermoelectric Refrigerator

Publications & Patents

July 2015 - June 2016

International Conference – 05

National Conference – 0

International Journals – 03

Patents – 03

July 2016 - Till date

International Conference – 18

National Conference – 9

International Journals – 22

SCHOLARLY ACTIVITIES:

- **SIGNED MoU WITH EUROPRACTICE IC Service**
- **Signed MoU With KPIT Technologies Ltd**

IRIS:

IRIS is the EC Department student chapter where they can exhibit their talents.

This year they conducted

- Workshops

- Technical Quiz contests

- HW & S/W debugging Competitions

- Technical Talk from Experts

- Games and Cultural activities

Department is involved in many other activities

IIRS-ISRO Outreach Program

➤ Department is Recognized as "Remote Center" , one among two engineering Colleges in Karnataka (NMIT & BMSCE)

➤ This Academic year Course on' Basics of Remote Sensing,Geographical Information System&Global Navigation Satellite System' and "Remote Sensing and GIS applications in Carbon Forestry"were conducted on August22-November 22,2016& 16-2-2017 to 10-3-2017 respectively

Social Transformation Empowerment Program(STEP)

➤ An initiative taken by department to create social, economic ,civic, environmental awareness among students

➤ Residential programme held between Jan 23- Jan 31, 2016 by "Samartha Bharatha"

➤ 23 students across different departments have successfully participated 9 students were from ECE , front ended at college level

➤ Students have undergone rigorous training in this area and are nurtured to take up project in their interested area

➤ Overall personality development to build their personal and professional growth

Women Empowerment Program – "KATALYST"

Vision
Katalyst aims to be a leader in this continual elevation and transformation of young women fro m low income communities to lead change in their professional and personal spheres of life

➤ An initiative taken by department at college level for women empowerment in collaboration with NGO Katalyst connected to Placement & Training department

➤ Identified 32 Girl students and have been selected for this program

➤ Students are given comprehensive training continuously for 4 years of engineering on skill enhancement, mentor
support, assistance with internships and exposure to corporate life.

Topic: Training & Placement Activities, Industry Institute Interaction

Date: 1ˢᵗ Aug 2017   **Time:** 3.30 PM -3.50 PM

Resource Person: Mrs. Bhanu Rekha Reddy, Director, Placement Cell

The Training & Placement Department has an important role to play in student's future and an indispensable pillar of the Institute. Placements provide an "OPPORTUNITY" to students to demonstrate their knowledge acquired over years for applicability in the real world. This department continuously strives to help students in pursuing their career goals by acquiring employment seeking skills and ultimately to attain desired employment.

We recognize the power and strength of our method of education to our engineers in providing ample placement avenues in the industries. Our college placement cell is a place to create and develop positive thoughts to our prospective engineers. We trust "To reap the benefits tomorrow, we need to sow the seeds today "and we act upon it. We strive hard to transform the talent pool through continuous training programme by experts in the respective area to meet the expectation of the industries. The robust and proactive Training & Placement Cell is a team of experienced experts in the order to groom the students in the best of their capabilities

The Training & Placement Cell maintains liaison with various Industries/Organizations .These organizations are invited to the institution for campus recruitments so that students get career offers before they graduate from the college.

Objectives of this department are as follows:

• The main objective is to create a platform where industries can come and select freshtalents from the campus**.**

• Work with faculty members, department heads and administration to integrate career planning with academic curriculum.

• Empower students with life long career decision making skills.

• Providing resources and activities to facilitate the career planning process.

- Act as an interface among students, alumni, and the employment community.

- Awareness in the students regarding future career optionscoordinating summer training/internship programme.

- Bridging gap between Industry and Academia.

Our Long Term Goal:

Try to touch every facet irrespective of past educational credentials which goes on to empower the strengths and positives and hence provide them with an opportunity to climb the ladder of success.

How do we work?

An independent, self-sufficient Placement and training cell is functional in this institute where all the student department interactions are direct and transparent.

Training for pre final year students:

Our Department is concerned with managing the student fraternity in order to enable them to understand and identify their skill sets, capabilities and knowledge and develop the same to maximum extent possible through an innovative and continuous learning process comprising of specialized training, counseling, evaluation and feedback so that they are transformed into employable professionals.

The Training & Placement department strives to offer at least one chance to every eligible student to appear in the placement process based on the consistence performance from class Xth to 6th Semester. This is achieved by collecting student database from autonomous department which is relevant and authentic.

In order to enable the students get an insight into the industry, the director of Training & Placement department addresses the students prior to the recruitment drives therefore they are urged to work towards placement preparations.

Well in advance information about the recruitment drives is provided by uploading the details on the Google drive/ shooting e- mails to the students which is beyond the traditional approach, in order to avoid the communication gap and therefore providing equitable opportunities to all the students

Placement process

The Training & Placement Department has an important role to play in student's future and an indispensable pillar of the Institute. Placements provide an "OPPORTUNITY" to students to demonstrate their knowledge acquired over years for applicability in the real world. This department continuously strives to help students in pursuing their career goals by acquiring

employment seeking skills and ultimately to attain desired employment.

