MUFFAKHAM JAH COLLEGE OF ENGINEERING AND TECHNOLOGY
INFORMATION TECHNOLOGY DEPARTEMENT
INFOVOGUE
Month & Year: JULY 2017 A SEMIANNUAL NEWSLETTER Volume VIII, Issue II

CONTENTS

INSTITUTE VISION

To be part of universal human quest for development and progress by contributing high caliber, ethical and socially responsible engineers who meet the global challenge of building modern society in harmony with nature.

INSTITUTE MISSION

1. To attain excellence in imparting technical education from the undergraduate through doctoral levels by adopting coherent and judiciously coordinated curricular and co-curricular programs.
2. To foster partnership with industry and Governmental agencies through collaborative research and consultancy.
3. To nurture and strengthen auxiliary soft skills for overall development and improved employability in a multi cultural work space.
4. To develop scientific temper and sprit of enquiry in order to harness the innovative talents.
5. To develop constructive attitude in the students towards the task of nation building and empower them to become future leaders.
6. To nourish the entrepreneurial instincts of the students and hone their business acumen.
7. To involve the student and faculty in solving local community problems through economical and sustainable solutions.

DEPARTMENT VISION

Fostering a bright technological future by enabling the students to function as leaders in software industry and serve as means of transformation to empower society through ITeS.

DEPARTMENT MISSION

To create an ambience of academic excellence through state of art infrastructure and learner-centric pedagogy leading to employability in multi-disciplinary fields.

PROGRAM EDUCATIONAL OBJECTIVES

1. Graduates will demonstrate technical competence and leadership in their chosen fields of employment by identifying, formulating, analyzing and creating efficient IT solutions.
2. Graduates will communicate effectively as individuals or team members and be successful in varied working environment.
3. Graduates will demonstrate lifelong learning through continuing education and professional development.
4. Graduates will be successful in providing viable and sustainable solutions within societal, professional, environmental and ethical context

PROGRAM OUTCOMES

1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
11. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

Article on Machine Learning

Machine learning is the subfield of computer science that gives "computers the ability to learn without being explicitly programmed." Evolved from the study of pattern recognition and computational learning theory in artificial intelligence, machine learning explores the study and construction of algorithms that can learn from and make predictions on data. Such algorithms follow static program instructions by making data-driven predictions or decisions through building a model from sample inputs. Machine learning is employed in a range of computing tasks where designing and programming explicit algorithms with good performance is difficult or infeasible.

Resurging interest in machine learning is due to the same factors that have made data mining and Bayesian analysis more popular than ever. Things like growing volumes and varieties of available data, computational processing that is cheaper and more powerful, and affordable data storage.

Machine learning tasks are typically classified into three broad categories, depending on the nature of the learning "signal" or "feedback" available to a learning system. These are

- Supervised learning: The computer is presented with example inputs and their desired outputs, given by a "teacher", and the goal is to learn a general rule that maps inputs to outputs.
- Unsupervised learning: No labels are given to the learning algorithm, leaving it on its own to find structure in its input. Unsupervised learning can be a goal in itself (discovering hidden patterns in data) or a means towards an end (feature learning).
- Reinforcement learning: A computer program interacts with a dynamic environment in which it must perform a certain goal (such as driving a vehicle or playing a game against an opponent). The program is provided feedback in terms of rewards and punishments as it navigates its problem space.

Here are a few widely publicized examples of machine learning applications you may be familiar with:

The heavily hyped, self-driving Google car? The essence of machine learning.

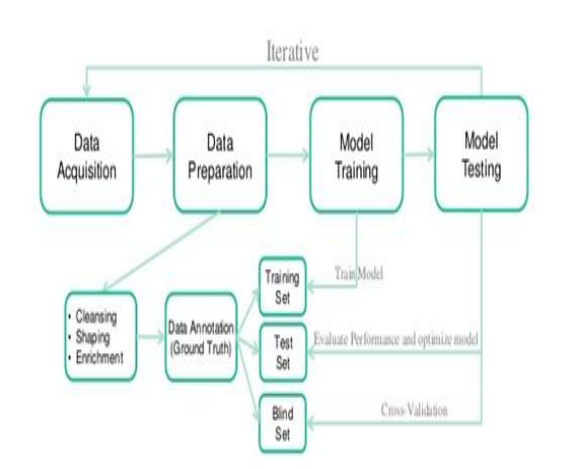
Online recommendation offers such as those from Amazon and Netflix? Machine learning applications for everyday life.

