CONTENTS

INSTITUTIONAL VISION

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

INSTITUTIONAL MISSION

i. To attain excellence in imparting technical education from the undergraduate through doctorate levels by adopting coherent and judiciously coordinated curricular and co-curricular programs.

ii. To foster partnership with industry and government agencies through collaborative research and consultancy

iii. To nurture and strengthen auxiliary soft skills for overall development and improved employability in a multi-cultural work space

iv. To develop scientific temper and spirit of enquiry in order to harness the latent innovative talents

v. To develop constructive attitude in students towards the task of nation building and empower them to become future leaders

vi. To nourish the entrepreneurial instincts of the students and hone their business acumen.

vii. To involve the students and the faculty in solving local community problems through economical and sustainable solutions.

DEPARTMENT VISION

To create a ambiance of academics, excellence through state of art infrastructure and learner-centric pedagogy to employability in multi-disciplinary fields.

DEPARTMENT MISSION

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.

PROGRAMME EDUCATIONAL OBJECTIVES

i. Graduates will demonstrate technical competence and leadership in their chosen fields of employment by identifying, formulating, analyzing and creating efficient IT solutions.

ii. Graduates will be successful as software engineers, academicians, researchers, and administrators appropriate to their background, interest and education.

iii. Graduates will communicate effectively as individuals or team members and be successful in varied working environment.

iv. Graduates will demonstrate lifelong learning through continuing education and professional development

v. Graduates will be successful in providing viable and sustainable solutions within societal, professional, environmental and ethical context.

PROGRAMME OUTCOMES

i. Apply knowledge of computing, mathematics, science and IT engineering fundamentals for solution of complex problems.

ii. Analyze a problem, and identify and formulate the requirements appropriate to its solution.

iii. Design and implement a computer-based system, process, component, or program to meet the needs with appropriate consideration for public health and safety, cultural, societal and environmental. Considerations.

iv. Use research - based knowledge and research methods to derive valid conclusions for complex problems.

v. Use current techniques and modern tools necessary for computing practice i.e. for presentation and report.

vi. Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional IT practice.

vii. Examine the impact of professional engineering solutions in societal and environmental contexts and demonstrate the knowledge of and need of sustainable development.

viii. Understand professional, ethical, legal, security and social issues and responsibilities.

ix. Function effectively individually and on teams, including diverse and multidisciplinary, to accomplish a common goal.

x. Communicate effectively with a range of audiences in various formats.

xi. Recognize and engage in continuous professional development.

xii. An ability to understand engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects.

ARTICLE ON INTERNET OF THINGS

The Internet of Things (IoT) is the network of physical objects—devices, vehicles, buildings and other items embedded with electronics, software, sensors, and network connectivity that enables these objects to collect and exchange data. The IoT allows objects to be sensed and controlled remotely across existing network infrastructure, creating opportunities for more direct integration of the physical world into computer-based systems, and resulting in improved efficiency, accuracy and economic benefit; when IoT is augmented with sensors and actuators, the technology becomes an instance of the more general class of cyber-physical systems, which also encompasses technologies such as smart grids, smart homes, intelligent transportation and smart cities. Each thing is uniquely identifiable through its embedded computing system but is able to interoperate within the existing Internet infrastructure. Experts estimate that the IoT will consist of almost 50 billion objects by 2020.

Typically, IoT is expected to offer advanced connectivity of devices, systems, and services that goes beyond machine-to-machine (M2M) communications and covers a variety of protocols, domains, and applications.

The interconnection of these embedded devices (including smart objects), is expected to usher in automation in nearly all fields, while also enabling advanced applications.

"Things," in the IoT sense, can refer to a wide variety of devices such as heart monitoring implants, biochip transponders on farm animals, electric clams in coastal waters, automobiles with built-in sensors, DNA analysis devices for environmental/food/pathogen monitoring or field operation devices that assist firefighters in search and rescue operations.