- The Training & Placement dept. sends invitation to the companies enclosing a brief summary of the courses available, company profile & student's database.
- A company can show its interest in recruiting NMIT students by contacting T&P cell, Database of the students is prepared and sent according to the eligibility criteria specified by the company.
- A mutually convenient date is finalized for the recruitment drive.
- Students who are eligible for the company will have to give his/her consent before attending the drive. Failing which the candidate will be marked absent for the placement drive.
- The students should maintain punctuality throughout the campus drive.
- All the queries regarding placement drives etc. will be handled by the faculty/student placement coordinators.
- Well in advance information about the recruitment drive is provided by uploading the details on the Google drive/ shooting e- mails to the students which is beyond the traditional approach, in order to avoid the communication gap and therefore providing equitable opportunities to all the students.
- The company visits the campus for placements on the allotted date and conducts Pre-placement talk Aptitude Test/Technical test/Personal Interviews/Group Discussion as part of their preferred selection procedure.
- After completion of the selection process,the company is required to furnish the final list of selected students preferably on the same day, or as soon as possible.
- Feedback from the companies is taken and is used as an input towards development of the curriculum and hence keeping pace with industry trends.
- Intensive supportive measures are undertaken by the T&P cell for rejected candidates and thereafter motivating them for further recruitment drives.
- The company sends offer letters to the Placement Office for handing them over to the students. Offer acceptance are received and the details are sent to the company by the placement office.
- Student, once selected will not be allowed further in any placement driveuntil the offer is 3 folds more than the existing offered CTC.

Career training sessions

Pre placement training is a special form of guidance and education which is aimed at improving the skills of students and increases the performance by focusing on professional ethics.

The placement process includes intensive pre-placement activities comprising of:

- Career Counseling Sessions

- Aptitude

- Soft skills

- Group discussion

- Resume building

- Mock Interview Sessions

- Technical skills

- Mock Aptitude tests

Training

The training program enhances the employability skills of a fresher through systematic and structured approach with appropriate mentorship at every step of learning

- Work with faculty members, department heads and administration to integrate career planning with academic curriculum.

- Identifying organization for industrial training and placement activities.

- Collecting their proposals, based on the best Expression ofInterest, Vendors are selected and the training program commences for the academic year.

- Demo of various agencies to students &, based on the student feedback, finalization of agency ,fees and terms of payment are decided.

- Time table for training sessions are made.

- Monitoring of the program through T&P cell.

- Feedback about the program from students and corrective actions are taken out accordingly.

Conclusion:

"A comprehensive use of feedback of HR & Technical Professionals of the corporate is made to further help students improve their skills".

This regular updating of skills and knowledge has helped Nitte Meenakshi Institute Of Technology carve a niche and create new benchmarks with the talent of budding technocrats.

Training Partners:

- JV Global

- Quantech Origin

- Innovations Unlimited

- Vista Mind

- K Dot

- Career Launcher

- Inroad

Industry Institute Interaction

Acute care is taken to bridge the Industry Academia gap by upgrading each and every student with the latest knowledge of trends and requirements of the industry. Imparting Technical Training with organized Industry experts.

To promote Industry Institute Interaction following schemes are undertaken

- Establishment of Industry-Institute Partnership.

- Organizing lectures, seminars with joint participation of the faculty and the industries.

- Encouraging engineers from industry to visit our Institution to deliver lectures.

- Participation of experts from industry in curriculum development.

- Memoranda of Understanding between the Institute and industries to bring the two sides emotionally and strategically closer.

Industry institute Partners areIBM, L&T InfoTech, Xerox India and many more!

Topic: Research Funding Agencies: Teaching and Participating in Research & Development Activities – Order of the Day

Date: 1ˢᵗ Aug 2017   **Time:** 9.15 AM -10.30 AM

Resource Person: Dr. Bharathi Ganesh, Professor and head, Dept of civil Engineering,

Introduction

Behind the classroom door the key factor in the success of a lesson, in determining whether the students actually learn something that matters, is the creative ability of the teachers — their ability to combine theory and practical classroom experience. Theory alone will not result in effective teaching. Nor will practice alone result in truly excellent teachers engaged in the learning process. Critical to this process is the teacher's knowledge of the subject content, and his/her ability to implement new strategies, to develop effective performance tasks, to design appropriate assessment tools, and to address the different student learning styles. Little of this can be accomplished if teachers are not knowledgeable of new research, and determined to implement it. Effective teaching therefore involves the practical application of new research/theory in a classroom environment.(**Joseph T. Stafford 2006). To create new knowledge, one must first master the existing body of knowledge.** Research is the process of creating new knowledge. Making progress in creating knowledge requires a significant amount of background knowledge. In this direction, it is necessary for a teacher to involve in research activities for creating and disseminating new knowledge.

The responsibilities involved in teaching profession are of many folds.

- Teaching and Learning – Slogan for a good teacher to be is 'Teach to Learn and Learn to Teach.
- Research and developmental activities - To involve in research activities for creating and disseminating new knowledge
- Additional Responsibilities - To be a part of growing team, contributing by taking additional responsibility is a must.
- Documentation of all activities – Systematic   approach and documentation of all activities is a part of teaching learning process.

Why Research in Teaching Profession?

Teaching Profession is no more an attractive option for those who think that one can relax and enjoy both profession and family.This is a rapid and accelerating pace of change in teaching where expectations from Teachers are many and they are 'Givers'!!!Teaching accompanied by Research more realistically convey the excitement and challenges of research science and perhaps

- ✓ Stimulate the interests of learners towards the subjects
- ✓ Improves their learning skills
- ✓ Imbibes research culture at the right time
- ✓ Encourages their thinking ability
- ✓ Motivates some students to consider research careers for themselves

An approach, termed "CREATE" (for Consider, Read, Elucidate hypotheses, Analyze data, and Think of the next Experiment), has proven more successful at both demystifying the scientific literature of science and Engineering in UG and PG programmes.

Less is More

Learning our L.I.M.I.T.S. - Less (contribution towards Research is considered as) Is More (deficiency) In Teaching Science & Engineering. Hence, its time now to start towards research and publications. Knowing more about research activities, how to write Proposals for Research funding, how to proceed towards publications in referred journals will help in channelizing towards research and publication activities.

The participation of Faculty members in research and development in India is alarmingly low despite the efforts of the many managementsto promote them. Institutions of national importance like Council of Scientific and Industrial Research (CSIR), and the National Institute of Science and Technology and Development Studies (NISTADS), have a constant watch on total indexed research projects and contribution of teaching fraternity on research.