Knowing what customers are saying about you on Twitter? Machine learning combined with linguistic rule creation.

Fraud detection? One of the more obvious, important uses in our world today.

Who's using it?

Financial services, Health care, Marketing and sales, Government agencies like security etc



DEPARTMENTAL ACTIVITIES

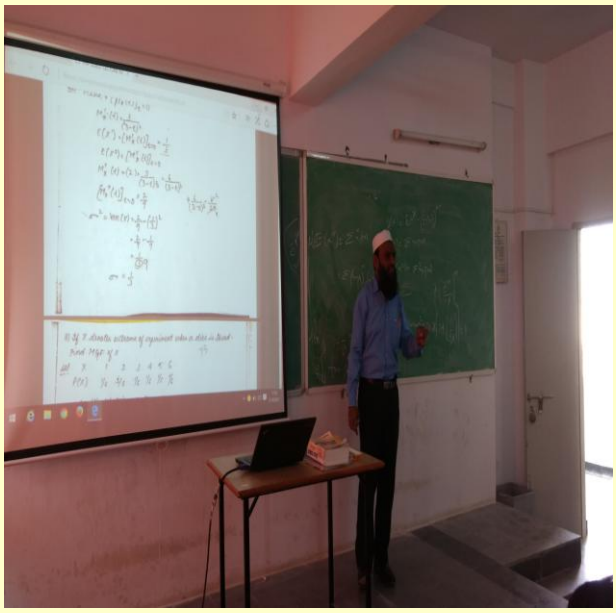
Information Technology Department has initiate Guest Lectures and Industry Institute Interactions in the academic curriculum to fill the gap between the industry and academia. These interactions are conducted as a part of the syllabus or as a part of content beyond syllabus which helps the students to understand the working of the industry. During the semester many such guest lectures and Industry Institute Interactions were conducted.

Matlab Environment for Technical Computation

The guest lecture was organized for II and III year students on 10th February 2017. The speaker of the talk was by Prof P V Rama Sharma from Stanley college of Engineering. The objective of the talk was to focus on exposure of MATLAB applications on projects.

Functions of One Random Variable

The lecture was organized on 14th February, 2017 for all the II year students as part of their academics for Probability and Random Processes subject. The speaker of the lecture was Mr. Rauf Sayeed, Assistant Professor, Department of Mathematics, MJCET. The topic covered in the talk was the Functions of One Random Variable.



Random Processes

The lecture was organized on 1st April, 2017 for all the II year students as part of their academics for Probability and Random Processes subject. The speaker of the lecture was Mr. Mohd Subhan Vali, Asst Professor, ECE Department, MJCET. The topics covered in the talk were Stationarity and Ergodicity, Second order processes, weakly stationary processes, Covariance functions and their properties.

Cluster Analysis in Data Mining

The lecture was organized on 7th April, 2017 for all the III year students as part of their academics. The lecture was delivered by Dr. Uma Dulhare, Professor, Computer science, MJCET.
The topics included in the talk were
1. Cluster Analysis: Basic Clustering methods
2. Partitioning methods,
3. Density –Based Methods,
4. Grid-based Methods and
5. Evaluation of Clustering,
6. Outlier Analysis and Detection methods

The above topics were part of Unit-V of "Data warehousing and Data Mining" subject.

FACULTY ACHIEVEMENTS

ENROLLMENT IN PhD

1. Ms. Asia Sultana got admitted in JNTU.
2. Mr. Asrar Ahmed got admitted into Osmania University.
3. Mr. Azar Ali got admitted into Gitam University
4. Mr. M D V Prasad got admitted into Gitam University

PAPERS PUBLISHED BY FACULTY

1. Fouzia Sayeedunnisa, "Clustering High Dimensional Data: A Review", published in national conference NCEITCS conducted in March 2017 at Vasavi College of Engineering.