IoT is also expected to generate large amounts of data from diverse locations, with the consequent necessity for quick aggregation of the data, and an increase in the need to index, store, and process such data more effectively. IoT is one of the platforms of today's Smart City, and Smart Energy Management Systems.
Applications:
1. Connected/Smart Home
2. Wearables
3. Retail
4. Smart Cities
5. Healthcare
6. Agriculture
7. Automotive/Transportation
8. Industrial Automation
9. Energy Management
10. Smart Supply Chain
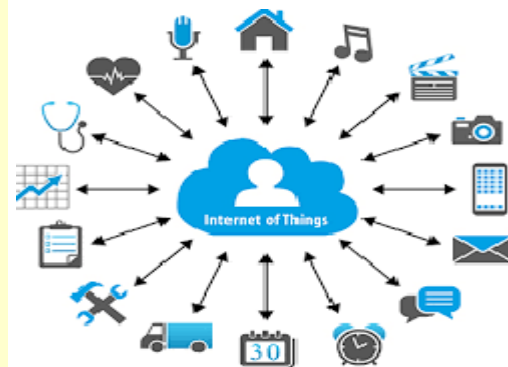
DEPARTMENTAL ACTIVITIES

Information Technology Department has initiated 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.

1. Software Project Artifacts

The objective of the seminar was to make students aware of the artifacts while developing the projects.
The talk was very informative where Dr. Salman focused on the entire project development plan. Some important aspects of his talk which included

1. Possible Deliverables by phase.
2. Software requirement specification.
3. Functional specification.
4. Detailed design specification.
5. Coding standards.
6. Acceptance test procedures.
7. Deployment & Maintenance.

He further continued explaining the do's and don'ts while developing the project and motivated students to bring innovative and real time projects.

2. Web Technologies

The objective of the seminar was to make students aware of the different web technologies. The session started with the speaker providing information about web technologies that relate to the interface between web servers and their clients.

This information includes markup languages, programming interfaces and languages. Mr. Bari differentiated between the Static & Dynamic web pages. Static pages contain Text, Image, Audio & Video. Whereas Dynamic pages JSP, Servlets & ASP.Net

Mr. Bari explained about the request and response procedures in Browsers and how to access the databases. Later he enlightened the students about the Microsoft Visual Studio. The Seminar concluded with an interactive query sessions wherein students came up with diverse questions.

3. Software Ethics & New Technologies

The objective of the seminar was to make students aware of developments in the industry.

Mr. Pappu started his talk by discussing the issues that dominate a discussion of privacy:

1. Freedom from intrusion

2. Control of personal information

3. Freedom from surveillance

He counseled the students not to follow the cooperative politics and do as many mistakes as possible so that students can learn from their mistakes. Later he explained the difference between past technologies that we generally use and todays technologies that are supposed to be learned and which are the need of industry.

He advised the students to learn mongodb, cachedb and to focus more towards the Cloud computing, Big data and IoT.

4. Software Testing Tools

The objective of the guest lecture was to make the students familiar with working of various testing tools.

The guest speakers were Dr Ganesh N Iyer, Principal Researcher, Progress Software, Hyderabad and Mr. C Ganesh, Senior Software Engineer, Progress Software, Hyderabad.

The talk included Introduction to Software Testing Tools like WinRunner, Load Runner, SilkTest, JMeter and Future of Software Testing

5. Knowledge Discovery using Big Data Analytics

The objective of the workshop was to enable the students to develop their skill sets and competencies of data scientists as they play a vital role in competitive intelligence – a newly emerging field.

The guest speaker was Mr. P. Mohan from Center for IT Business Analytics, HBO, Gitam Hyderabad. The lecture included introduction on Big Data Analytics and a hands-on session on ESTARD Miner tool for Big Data Analytics.

FACULTY ACHIEVEMENTS

1. Dr. Uma N. Dulhare, Prof. ITD was session chair for 4th international conference on Big Data Analytics organized by the department of CSE, NIT Warangal on 15th-18th Dec, 2015.