Less 'us' Less 'them'&More 'us'More 'them'

Involvement of students also in research activities is one of the Indicesof the growth and quality of the Institution. Lesser the teacher in research, lesser will be the number of students in research and vice versa.

Research publication in peer reviewed Journals and reputed conferences.

The research should result in publications in refereed journals, patenting or at least

publications in proceedings of highly reputed conferences. The quality of publication is judged by its citation analysis.

About Citation Analysis

Citation Analysis - What is it?

The process whereby the impact or "quality" of an article is assessed by counting the number of times other authors mention it in their work.

Citation analysis involves counting the number of times an article is cited by other works to measure the impact of a publication or author. The caveat however, there is no single citation analysis tools that collects all publications and their cited references. For a thorough analysis of the impact of an author or a publication, one needs to look in multiple databases to find all possible cited references.

A number of resources are available at UIC that identify cited works including: Web of Science, Scopus, Google Scholar, and other databases with limited citation data.

Citation Analysis - Why use it?

To find out how much impact a particular article or author has had, by showing which other authors cited the work within their own papers. The H-Index is one specific method utilizing citation analysis to determine an individuals impact.

Citation Analysis

Terminologies Research Publications

- ✓ AI Services
- ✓ Citation Index
- ✓ H-Index &Hirsch number
- ✓ DOI – Digital Object identifier

AI Services - An Abstracting and Indexing (AI) service is a service that provides shortening or summarizing of documents and assigning of descriptors for referencing documents. The product is often an **abstracts journal** or a bibliographic index, which may be a subject bibliography or a bibliographic **database**.

Nowadays more than 400 online Abstracting and Indexing (A&I) services provide these search capabilities for the various disciplines and research areas. Researchers need to be aware of the reputation of AI services while selecting the publishers.

Example: About - Thomson Reuters

Thomson Reuters is the world's leading source of intelligent information for businesses and professionals, who combine industry expertise with innovative technology to deliver critical information and are powered by the world's most trusted news organization. Thomson Reuters

shares are listed on the Toronto and New York Stock Exchanges (symbol: TRI).

The **impact factor** (**IF**) of an academic journal is a measure reflecting the average number of citations to recent articles published in that journal. It is frequently used as a proxy for the relative importance of a journal within its field, with journals with higher impact factors deemed to be more important than those with lower ones.

Impact factors are calculated yearly starting from 1975 for those journals that are indexed in the *Journal Citation Reports*.

Citation Impact /A citation index is a kind of bibliographic database, an index of citations between publications, allowing the user to easily establish which later documents cite which earlier documents.

Calculation of impact Factor

In any given year, the impact factor of a journal is the average number of citations received per paper published in that journal during the two preceding years.[1] For example, if a journal has an impact factor of 3 in 2008, then its papers published in 2006 and 2007 received 3 citations each on average in 2008.

The 2008 impact factor of a journal would be calculated as follows:

2008 impact factor = *A*/*B*.

where: *A* = the number of times that all items published in that journal in 2006 and 2007 were cited by indexed publications during 2008 and *B* = the total number of "citable items" published by that journal in 2006 and 2007. ("Citable items" for this calculation are usually articles, reviews, proceedings, or notes; not editorials or letters to the editor).

- (Note that 2008 impact factors are actually published in 2009; they cannot be calculated until all of the 2008 publications have been processed by the indexing agency.)

Importance of Publications & citation.

H-index or Hirsch number - The h-index is an index that attempts to measure both the **productivity** and citation **impact** of the published body of work of a scientist or scholar. The index is based on the set of the scientist's most cited papers and the number of **citations** that they have received in other publications.

Case Study: Prof. C N R Rao has published around 1500 research papers and 44 books(2013). He has around 94000+ citations with an H-index of 140+. C.N.R. Rao is on the editorial boards

of several journals dealing with chemistry, chemical physics, materials science and solid state chemistry.

Fig.1 Prof. C N R Rao, Scientific Advisory Council to the Prime Minister of India.

Table 1 Citation Index Details of Publications of Dr.C N R Rao (Sourse:scholar.google.co.in/citations)		
Citation indices	**All**	**Since 2012**
Citations	93398	34970
h-index	138	84
i10-index	1186	575

DOI - Digital Object Identifier

This is the web site of the International DOI Foundation (IDF), a not-for-profit membership organization that is the governance and management body for the federation of Registration Agencies providing Digital Object Identifier (DOI) services and registration, and is the registration authority for the ISO standard (ISO 26324) for the DOI system. The DOI system provides a technical and social infrastructure for the registration and use of persistent interoperable identifiers, called DOIs, for use on digital networks.

General Information on Research & Development Funding Schemes of Central Government Departments/Agencies

The following National level Agencies/Ministry/Departments provide funding facility for

researchers in various fields of Science and Technology. The detailed list is enclosed in reference.

Teaching Excellence Frame Work

The contribution to research in addition to teaching is particularly timely and important in view of the Institutions' intention to introduce the Teaching Excellence Framework (TEF) 'as a way of better informing students' choices about

a. What, How and How much to study,

b. Raising esteem for teaching,

c. Recognising and rewarding excellent teaching and

d. Better meeting the needs of employers, business, industry and the professions'.

What is Needed???

General opinions of Visionary of the Institution are

➢ Bridging the research in academia, is needed to ensure that teachers make strong impact on learners at all levels, utilizing the time and facilities available.
➢ There are no quick fixes to bridge the gap of research and teaching or one should abandon academic science and Engineering careers for complex reasons.
➢ A fundamental restructuring of the way academic science is conducted and how individual Teachers are evaluated is necessary if Fresh Graduates are to be fully embraced in all walks of science and Technology. Unless there is a drastic restructuring of the way academic delivery is conducted, evaluated and rewarded, teachingfraternity may never take up research activity seriously.
➢ A strong scientific research base is the heart of a strong economy (of Institution or Country),

Who Should Contribute & How?

