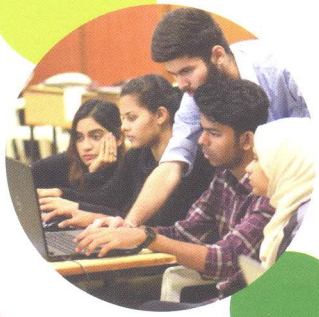
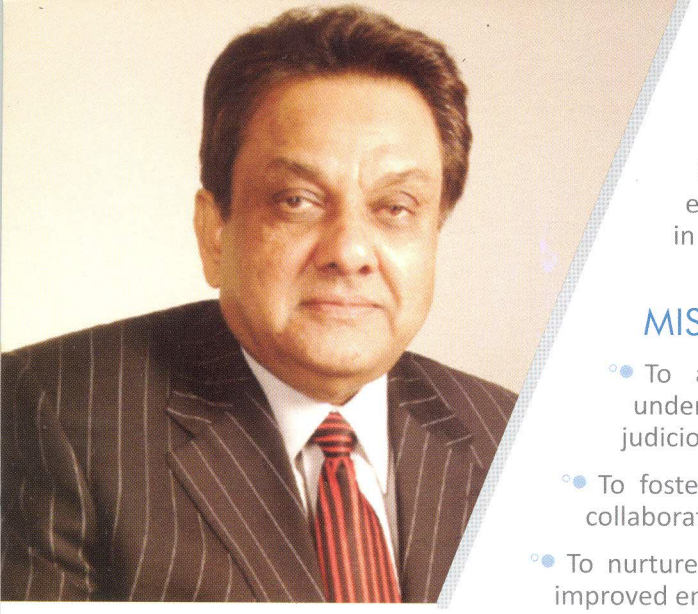
MUFFAKHAM JAH

COLLEGE OF ENGINEERING & TECHNOLOGY



A Passion For Excellence
A Spirit That Transcends Limitation



Mr. Khan Lateef Mohd. Khan
Chairman

VISION

To be a 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.