WORKSHOP/CONFERENCE PARTICIPATION BY FACULTY

1. Following faculty members attended a two week ISTE STTP on "CMOS, Mixed Signal and Radio Frequency VLSI Design" in Jan/Feb-2017, organized by IIT Kharagpur, at MJCET (remote center).
   i. Syed Azar Ali
   ii. Mohd Abdul Wajid

2. Syed Azar Ali attended a 4 day workshop on "Crime Analytics and Prediction" held during March 9-12, 2017.

3. Syed Azar Ali participated in a workshop on "Digital Health Initiative" held during March 9-12, 2017.

STUDENT ACHIEVEMENTS

1. Rayyan Shaji (III/IV), Fariya BAnu (II/IV), Syed Uzair (II/IV),Amtul Ahad Bushra (III/IV) represented MJCET in the "Great Britain Debate" conducted by the British High Commission, New Delhi and co-hosted by Indian School of Business, Hyderabad held on 12th January 2017.

2. Magani Menitha (III/IV) has won Bronze medal in Female Kumite Black Belt at all India level Budokan open Karate Championship held on 10th-12th February 2017.

3. Magani Menitha (III/IV) has won Gold medal in Individual Kata at all India level Budokan open Karate Championship held on 10th-12th February 2017.

4. Syed Salman (III/IV) and Md. Abdul Khader Sufi (III/IV) secured first position in Group Discussion conducted on "The Femina Power" by WIE, MJCET.

5. Hidayathullah Baig (II/IV) and Maqsood Ahmed (II/IV) has presented a paper on "Cyborg" in Convergence2K17 at VNR Vignana Jyothi Institute of Engineering & Technology held on February 2017.

6. Mir Faraz Ali (II/IV), Mohammed Yousuf Ali (II/IV), Nazeer Ahmed Siddiqui (II/IV) represented MJCET in Volleyball at Athlema 2k17 organised by MVSR Engineering College held on March 2017.

7. Mudabbir Ahmed (II/IV) secured First position in the event Sync Your Skills conducted by Orators Club, MJCET.

8. Khadija Sultana, Fayaz Ali Khan, Mohammed Iftequar Iqbal and Ajmal Hussain of B.E III/IV represented ITD in Hakathon 2017.

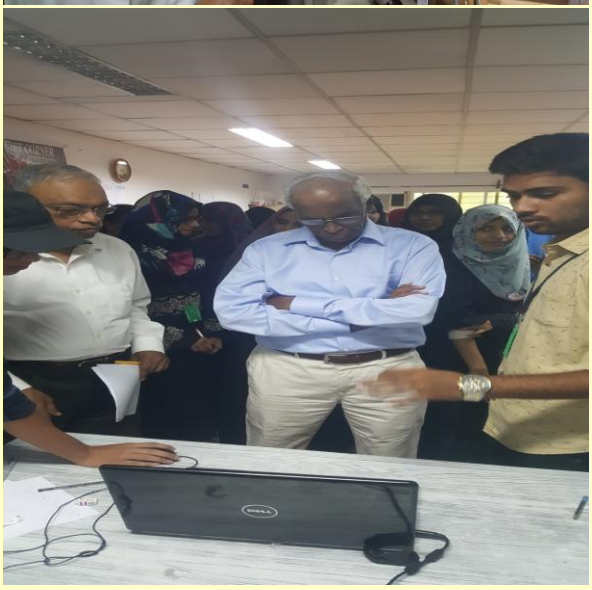
STUDENT ACTIVITIES

ADSOPHOS' 2017

Adsophos-2K17 was conducted on the 18th and 19th of March. Various events were organized and managed by the students of the Information Technology Department. The faculty coordinators for the events were Mrs. Fouzia Sayeedunissa (Associate. Prof-ITD) and Mr. Shaik Rasool (Asst. Prof-ITD). The events were aimed at bringing awareness among students towards understanding of professional responsibilities, social responsibilities, and environmental consciousness and meet the program outcomes.