✓ Academicians
✓ Industrialists
✓ More importantly Academicians in association with Industry for a Need based Research

which is of more significance availing the funding facilities of Government Agencies.

Fig.3 Collaboration between Academia, Industry, Private Organisations and Government Agencies - An Order of the Day.

How ?

What is needed is striking the balance between Teaching & Research, as professionals are trying to adopt balancing act between Work & Home.

Fig.2 Balance Teaching & Research is similar to the Balancing Work& Life

Research and Developmental Activities at NMIT

- NMIT is a recognized Research Centre under University of Mysore (UoM) and also has 8 Research Centres under VTU. NMIT has a strong research culture in various departments and has nearly 70 PhD holders, 90 internal Research Scholars and 16 external Research Scholars.

- NMIT has a Research Council.
  - To encourage Publications and Research Activities

- To monitor the progress of PhD of Research Scholars (by PhD Progress review Committee)
- To imbibe research culture in Teaching fraternity & students
- To encourage your profession growth and hence the growth of the Institution
- To facilitate research activities
- To encourage filing for Patents (NMIT Patent Cell)

🞦 NMIT has
- Has subscribed for National and International Journals
- Is Members of reputed Libraries (IISc, British library, NAL and so on)
- Has MoUs with Reputed Research organizations and Universities Abroad.
- Appointed many Senior Professors from Reputed Institutions / Organizations to take the institution forward in R & D activities.

Conclusion

Special message for "Teacher- the Learners" !

With adequate knowledge, strong drive towards achieving goal and comprehensive understanding of the situation, it is possible to contribute also as a Researcher in teaching Profession. One has to have a beginning as it is said that '**more You Learn to Handle the Challenges, Better You Grow!**

'References

1. *Joseph T. Stafford, The Importance Of Educational Research In The Teaching Of History Canadian Social Studies, Volume 40 Number 1, Special Issue: History Alive! Old Sources, New Technologies,Summer 2006,Www.Quasar.Ualberta.Ca/Css*
2. Source:http://researchguides.uic.edu/c.php?g=252299&p=1683205

Reading Assignments

1. Reading Assignment: 8 steps to improving learning and teaching through research by Dr Shelley Kinash, Director of Learning & Teaching, skinash@bond.edu.au 26 January 2015. https://bond.edu.au/files/628/8%20steps%20to%20improve%20learning%20and%20teaching%20through%20research.pdf
2. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.551.1639&rep=rep1&type=pdf
3. https://www.elsevier.com/connect/7-steps-to-publishing-in-a-scientific-journal
4. https://www.loc.gov/rr/scitech/general.html#aboutsci
5. https://www.loc.gov/rr/readerregistration.html
6. https://www.loc.gov/rr/scitech/asi1.html
7. https://en.wikipedia.org/wiki/Indexing_and_abstracting_service

8. http://www.asindexing.org/i4a/pages/index.cfm?pageid=1
9. http://www.indexers.org.uk/
10. https://en.wikipedia.org/wiki/Library_and_information_science
11. http://researchguides.uic.edu/if/altmetrics
12. Google
13. Thomson Reuters /ISI
14. Well-known discipline-specific indexing services include
15. PubMed/Medline (in the field of medicine)
16. ChemAbstracts (chemistry)
17. ADS (astronomy & physics)
18. ZentralblattfürMathematik (mathematics)
19. Web of Science
20. **Databases containing limited citation counts -** CINAHL, CSA Illumina Databases (BioOne Abstracts and Indexes, ERIC, PsycInfo, Social Services Abstracts, Sociological Abstracts, Worldwide Political Science Abstracts), EBSCOhost Databases (Academic Search Complete, America: History and Life, CINAHL, Communication and Mass Media Complete, Historical Abstracts), **EMBASE,** PubMed Central, Science Direct, SciFinder Scholar,

Agency/Departments/Ministry

(www.mnit.ac.in/research/admin/Final_LIST.pdf)

- All India Council for Technical Education (**AICTE**)
- Council of Scientific and Industrial Research (**CSIR**)
- Defence Research and Development Organisation (**DRDO**)
- Department of Atomic Energy (**DAE**)
- Department of Ayurveda, Yoga & Naturopathy, Unani, Siddha and Homoepathy (**AYUSH**)
- Department of Biotechnology (**DBT**)
- Ministry   of   Coal   (**MOC**) Ministry of Earth Sciences (**MoES**)
- Department of Science and Technology (**DST**)
- Department of Scientific and Industrial Research (**DSIR**)
- Indian Council of Medical Research (**ICMR**)
- India Meteorological Department (**IMD**)
- Indian Space Research Organisation (**ISRO**)
- Department of Electronics & Information Technology (**DeitY**)
- Ministry of Environment, Forest and Climate Change
- Ministry of Food Processing Industries (**MOFPI**)
- Ministry of Power, Central Power Research Institute (**CPRI**)
- Ministry of Social Justice & Empowerment (**MOSJE**)
- Ministry of Water Resources, River Development &Ganga Rejuvenation
- Ministry of Petroleum & Natural Gas
- Petroleum Conservation Research Association (**PCRA**)

- University Grants Commission (**UGC)**
- Ministry of New and Renewable Energy
- Ministry of Power

Web links of National Level Funding Agencies

Scientific Agencies and Departments to spread the spirit of science and technology co-operation among developing societies are providing funding supports for interested researchers based on their research proposals. They are