MISSION

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

BOARD OF GOVERNORS

MR. KHAN LATEEF MOHAMMED KHAN
Chairman

MR. MOHAMMED WALIULLAH
Vice-Chairman

MR. ZAFAR JAVEED
Hon. Secretary

DR. MIR AKBAR ALI KHAN
Treasurer

MR. NISAR AHMED
Member

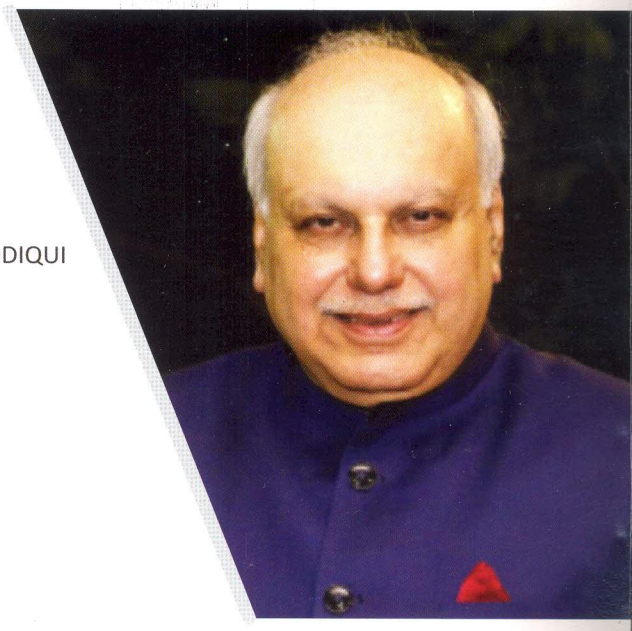
MR. SYED ABDUL WAHAB
Member

MR. MOHAMMED JAFER
Member

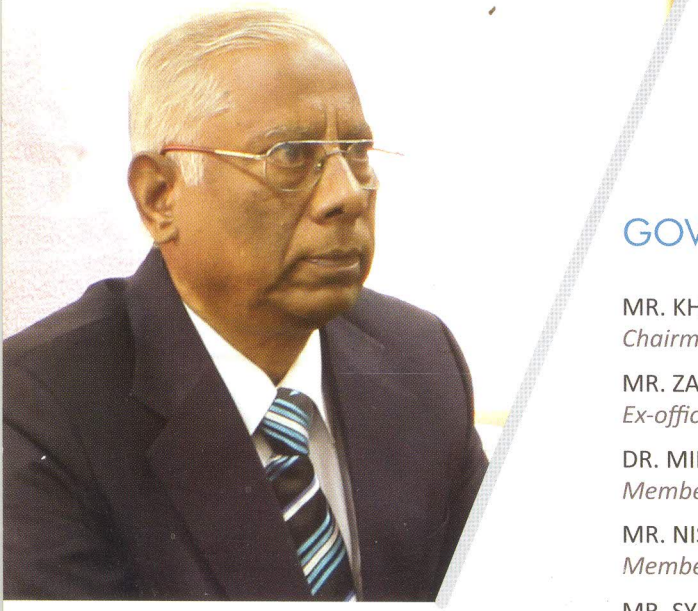
MR. MOHAMMED IBRAHIM ALI SIDDIQUI
Member

DR. ASLAM MOHAMMED KHAN
Member

MR. SYED AAMER JAVEED
Member



Mr. Zafar Javeed
Honorary Secretary



Dr. Basheer Ahmed
Advisor-cum-Director

GOVERNING COUNCIL

MR. KHAN LATEEF MOHAMMED KHAN
Chairman

MR. ZAFAR JAVEED, HON. SECRETARY, SUES
Ex-officio Member

DR. MIR AKBAR ALI KHAN
Member

MR. NISAR AHMED
Member

MR. SYED ABDUL WAHAB
Member

MR. MIR WAJID ALI KAMIL
Member

MR. NASIRUDDIN AHMED
Member

MR. MOHAMMED JAFER
Special Invitee

DR. BASHEER AHMED
Advisor-cum-Director/ Convener

SULTAN-UL-ULOOM
EDUCATION SOCIETY

A history of nearly four decades.

A passion for making a positive contribution to society and a lasting impact towards the intellectual, cultural, and social enrichment of the citizens of Telangana (part of erstwhile state of Andhra Pradesh).

These attributes are what describe Sultan-Ul-Uloom Education Society, which has today emerged as a significant entity in the field of education.

The concept of educational and intellectual dissemination subsisted in the minds of a few visionaries, who materialized it in the form of Sultan-Ul-Uloom Education Society in the year 1980.

The founding members, each in their own way representing varied facets of intelligentsia, decided to name the Society after H.E.H The Nizam Mir Osman Ali Khan, the former ruler of Hyderabad State who was referred to as 'Sultan-Ul-Uloom', which means, 'Monarch of all Sciences' in recognition of the means and incentives he provided for the dissemination of knowledge through establishment of educational and cultural institutions all over the state.