PAPERS PUBLISHED BY FACULTY

1. Mohd Sarfaraz Ahmed, Dr. Uma N. Dulhare, Maniza Hijab, "A novel approach to improve efficiency in P2P systems using Backpropagation algorithm" In IEEE International Conference on Electrical, Electronics and Optimization Techniques (ICEEOT), IEEE Madras,3-5 thMarch 2016 (pp. 2617-2621), published in IEEE Xplore, ISBN: CFP16E71-ART-978-1-4673-9939-5.

2. Mohd Sarfaraz Ahmed, "Achieving QoS in Media streaming for Peer to Peer Networks" In IEEE International Conference on Electrical, Electronics and Optimization Techniques (ICEEOT), IEEE Madras, March 2016 (pp. 3694-3698), published in IEEE Xplore, ISBN: CFP16E71-ART-978-1-4673-9939-5.

3. Ramu Kuchipudi, "Latest Developments on Dynamic Key Management for Dynamic Wireless Sensor Networks", IEEE International Conference on Electrical, Electronics and Optimization Techniques (ICEEOT), IEEE Madras, March 2016

4. Mohammad Pasha, et al, "A Proof-of-Concept model for Vehicular Cloud Computing using OMNet++ and SUMo" , Proceedings of the 3rd ICICSE-2015, India, Springer-Verlag Singapore, ISSN: 2194-5357, eBook ISBN: 978-981-10-0419-3, Series Volume-413.

5. Tahseen Munavvara, et al, "Security in CryptDB using fine grained access controls with ECDHE-Zero vi's framework", Springer conference, Dec 2015

WORKSHOP/CONFERENCE PARTICIPATION BY FACULTY

1. The following faculties attended Educational Technology for Engineering Teachers, an online course of study offered by IITBombay
    i. Mrs. Maniza Hijab
    ii. Dr. Uma N. Dulhare
    iii. Mrs. Asia Sultana
    iv. Mrs. Fouzia Sayeedunnisa
    v. Mrs. Afshan Kaleem
    vi. Mrs. Sayyada Hajera Begum
    vii. Mrs. FarhaNausheen
    viii. Ms. G. Vani
    ix. Ms. Alefiah Mubeen

2. The following faculties attended 2 weeks MTA Program on HTML5 Fundamentals organized by CERTIPORT, MJCET.
    i. Mr. Mohd. Pasha
    ii. Mr. Mohd Afroze

3. Mr. Mohd Afroze attended a 2 days FDP on Internet of Things and its Applications organized by GRIET.

4. The following faculties attended a 1 week MTA on Cloud Fundamentals organized by CERTIPORT, MJCET
    i. Mr. Mohd Afroze
    ii. Ms. Munnavara Tahseen

STUDENT ACHIEVEMENTS

1. Sajeed Rayani of II/IV has been selected for Hyderabad level scouts and guides camp-2k16.
2. Mohammed Khaled of III/IV has been selected to receive the scholarship by Tata Trusts & Google for Android Developer Nanodegree program.
3. Syed Durre Najaf Hussain of III/IV secured second position in paper presentation at Adsophos 2016 organised by MJCET.
4. Mohammed Faheemuddin Rizwan of IV/IV was appreciated by IEEE Hyderabad section for his contribution for designing IEEE Hyderabad Section Logo.
5. Vrinda Lakhotia of II/IV secured second position in basketball in Athlema 2k16 organised by MVSREC.
6. Vrinda Lakhotia of II/IV secured first position in poster presentation organized by Orators club, MJCET
7. Vrinda Lakhotia of II/IV secured First position in caroms during ARENA 2016, the national annual sports meet of BITS Pilani Hyderabad campus.
8. Romana Khatoon of III/IV secured second position in basketball in Athlema 2k16 organised by MVSREC.
9. Simran Kanty of II/IV secured First position in caroms during ARENA 2016, the national annual sports meet of BITS Pilani Hyderabad campus.
10. Ibrahim Shah Khan participated in ROBOCON 2016, a National Robotic contest organized by Doordarshan India and MIT Academy of Engineering held at Pune during March 2016.