ENVISAGE 2017

The Information Technology Department organized a Mini Project Presentation contest Called Envisage – 2017 on 13th April 2017. Mr. Mohd Afroze and Mr. Riyazuddin were the event co-ordinators. All the students of Second and Third year exhibited their Mini Projects and three batches from II and III year were given best mini project prizes and all the participated students were given the participation certificates.



CAMPUS PLACEMENTS

Organizations	2016-17
Tech Mahindra	15
Capgemini	11
Infosys	18
Wipro Technologies	4
AMAZON	7
NTT Data	1
Service Now	1
Multiplier Solutions	2
Genpact	3
Total Job offers	**62**

UPCOMING EVENTS

- Guest lectures on latest trends
- Technical Events
- Mock Interviews
- Industry Institute Interaction Programs for academic subjects

CALL FOR ARTICLES

Call for articles for the next issue of INFOVOGUE Newsletter theme - Data Science

Interested students and faculties can submit the articles on this theme. The article should not exceed 300 words and relevant to the newsletter theme of the issue. The editorial committee will scrutinize and publish the high quality articles in the next issue.

EDITORIAL BOARD

B.E. II, III and IV YEAR I Semester – ACADEMIC CALENDER 2017-2018

Sl. No.	Event / Activity	Scheduled Date
1	Pre-semester meeting	10-07-2017
2	Commencement of Class work	11-07-2017
3	Last date of registration for Electives	15-07-2017
4	Final Year project registration	29-07-2017
5	Manual submission of attendance up to 5-8-2017	07-08-2017 to 08-08-2017
6	Course Counselling	07-08-2017 to 11-08-2017
7	Meeting / Counseling with parents of students having less than 65% of aggregate attendance up to 05-08-2017	16-08-2017 to 19-08-2017
8	Commencement of Project Seminar	19-08-2017
9	**Class Test I (In syllabus coverage up to 02-09-2017)**	**11-09-2017 to 13-09-2017**
10	Distribution of Corrected Scripts of Class Test I and Online Entry of Class Test I Marks in Assessment matrix and online portal	14-09-2017 to19-09-2017
11	Engineers Day 2017	15-09-2017
12	Feedback	18-09-2017 to 23-09-2017
13	Manual submission of attendance up to 16-9-2017	18-09-2017 to 19-09-2017
14	Display of attendance up to 16-09-2017 and I internal marks	21-09-2017
15	Dasara Vacation (Short Vacation)	25-09-2017 to 30-09-2017
16	Issue of Progress Report, Meeting / counseling with parents of students having less than 65% of aggregate attendance up to 16-09-2017and/or scoring less than 40% marks in Class Test I	03-10-2017 to 07-10-2017
17	Final Year Project Review	09-10-2017 to13-10-2017
18	Course Counselling	15-10-2017 to 21-10-2017
19	Manual submission of attendance up to 01-11-2017	02-11-2017
20	**Class Test II**	**06-11-2017 to 08-11-2017**
21	Display of attendance up to 01-11-2017, Finalizing detention & Condo nation List	04-11-2017
22	Distribution of Corrected Scripts of Class Test II and Online Entry of marks in Assessment Matrix and MJCET Portal	07-11-2017 to10-11-2017
23	Last Date of Instruction	10-11-2017
24	Submission of Final Attendance up to 10-11-2017	13-11-2017
25	Preparation and Practical Examinations	13-11-2017 to 02-12-2017
26	Display of Final Internal Assessment Marks and Attendance	15-11-2017
27	Intimation of Errors and Discrepancies by Students to HODs	18-11-2017
28	**Submission of Course file & registers(Th/ Tut/ Lab)**	**22-11-2017**
29	Submission of Sessional Marks O.U. Examination Branch	27-11-2017
30	Commencement of Theory Examinations	04-12-2017
31	**Monday Compensation**	**07-09-2017**
32	**Wednesday compensation**	**21-09-2017**