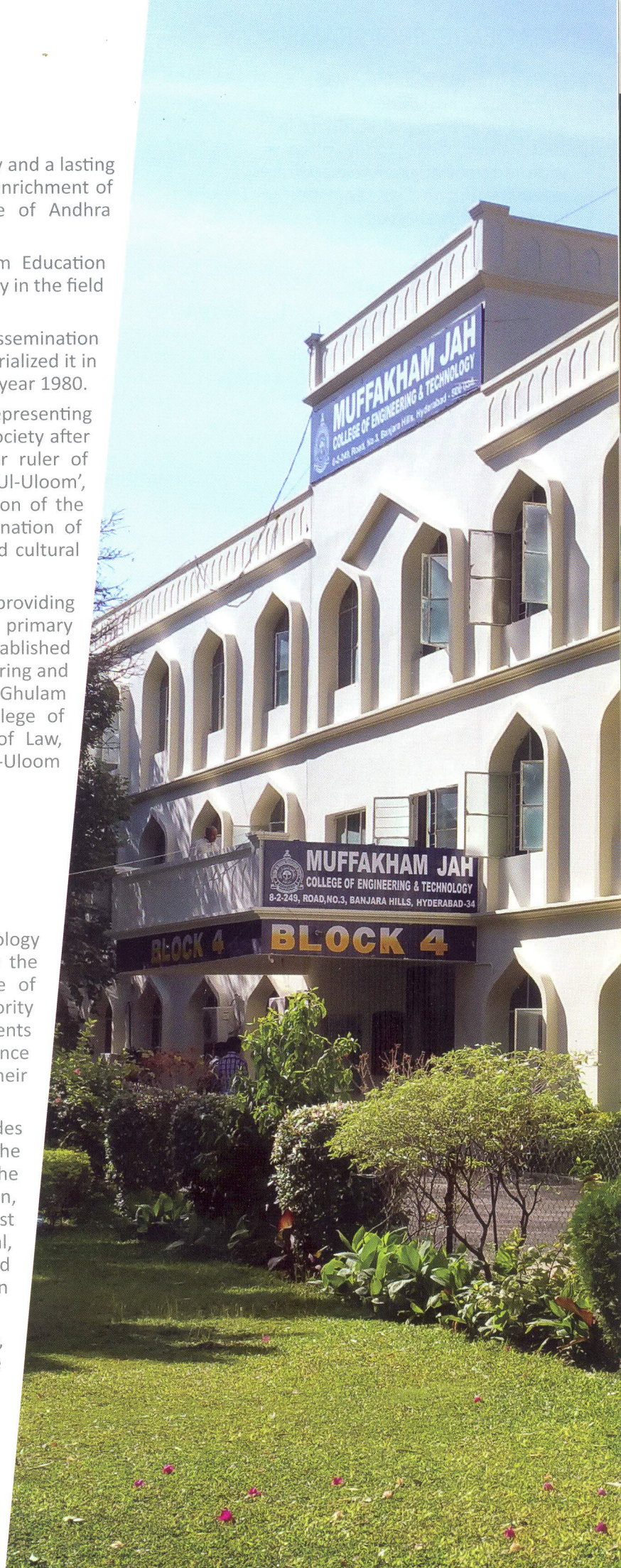
In a span of four decades, the Society can boast of providing education in various disciplines extending from primary education to doctoral programs. The institutions established by the Society are: Muffakham Jah College of Engineering and Technology, Sultan-Ul-Uloom College of Pharmacy, Ghulam Ahmed College of Education, Amjad Ali Khan College of Business Administration, Sultan-Ul-Uloom College of Law, Sultan-Ul-Uloom Junior College and seven Sultan-Ul-Uloom Public Schools.

MUFFAKHAM JAH
COLLEGE OF ENGINEERING AND TECHNOLOGY

Muffakham Jah College of Engineering and Technology (MJCET), an institution par excellence, appeared on the horizon of Hyderabad in 1980 with the objective of unlocking engineering potential of the Muslim minority students. The college strives to make its students proactive and pledge them to engineering excellence through integrated programs devised to realize their mettle.

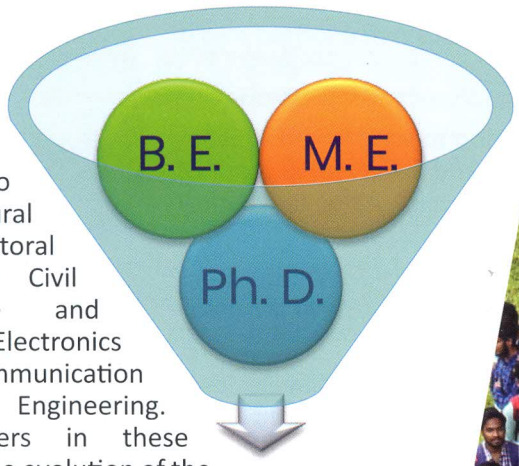
The faculty serves as the knowledge promoters, guides and facilitators whose primary aim is to awaken the potential within the students and integrate it with the global engineering trends and aspirations. In addition, many a student graduating from this college, in the past four decades have already unleashed their potential, through their innovations and ingenuity, and created an ambience of sustainable engineering where human progress is wisdom-based and value-driven.