STUDENT ACTIVITIES

1. ADSOPHOS' 2016

Adsophos'16 was conducted on 22nd -23rd Feb 2016 by the Department of IT. Many college students participated in the Adsophos events like Paper Presentation, Project Exhibition Events at ITD Labs. Mr. Mohd Asrar Ahmed, Assistant Professor and Mrs. Fouzia Sayeedunnisa, Associate Professor were the event co-ordinators. ACM and IEEE CIS Student chapters have taken an active role in the Adsophos 2016.

2. Envisage – 2016

The Department of Information Technology, Muffakham Jah College of Engineering and Technology (MJCET) organized a Mini Project Presentation contest Called Envisage – 2016 on 31st April – 2016. Mr. Mohd Afroze and Mr. Sarfaraz Ahmed, were the event co-ordinators. All the students of Second and Third year students 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.

3. Mock Interview

The Information Technology department, MJCET in collaboration with ACM MJCET & Orators Club has conducted a MOCK INTERVIEW Event on 31st January 2016. The resource persons were Alumni of MJCET.

4. STAR Program

With an intent of spreading awareness about environment, IEEE WIE team conducted "STAR: Student teacher and Research Program" a one week program at Safdaria Girls High School, Humayun Nagar, Mehdipatnam, from 23rd Jan 2016 to 29th Jan 2016. The theme of the event was **"The Education of women is the best way to save the Environment".**

UPCOMING EVENTS

➢ Guest lectures on latest trends
➢ Programming Languages workshop for Final years
➢ Technical Events
➢ Mock Interviews
➢ Industry Institute Interaction Programs for academic subjects
➢ Competitive Mobile App development

CAMPUS RECRUITMENT IN THE DEPARTEMENT

Organizations	2015-16
Infosys	10
Wipro	2
Amazon	7
Multiplier Solutions	1
CapGemini	2
Persistent Systems	1
Axness Technology	3
Uber	2
Genpact	17
Total Job offers	**45**

CALL FOR ARTICLES

Call for articles for the next issue of INFOVOGUE Newsletter theme – Machine Learning

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

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Faheemuddin Rizwan(4/4 IT)
Mohd Azher (4/4 IT)

**B.E. II, III and IV YEAR I Semester – ACADEMIC YEAR 2016-2017
ACADEMIC CALENDAR**

Sl. No.	Event / Activity	Scheduled Date
1	Commencement of Class work	11-07-2016
2	Manual submission of attendance up to 06-08-2016	10-08-2016
3	Meeting / Counseling with parents of students having less than 65% of aggregate attendance up to 06-08-2016	16-08-2016 to 20-08-2016
4	Class Test I	29-08-2016 to 31-08-2016
5	Distribution of Corrected Scripts of Class Test I and Online Entry of Class Test I Marks in Assessment matrix and online portal	13-09-2016 to 17-09-2016
6	Feedback	13-09-2016 to 17-09-2016
7	Display of I Internal Marks and monthly attendance up to 09-09-2016	19-09-2016
8	Issue of Progress Report, Meeting / counseling with parents of students having less than 65% of aggregate attendance up to **09-09-2016** and/or scoring less than 40% marks in Class Test I	22-09-2016 to 24-09-2016
9	Final Year Project Review	26-09-2016 to 29-09-2016
10	Display of aggregate attendance up to 22-010-2016	26-10-2016
11	Class Test II	27-10-2016 to 29-10-2016
12	Last Date of Instruction	29-10-2016
13	Meeting with parents of students having less than 65% of aggregate attendance up to 22-10-2016	31-10-2016 to 02-11-2016
14	Distribution of Corrected Scripts of Class Test II and Online Entry of marks in Assessment Matrix and MJCET Portal	31-10-2016 to 02-11-2016
15	Practical Examination	31-10-2016 to 19-11-2016
16	Display of Final Internal Assessment Marks	03-11-2016 to 05-11-2016
17	Intimation of Errors and Discrepancies by Students to HODs	05-11-2016
18	Commencement of On line entry of Final Sessional Marks and Attendance on OU Portal	07-11-2016
19	Commencement of Theory Examinations	21-11-2016