- ✓ Scientific Programmes Science and Engineering Research Board (SERB) www.serb.gov.in
- ✓ Kishore VaigyanikProtsahanYojana (KVPY) www.iisc.ernet.in/kvpy
- ✓ National Science & Technology Management Information System(NSTMIS)www.nstmis-dst.org
- ✓ Scientific Services National Atlas and Thematic Mapping Organisationwww.natmo.gov.in
- ✓ Survey Of Indiawww.surveyofindia.gov.in
- ✓ Autonomous S&T Institutions Agharkar Research Institute, Punewww.aripune.org
- ✓ Aryabhatta Research Institute of Observational-Sciences (ARIES), Nainitalwww.aries.ernet.in
- ✓ BirbalSahni Institute of Palaeobotany, Lucknowwww.bsip-india.org
- ✓ Bose Institute, Kolkatawww.boseinst.ernet.in
- ✓ Centre for Liquid Crystal Research, Jalahalli, Bangalorewww.clcr.res.in
- ✓ Indian Association for the Cultivation of Science, Kolkatawww.iacs.res.in
- ✓ Indian Institute of Astrophysics, Bangalorewww.iiap.res.in
- ✓ Indian Institute of Geomagnetism, Mumbai www.iigm.res.in I
- ✓ Indian Institute of Tropical Meteorology, Punewww.tropmet.res.in
- ✓ International Advanced Research Centre for Powder Metallurgy and New Materials, Hyderabad www.arci.res.in
- ✓ The Institute of Advanced Study in Science & Technology, ASSAM www.iasst.gov.in/
- ✓ Jawaharlal Nehru Centre for Advanced Scientific Research, Bangalorewww.jncasr.ac.in
- ✓ National Accreditation Board for Testing & Calibration Laboratories, New Delhiwww.nabl-india.org/
- ✓ Raman Research Institute, Bangalorewww.rri.res.in/
- ✓ S.N. Bose National Centre for Basic Sciences, Kolkata www.newweb.bose.res.in/
- ✓ SreechitraTirunal Institute for Medical Sciences & Technology, Thiruvananthapuramwww.sctimst.ac.in
- ✓ Technology Information, Forecasting & Assessment Council (TIFAC), New Delhiwww.tifac.org.in
- ✓ VigyanPrasar, New Delhi www.vigyanprasar.gov.in
- ✓ Wadia Institute of Himalayan Geology, Dehradunwww.himgeology.com/
- ✓ Professional Bodies Indian Academy of Sciences, Bangalorewww.ias.ac.in
- ✓ Indian National Academy of Engineering, New Delhiwww.inae.org
- ✓ The National Academy of Sciences, Allahabad www.nasi.nic.in
- ✓ Indian National Science Academy, New Delhi www.insaindia.org
- ✓ The Indian Science Congress Association, Kolkata www.sciencecongress.nic.in
- ✓ Statutory Board Technology Development Board www.tdb.gov.in

- ✓ Three categories of scholarships, with research grants, are available for Indian citizen.
- ✓ The various categories of Scholarship available are indicated below:
- ✓ Scholarship for Research in Basic/Applied Science (WOS-A)
- ✓ Scholarship for Research in S&T - based Societal Programs (WOS-B)
- ✓ Internship for the Self-Employment (WOS-C)

Topic: Mentoring Students as it is in NMIT: Review & Reforms.

Date: 2nd Aug 2017   **Time:** 11.00 AM -11.45 AM
Resource Person: Dr. K Sudha Rao

The main objective of NMIT is to obtain excellence in engineering and management education. An outcome of education is reflected in any student, when s-he is always aware of the fact that what is his/her aim of education. Establishing this particular awareness about the aim is a difficult task for the students because of ample ways of distractions in the present society. Mentorship program in NMIT aids the student by creating awareness about the aim of professional education in general and engineering education in particular. Mentoring develops the good relationship between faculties, students and the institution. It motivates the students to persue higher studies and it develops the leadership abilities among the mentors and students towards achieving learning goals in addition to developing the skills and behavior needed for succeeding professionally. It has positive impact on students towards achievements in college, also in co curricular activities.

Mentorship Program, is a program for the Student and Staff Community, with the primary objective of enabling constructive, positive interaction and guidance. It is necessary in college to facilitate over all college growth. The vision of the program is to develop right attitude start

from the beginning.

It assists in creating awareness regarding the aim / goal of his/ her education. Build better citizens through responsibility and service. In general there are about 70 students per class. All the faculties handling subjects to a class cannot become parent to all 70 students, that is why this practice of mentorship has come to picture. Every teacher is assigned with around 25 students and teacher tries to become their parents at college. That is on personal note.

Mentorship program plays a key role in a student's academic as well as personal growth. It is a way to get students engaged and empowered in terms of academics/ extra-curricular activities. The concept of mentoring is good to track and nurture the performance of students as their academics are concerned. But this concept fails if the efforts are unilateral.

The mentorship program at NMIT is benefiting large number of students. Teachers as mentors - guide, support and help mentees for their growth. I mentored 20 students for the first time during this semester (January 2017 -May 2017). I took the guidance and help (mentoring) of senior teachers in my department, for mentoring my students.

"Mentoring is to support and encourage students to manage their own learning in order that they may maximize their potential, develop their skills, improve their performance and become the person they want to be." Eric Parsloe, The Oxford School of Coaching & Mentoring

The initiative idea of mentoring students is really a good one, which will help the teacher to council the students and to motivate them Mentoring focuses on the human relationships, commitments, and resources that help graduate/ post graduate students find success and fulfilment in their academic and professional pursuits.

Mentoring is not a task, per se, but a renewable source of intellectual, professional, and personal fulfilment and a gratifying means by which mentors can pass on the rich lessons they have learned throughout their careers

At the graduate level, mentors are needed to offer advice and guidance in academic matters. In addition, the mentor becomes a valuable support person for the student. Mentor can help the student in becoming a legitimate member of the department.

Advice and support from mentors are among the most important factors in determining the success of students' education, to make sure that they happened more routinely, departments should establish explicit requirements for faculty advising. Most important, the mentor must serve as a positive role model.