The MJCET campus presents a picturesque view, where the dream of green spaces complementing the hard brick-mortar infrastructure is realized. Spread over 24 acres, every inch of it celebrates the diversity of engineering fields and convergence of engineering visions. It is home to five instructional and administrative buildings, which provide the entire range of infrastructure required for effective deliverance of engineering education.



ACADEMIC PROGRAMS

From a humble beginning with three B.E. programs and an annual intake of 150 students in 1980, the college today offers a wide range of engineering programs, extending from Civil Engineering to Information Technology. As a natural progression, post graduate and doctoral courses have been introduced in Civil Engineering, Computer Science and Engineering, Electrical and Electronics Engineering, Electronics and Communication Engineering and Mechanical Engineering. Establishment of Research Centers in these Departments is another milestone in the evolution of the institution in to a center of higher learning.



MoUs

IPA Private Limited (SAP Education Partner): Under this MoU, the partner has established an e-learning center at MJCET by installing the SAP ERP Dongle Site License and complementing it with training three college faculty members on the SAP ERP modules. Students can enroll in the SAP ABAP or SAP Materials Management courses followed by global certification.

AMD India Private Limited: The MoU enables the M.E. second year students of Digital Systems to be considered for recruitment as Co-Ops on full time basis for the entire one year period of the work tour.

Peketi Ventures Pvt. Ltd: The MoU enables students of B.E. (Civil Engineering) and M.E. (Structural Engineering) to pursue internship program at the various construction sites of Peketi Ventures. This enables the Civil Engineering students to get hands-on experience in the field of Construction.

Redpine Signals: The MoU underlines the mutual desire of the two parties to further industry-academia collaborative activities for mutual benefit. Under this MoU, Redpine Signals has installed it's WyzBee IoT platform in ECE Department for developing solutions and carrying out research in IoT.

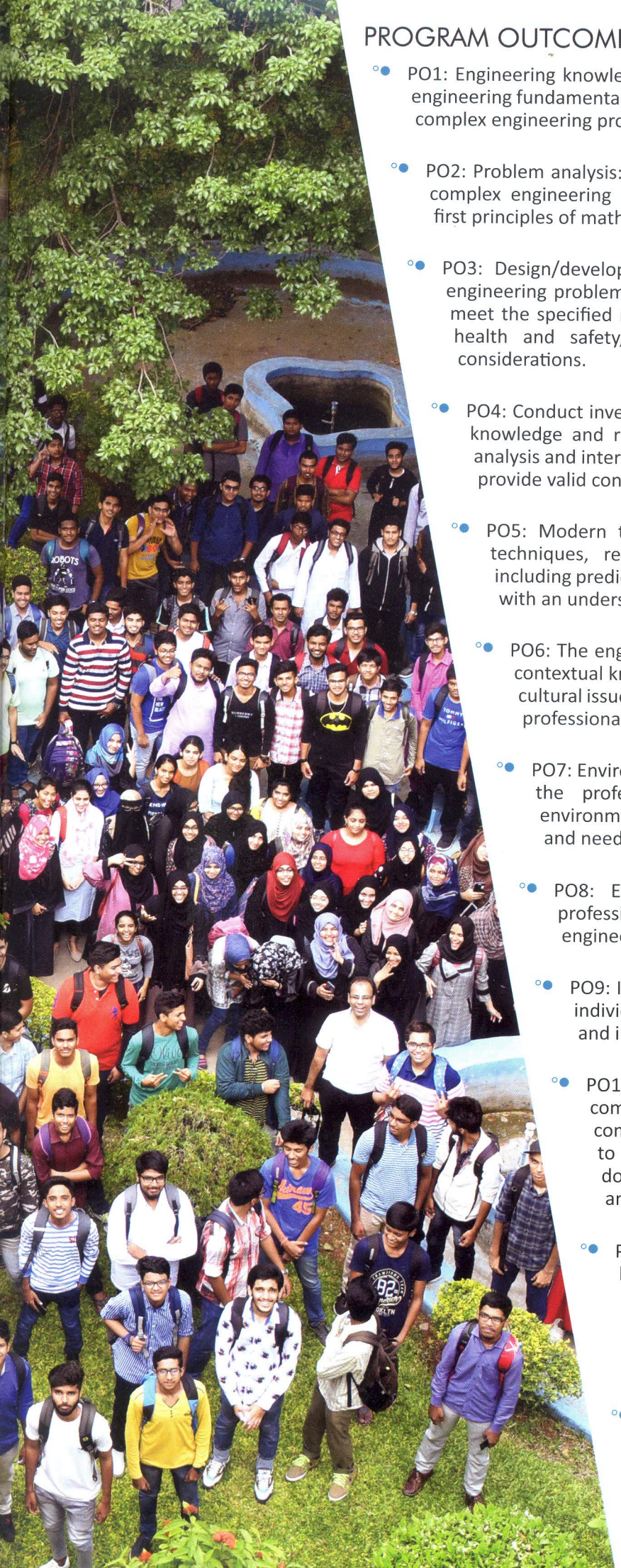
Entuple Technologies: This MoU is targeted towards facilitating academic and research interactions in the field of Integrated Circuit(IC) Design and Embedded systems. As per this MoU, the college has become a part of its EnCompPAS (Entuple Community project for ASICs and Systems) program which focuses on improving the employability skills of students.

Big Innovation Center(BiC) India Pvt. Ltd.: This MoU facilitates collaborative work on projects related to Artificial Intelligence and Machine Learning leading to application of advanced technologies across various engineering domains.

Tech Next Labs(TNL): As a part of this MoU, TNL will establish a TCAD lab in the ECE Department of MJCET by providing 10 user licenses of TNL Atomistic TCAD tools for semiconductor processor and device technologies. Practical training on the Industry tool will equip the students to acquire jobs in the niche area of Semiconductor Device Modeling.

Texas Instruments: Under the MoU, Texas Instruments has installed five Analog Starter Kits to train students on MSP 4300 TI DSP Processor.

University of Connecticut and MJCET EWB INDIA student Chapters: This MoU enables knowledge transfer and project collaborations.



PROGRAM OUTCOMES

- PO1: Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

- PO2: Problem analysis: Identify, formulate, research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

- PO3: 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.

- PO4: 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.

- PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.

- PO6: 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.

- PO7: 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.

- PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

- PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

- PO10: 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.

- PO11: Project management & 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.

- PO12: Life-long learning: Recognise the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

INTAKE

DEPARTMENT	COURSE	YEAR	INTAKE
Civil Engineering	B.E. (Civil Engineering)	1980	120
	M.E. (Structural Engineering)	2010	18
	Ph. D. (Civil Engineering)	2017	14*
Computer Science and Engineering	B.E. (Computer Science and Engineering)	1986	120
	M.Tech. (Computer Science and Engineering)	2010	24
	Ph. D. (Computer Science and Engineering)	2017	08*
Electrical Engineering	B.E. (Electrical and Electronics Engineering)	2002	60
	B.E. (Electronics & Instrumentation Engineering)	1997	60
	M.E. (Power Electronic Systems)	2013	18
	Ph. D. (Electrical and Electronics Engineering)	2017	08*
Electronics and Communication Engineering	B.E. (Electronics and Communication Engineering)	1980	120
	M.E. (Digital Systems)	2009	24
	Ph. D. (Electronics and Communication Engineering)	2013	13*
Information Technology	B.E. (Information Technology)	2000	120
Mechanical Engineering	B.E. (Mechanical Engineering)	1980	120
	B.E. (Production Engineering)	1989	60
	M.E. (CAD/CAM)	2004	18
	Ph. D. (Mechanical Engineering)	2013	26*