NMIT, is doing good job through this mentoring process. Mentoring engineering students provides mentors the chance to make a significant impact in someone's life. Through mentoring, teachers help students discover themselves and their potential, show them how to apply their skills and special aptitudes, and guide them in defining and pursuing their own

career goals.

Advantages

The concept of mentoring is good to track the performance of students as their academics are concerned and develop a bond between students and faculties. These programs enable the mentors to develop the talent of the student and increase productivity within them.

This program increases the level of integrity in the student towards the faculty as well as the Institution. It also increases the morale of NMIT, along with institutional productivity and development.

Many teachers have benefited from a trusted mentor, perhaps students call mentors a friend, family member or an advisor. Mentors have created an intangible bond with mentees through sharing of their experiences, opinions, and the time mentors took to give mentees advice and counsel.

As professional engineers, many of teachers have the same opportunity - getting involved in two aspects that are vitally important to the engineering profession. The first is to make a positive impact on the life of a young, aspiring professional or student. The second is to help solidify the role of engineering in a fast paced, diverse landscape.

In turn, mentoring helps mentors discover new things about themselves. They will learn just how valuable their knowledge, experience, and expertise are to their mentees. They will also discover new levels of patience and commitment not experienced before. And will marvel at the energy, sincerity, and fresh perspectives of the next generation of professional engineers.

MENTOR is more of like a PARENT. mentoring is a relationship between two individuals based on a mutual desire for development towards career goals and objectives.

Students as well as faculties benefit out of such a practice. Students get a local guardian with whom they can share joy and sorrow. Faculties get to be a cause for overall development of a student. But the idea of mentorship collapses if either of them shows disinterest in the interaction and personal touch.

Mentorship program has helped teachers in connecting with students from different backgrounds. Mentors have learnt about mentees background, their parents and how they are coping in studies.

Mentoring is a particular form of relationship designed to provide personal and professional support to an individual. The mentor is generally more experienced than the Mentee and makes use of that experience in a facilitative way to support the overall development of the Mentee. Mentorship helps students build networks with other students and staff who can help make the most of their career and a sense of secured feeling to every student It helps in students' to stay

focused; helps student to get a professional guidance which is often needed in any professional courses. A better mentor-mentee relationship can be established if students are able to respond to mentor's efforts. Mentoring will help students in their academic performance, office work (fees payment, dues etc.). Mentees feel free to speak to mentors in case they are facing any problem personally or academically. Mentoring helps students understand how their ambitions fit into graduate/post graduate education. As students progress through the programs, they will find that rarely is one individual able to meet all their mentoring needs and Formal mentoring increases job performance, enhances confidence, facilitates networking, and decreases turnover, thus positively impacting the entire department.

A mentor recognizes a student's unique qualities and need for special coaching. In turn, this recognition inspires the student to seek to benefit from the mentor's support, skills, and wisdom. Later, both will explore and deepen their working relationship.

Gain personal satisfaction; Develop patience, insight, and understanding; Improve leadership and communication skills; Students get more confident, mentors can rectify the problems mentee is facing in his/her subjects or any other problems s-he is facing.

Students get the information what actually they have to do to achieve their success. This is indirectly more important for college success also.

Disadvantages

For Instructors I feel time may be a great constraint. Teachers can identify some young mentors among students. And also for students who done with their graduation, most of them are worried about their future carrier and teachers rarely get to deal with the alumni personal problems. Secondly, Any deliberate efforts of mentor to gain control over mentee may take an ugly turn or impose redundant pressure on mentee which is psychologically hazardous and subjective in nature.

Micro management (A little too much mentoring) may lead to invasion of personal space of student/person.

Invariable mentees would approach mentor ONLY when they ere in trouble. The rest of the times they would never respond to mentor's phone calls or messages, nor would meet the mentor personally. The excuse mentees would give are that they were busy with classes. Also that the assigned mentor and mentee group may not be a good fit for any number of reasons, for ex personalities. Mentor may be responsible for student's activities in college whether it is worst performance by the mentees. Some of the mentees parents might ask the mentors to take full responsibility of his son/daughter.

Mentoring the students by the teachers is possible?

Yes present format of mentoring at NMIT with Gurukul support system is excellent and the teachers can mentor students from the available resources by engaging mentors from a related department Alternatively, mentoring programs can be configured in one of the alternative ways described below, such as peer mentoring or group mentoring.Yes, As long as the teacher is completely aware of the Mentee. This depends on the individual perspective along with the compatibility level of both the parties. As a teacher, I personally feel that when I enter the classroom I need to have an open mind along with a non-judgmental attitude towards my students. I feel students are expressive, when the teacher is more empathetic and supportive enough to understand their needs. A better mentor-mentee relationship can be established if students are able to respond to mentor's efforts.

Ensure Better Results: How

Better results can only be obtained by treating Mentees in a friendly manner, rather than as students, with a better co-operation and healthy relationship between the mentee and mentor. A very conscious move is required from both mentor and parents on observations of mentee is concerned. Otherwise expecting the mentor alone to bring change in the mentee seems irrational As long as students follow the teachers instructions and mentor instructions and their parents instructions , also student should have interest in their studies then it is possible

It would be good if new teachers get Mentoring from senior faculties. Their experience and guidance will help us mentor our students better. As a course coordinator I have interacted with students and motivated them to get good in academics. For this practice of mentorship to be successful, mentor-mentee relation should not just be a signing authority (signing no due, signing request letters etc). But it should be to level that the students are comfortable sharing everything (be it personal, or related to studies) with the mentor. This initiative is the best way to build a good relationship between the teaching fraternity and the students so their needs can be taken care of at the best possible way.

To guide students in this regard mentors should conduct at least 4 meetings in a semester and a standardized format is required to maintain the records. I feel BE and MBA students will have a very different mindset and approach to formal academic system so mentoring system for graduates and post graduates has to be different.