**** On roll full time and part time Ph. D. scholars in academic year 2019-2020***

S.M. NIZAMUDDIN CENTRAL LIBRARY

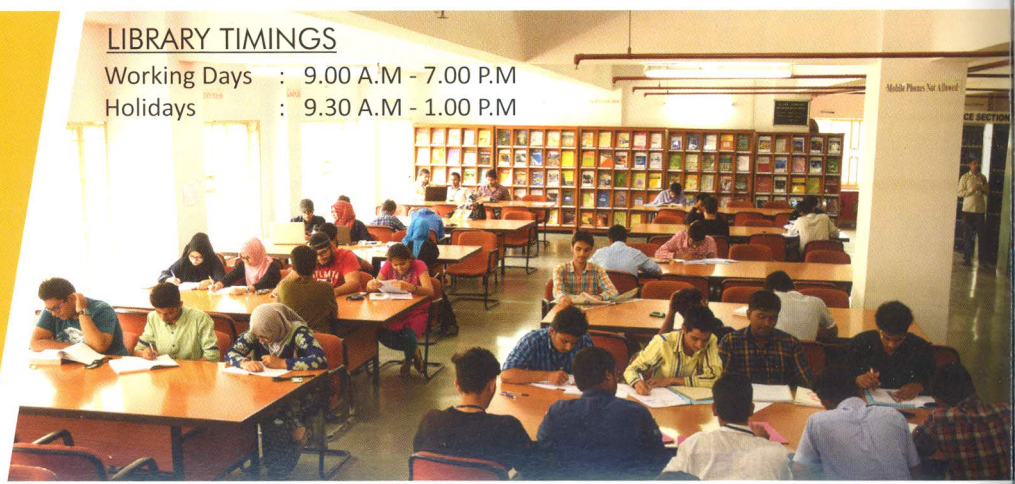
The S.M. Nizamuddin Central Library provides access to a vast range of books and journals in a spacious reading room with serene ambiance. It caters to the information needs of nearly 4,500 UG and PG students as well as of the teaching and non-teaching staff. With over 17, 000 titles, 119 Indian Journals and over 474 on-line Journals, total automation of all services using SOUL software developed by INFLIBNET, DELNET membership for sharing of library resources between member libraries, it provides a perfect blend of professionalism, high standards and flexibility. The library also provides photocopying service to the students.

LIBRARY FACILITIES

No. of Volumes	:	62,215
No. of Titles	:	17, 253
E-Journals	:	474 (3 databases)
Indian Journals	:	119
Bound Volumes	:	2,473
CD ROMS	:	1,935
Magazines	:	10
News papers	:	12
Project Reports	:	5, 444

LIBRARY TIMINGS

Working Days : 9.00 A.M - 7.00 P.M
Holidays : 9.30 A.M - 1.00 P.M



CENTER FOR SMART LEARNING & DIGITAL LIBRARY

Access to the NPTEL video lectures is provided through 'Local Guru', a content management and HTTP video streaming software installed in the College LAN.

A new facility in the form of Center of Smart Learning has been established with 20 high end computers for online self-learning initiatives like MOOC, SWAYAM & NPTEL Certification Courses. To facilitate monitoring of enrollments, MJCET has established 'SWAYAM-NPTEL Local Chapter' with a single point of contact (SPOC).

The digital library is located within the central library premises and offers facilities to browse and download the online journals and view the large collection of NPTEL video lectures and courses for UG and PG programs through a high end workstation which also provides access to the UG and PG theses and dissertations of the students.

Digital Library Facilities

Computers	:	24	
Databases	:	3 (IEEE, ASCE, Science Direct)	
Internet speed	:	100 mbps leased line	
NPTEL	:	Video Lectures	128
		Video Courses	127
		Advanced video Lectures	168

INSTITUTION INNOVATION COUNCIL

MJCET has established 'Institution Innovation Council (IIC)' in 2018 with the objective of shaping the innovation ecosystem in the campus and to encourage 'startup' culture amongst the aspiring young entrepreneurs. Innovation center in conjunction with R & D center serves as a springboard for nurturing and realization of new ideas. The College IIC committee organizes activities and programs to create awareness about various facets of innovation commencing from conceptulization to obtaining IPR. The key focus of the programes is to ignite the young minds of budding engineers through various events like workshops on critical thinking, IPR, leadership talks, ideation contests, Hackathons, business plan development sessions and networking with entrepreneurs. As an outcome of these activities three student startups have been registered in the area of Artificial Intelligence and Machine Learning, Robotics and Software development. Further, as a result of the planned year long activities, the MJCET IIC has been awarded with a Four Star Status by MHRD Innovation Council for the year 2018.

PATENTS

In order to promote R & D culture at the institute, MJCET has signed an MOU with a consulting firm, 'Prometheus Patent Services Pvt. Ltd.' to assist the faculty and students in documentation and filing of application for patenting their inventions. The college has formed Patents and External Funding Committee to identify patentable inventions and streamline the process.

TITLE	YEAR	STATUS
Solar Powered Spinning Wheel	August, 2019	Granted (Patent No: 319528)
Process and system for efficient biodiesel production	January, 2020	Published
A Pneumatic Quadruped Robot and a method of preventing accident thereof	January, 2020	Published
Method for detecting optimal location and coordinated control of DSTATCOM in a radial distribution network	January, 2020	Published

PLACEMENTS

The Placement Cell, headed by a full time director and a faculty placement incharge, endeavors to place the graduating students in reputed companies through both 'on' and 'off' campus process. The cell provides logistic support like arranging pre-placement talks, written tests, group discussions and interviews, to the visiting companies at all stages of the placement process and also liaises with major corporates in association with the Heads of the Departments and the Placement Committee.

Apart from offering placement services, the cell is also responsible for assisting the students in planning their graduate studies in India or abroad and also in making informed decisions about career choice. The placement committee also responsible for organizing campus recruitment training to the senior students on the eve of commencement of annual placement season.

PLACEMENT STATISTICS

SL. NO	BRANCH	2014-15	2015-16	2016-17	2017-18	2018-19
1	Civil Engineering	09	08	10	05	07
2	Computer Science and Engg.	89	86	87	66	103
3	Electrical and Electronics Engg.	34	32	16	07	08
4	Electronics and Communication Engg.	101	80	92	50	53
5	Electronics and Instrumentation Engg.	11	09	10	01	05
6	Information Technology	38	45	67	33	40
7	Mechanical Engineering	28	26	25	35	17
8	Production	02	08	06	04	01
9	Post Graduate Courses	11	07	00	06	01
	Total	***323***	***301***	***313***	***207***	***235***

RESEARCH AND DEVELOPMENT

The dynamic nature of knowledge makes it imperative that those who are responsible for its dissemination are aware of the latest advancements in their specializations. The process of keeping abreast with the latest developments is achieved when the teachers are also active researchers. Having recognized the importance of R & D in the vertical growth of the institution, MJCET established the R & D Cell in the year 2003 to focus on the scientific and industrial research in the various disciplines of Engineering. The MJCET R & D cell is a nominated committee consisting of professors from various programs of Engineering and Basic Sciences.

Over the years, the activities of the cell have evolved into a systematic process wherein projects in the area of basic research, as well as R & D projects to solve 'live' problems are sanctioned funds to encourage in-house Research Projects prepared by faculty-student teams. The center also assists the faculty, research scholars and students in filing research proposals for grants from various funding agencies like DST, AICTE, MHRD etc. and also in filing of IPRs like patents and copy rights.

Flexible Manufacturing System (FMS)

Applications of automation and robotic in industrial processes and production are gaining acceptance in a wide array of industries. The students of MED have developed an FMS system by integrating Artificial Intelligence, IOT and Machine Learning with PLC SCADA for controlling and monitoring of systems with logical programming. The main tech domain is based on the upcoming 4th industrial revolution and the developed system is relevant across food processing and automobile assembly units.