It would be helpful if half an hour of specific time per week is allotted for mentors and their mentees. So that mentors can meet all their mentees irrespective of them have problems or not. This would result in good interaction between mentor and mentees and in turn help in the development of mentees and mentors as well. It is also possible that a particular department may not have enough mentors depending on the ratio of junior faculty to senior faculty. Better mentoring can also be done by students and it will help the faculty also. For ex. College students make excellent mentors because they are close enough in age to young people to

establish strong relationships, yet mature enough to offer guidance. The young mentors should report to respective faculties so that Teacher will have sufficient info about students.

By doing this even a sense of responsibility is shared between a student. It Improves leadership and communication skills and Gain experience for future careers in public service, social work, teaching, and more. by following these methods a college can achieve better results interms of Developing stronger ties with their communities,

Regular interactions with the students in a friendly manner and their parents regarding next step in their academics, will be key to achieve the better results.

ANNEXURES

ANNEXURE 1: LIST OF PARTICIPANTS

The young faculty who joined NMIT during 2016-17 after 01st August 2016 till 31st July 2017 are included in this program. The department wise faculty distribution is as following:

Dept. of Aeronautical Engg.	: 01
Dept. of Civil Engg.	: 03
Dept. of Computer Science & Engg.	: 03
Dept. of Electronics & comm. Engg.	: 04
Dept. of Electrical & Electronics Engg.	: 02
Dept. of Information Science &. Engg.	: 01

Dept. of Mechanical Engg.   : 04
Dept. of MBA   : 02
Dept. of Mathematics   : 01
Dept. of English   : 01
Total No. of Faculty   : 22

Faculty Details:

Sl. No	Employee	Designation, Department	Email ID	Contact No.
1	Dr. Neha Jain	Professor, Dept. of English	neha.jain@gmail.com	
2	Anand S	Asst. Professor, Dept. of Electrical and Electronics Engineering	anand.s@nmit.ac.in	+91 99002 30085
3	Girish Prasad M	Asst. Professor, Dept. of Mechanical Engineering	girishprasad1992@gmail.com	
4	Rashmi R Kulkarni	Asst. Professor, Dept. of Electronics and Communication Engineering	rashmi.kulkarni@nmit.ac.in	+91 88846 30585
5	Mrudula Shenoy M U	Asst. Professor, Dept. of Information Science and Engineering	mrudula.shenoy@nmit.ac.in	+91 97438 99864
6	Dr. Lalitha Y S	Professor, Dept. of Electronics and Communication Engineering	lalitha.ys@nmit.ac.in	+91 98800 57438
7	Shurti Gatade	Asst. Professor, Dept. of Electrical and Electronics Engineering	shruti.gatade@nmit.ac.in	+91 98865 50556
8	Nithin Aithal	Asst. Professor, Dept. of Mechanical Engineering	nithinaithal@gmail.com	+91 89713 93668
9	Divith Kumar R P	Asst. Professor, Dept. of Civil Engineering	divithkumar.rp@nmit.ac.in	+91 98809 57932
10	Devrath T S	Asst. Professor, Dept. of Management Studies	devrath012@gmail.com	+91 96119 59969
11	Varsha Vishwanath	Asst. Professor, Dept. of Civil Engineering	varsha.viswanath@nmit.ac.in	+91 91082 89220
12	Pramod S	Asst. Professor, Dept. of	pramodha321@gmail.com	+91 72591

		Mechanical Engineering		51081
13	Supriya P	Asst. Professor, Dept. of Computer Science and Engineering	supriya.p@nmit.ac.in	+91 96206 09519
14	Pramod S	Asst. Professor, Dept. of Mathematics	Pramod.s@nmit.ac.in	+91 90368 82924
15	Pratheeksha Hegde N	Asst. Professor, Dept. of Computer Science and Engineering	pratheeksha.hegde@nmit.ac.in	+91 89715 19696
16	Vishwachetan S G	Asst. Professor, Dept. of Civil Engineering	vishwa.chetan@nmit.ac.in	+91 97386 10069
17	Savithri Hande R	Asst. Professor, Dept. of Electronics and Communication Engineering	savithri.h@nmit.ac.in	+91 77955 55994
18	Pavan Kumar G Kulkarni	Asst. Professor, Dept. of Management Studies	pavankumar.kulkarni@nmit.ac.in	+91 98444 77348
19	Santosh Hosur	Asst. Professor, Dept. of Aeronautical Engineering	Santosh.hosur@nmit.ac.in	+91 90357 51535
20	Prajna K B	Asst. Professor, Dept. of Electronics and Communication Engineering	praghnakb295@gmail.com	+91 98860 52528
21	Vikram	Asst. Professor, Dept. of Mechanical Engineering	vikram.k@nmit.ac.in	9164155277
22	Dr. Priti Mishra	Assoc. Professor, Dept. of Computer Science and Engineering	mprits@rediffmail.com	9449632581

ANNEXURE 2: RESOURCE PERSONS

Prof.N.R.Shetty   - Advisor, Nitte Education Trust
Prof. L.M .Patnaik   - Advisor (Technical)
Prof. K Sudha Rao   - Advisor (Administration and Management)
Dr.H.C.Nagaraj   - Principal
Prof. Ranganatha Setty   - Dean (Academic)
Dr. Jharna Majumdar   - Dean (R&D)
Mr.Rohit Punja   - Administrator, Nitte Educational Trust

HoD's	- CSE, ISE, ECE, EEE, Mech, Civil, Aero, MBA, MCA, Applied Sciences
Mr.Rajendra	- Gurukul Software
Mr.Venkatesh K	- Dept. of Aero
Dr.Vidyavathi.N	- Dept. of Civil
Mrs.Prathima G	- Dept. of CSE
Mrs. Smitha G Prabhu	- Dept. of ECE
Mrs.Vasudha Hegde	- Dept. of EEE
Mr.Aditya Shastry	- Dept. of ISE
Dr.Smruthi Rekha Sen	- Dept. of Mech
Dr. Raghu	- Dept. of Chemistry
Dr. Chandrakala	- Dept. of Mathematics
Mrs. Jyothi G B	- Dept. of Physics
Mrs. Bhanu Rekha Reddy	- Dept. of Training & Placement
Mrs. Geetha Priyadarshini	- Dept. of MCA
Mrs.Nayana Desai	- Dept. of MBA

ANNEXURE 3: Actual Schedule of the Program

Day-1 : 01st August 2017 (Tuesday)	
Time	**Program**
9.15 am - 10.30 am	**Opening Session**
9.30 am - 09.40 am	Welcome to the program and Introduction to the Orientation program **Prof. Ranganatha Setty** Dean (Academic), NMIT
9.40 am - 10.00 am	NMIT tradition and Expectations from teachers -Words of Wisdom **Dr.N R Shetty**

	Advisor , NMIT
10.00 am - 10.30 am	Nitte Education Trust & NMIT structure and functions- who where and what to do. Resource Person: **Dr. H C Nagaraj**, Principal, NMIT
10.30 am -10.50 am	Department of Aeronautical Engineering Chair person : **Dr. Venkateshwaran** Professor & Head, AE Resource Person : **Mr.Venkatesh K.**
10.50 am - 11.10 am	Department of Civil Engineering Chair person : **Dr. Bharathi Ganesh** Professor & Head, Civil, Resource Person : **Mrs. Prathima**
11.10 am - 11.20 am	**Tea Break**
11.20 am – 11.40 am	Department of Computer science & Engineering Chair Person: **Dr. M N Thippeswamy** Professor & Head, CSE Resource Person : **Mrs.Archana Naik**
11.40 am – 12.00 noon	Department of Electronics & Communication Engineering Chair Person : **Dr. Sandya.S,** Professor & Head, E&CE Resource Person : **Mrs. Smitha G.Prabhu**
12.00 noon – 12.20 pm	Department of Electrical & Electronics Engineering Chair person : **Dr. H M Ravi Kumar** Professor & Head, EEE Resource Person :**Mrs.Vasudha Hegde**
12.20 pm – 12.40 pm	Department of Information Science & Engineering Chair person: **Dr. Sanjay H A** Professor & Head, ISE Resource Person : **Mr.Aditya Shastry**
12.40 pm -1.30 pm	**Lunch Break**
1.30 pm -1.50 pm	Department of Mechanical Engineering Chair person : **Dr.Kiran Aithal S** Professor & Head, MED Resource Person : **Mrs.Smruthi Rekha Sen**
1.50 pm -2.00 pm	Department of Chemistry Chair person : **Dr.Srilatha Rao** Professor & Head, Chemistry Resource Person : **Dr. Raghu**
2.00 pm -2.10 pm	Department of Mathematics Chair person : **Dr.Dhananjay Murthy** Professor & Head, Mathematics Resource Person : **Dr. Chandrakala**
2.10 pm -2.20 pm	Department of Physics Chair person : **Dr.S Abdul Sattar**

	Professor & Head, Physics Resource Person : **Mrs.Jyothi G.B**
2.20 pm -3.00 pm	Joys of Doing Research Resource Person: **Prof. L.M. Patnaik** Advisor (Technical),NMIT
3.00 pm -3.10 pm	**Tea Break**
3.10 pm -3.20 pm	Department of Master of Computer Application Chair person : **Dr. Prasad Naik Hamasavath,** Professor & Head, MCA Resource person: Mrs.Geetha priyadarshini
3.20 pm -3.30 pm	Department of Master of Business Administration Chair person : **Dr. S. Harish Babu,** Professor & Head, MBA Resource person: Mrs.Nayana Desai
3.30 pm -3.50 pm	Training & Placement Activities, Industry Institute Interaction Resource Person: **Mrs. Bhanu Rekha Reddy** Director, Placement Cell
3.50 pm- 4.10 pm	Role of regulatory Bodies & NMIT: UGC /AICTE / VTU / TEQIP/others Resource person : **Dr.Kiran Aithal** S, Professor & Head, MED
4.10 pm- 4.30 pm	Research Funding Agencies Resource person : **Dr.Bharathi Ganesh,** Professor & Head, Civil

Day-2 : 02nd August 2017 (Wednesday)	
Time	**Program**
9.30 am -10.10 am	NMIT Discipline and Code of Conduct Chair person : **Mr. Rohit Punja** Administrator, Nitte Educational Trust
10.10 am -10.50 pm	Introduction to Autonomy, Accountability & TEQIP Resource person: **Prof. Ranganatha Setty** Dean (Academic), NMIT
10.50 am -11.00 am	Tea break
11.00 am -11.45 am	Mentoring Students as it is in NMIT: Review & Reforms. Resource Person: **Dr. K Sudha Rao** Advisor (Administration and Management),NMIT
11.45 am -1.00 pm	Introduction to multi disciplinary research centre's & activities Resource Person: **Dr. Jharna Majumdar** Dean Research & Development
1.00 pm-1.30 pm	Lunch break
1.30 pm-2.50 pm	Outcome Based Education (OBE) with an exercise on CO,PO calculation, attainment and analysis. Resource Person: **Dr.Sanjay H A,** Professor & Head, ISE
2.50 pm-3.00 pm	Tea break
3.00 pm - 4.15 pm	Gurukul; Software: Facts & Impact (Hands on Session): Resource person : **Mr.Rajendra,**
4.15 pm – 4.30 pm	Closing Session

	Report by Program Director
	Feedback from Participants
	Vote of Thanks