Semi-Humanoid Robot

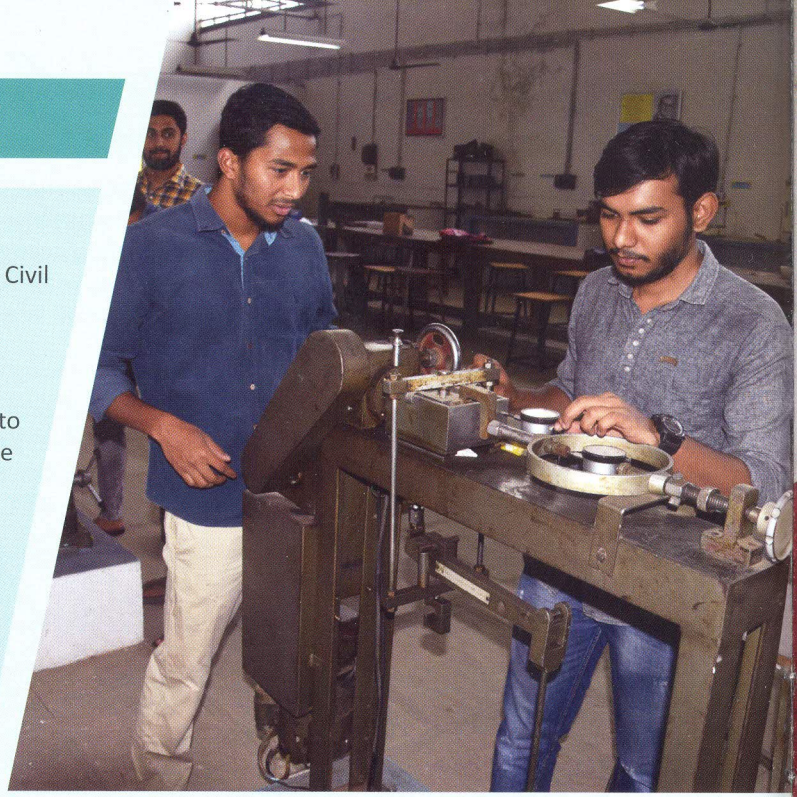
A multidisciplinary team of students successfully completed the semi-humanoid robot project. The upper torso of the humanoid robot was completely 3-D printed using the printer that was developed by another group of students in the previous year. The arms have three degrees of freedom and the finger movement is controlled through servo motors and strings through Bluetooth enabled connection. The project successfully demonstrated a Semi - Humanoid robot which combined face recognition and Voice Assistance to answer generic questions through web search. The lower torso is built on a chassis supported by three wheels.

STUDENT CHAPTERS & CLUBS

Apart from departmental professional chapters, the institution also hosts many institutional level Chapters & Clubs which permit multi-disciplinary enrollments. Some of these Chapters are also engaged in community development projects.

Name of the Chapter	Year	Faculty Coordinator	Membership
EWB (India) Student Chapter	2012	Dr. Ishrath M. Mirzana, Professor, MED	110
E - Cell	2008	Dr. Syed Ferhathullah Hussainy, Professor, MED	60
Robotics Club	2017	Dr. Mohammed Arifuddin Sohel, Professor, ECED	50
Orators Club	2017	Dr. Shabana Tahniath, Associate Professor, English	50
MJ Central Edification Cell	2018	Dr. Syed Ferhathullah Hussainy, Professor, MED	60
Technology Special Interest Group	2019	Mr. Md. Muneeruddin, Assistant Professor, ECED	80

CIVIL ENGINEERING DEPARTMENT



Vision

To produce technically competent and socially responsible Civil Engineers to propel infrastructural development.

Mission

To impart quality education and inculcate professional skills to function as proficient planners, designers and constructors, capable of ensuring sustainability and safety.

Program Educational Objectives

1. Graduates will demonstrate technical competence and leadership by analysing, designing and executing Civil Engineering Structures using current techniques and tools.

2. Graduates will communicate effectively as individual or team members and be successful Civil Engineers in the local and global 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 Specific Outcomes

1. Function in construction industry for planning and execution of Civil Engineering projects like multistoried buildings, Bridges and Water retaining structures etc.

2. Function as consultants for the design of infrastructural projects.

About the Department

The Civil Engineering Department has been in existence since the inception of the Institution in the year 1980. Today it is a full-fledged department offering courses both at UG and PG level and also has an Osmania University Approved Research Centre for doctoral program. Besides delivering quality teaching and instructions, it also undertakes industrial consultancy works as part of its professional interaction with industry. The sophisticated laboratories of the Department expose the students to contemporary technologies in the area of civil engineering drafting, structural analysis and design, material testing, GIS and automated mapping and facilities management.

Civil Engineering is broadest of engineering fields dealing primarily with designing, construction and maintenance of infrastructure projects. The scope of civil engineering has expanded in the recent years to include many environmental areas such as assessment of the impact of large scale projects, pollution control, resource management etc.

Programs Offered

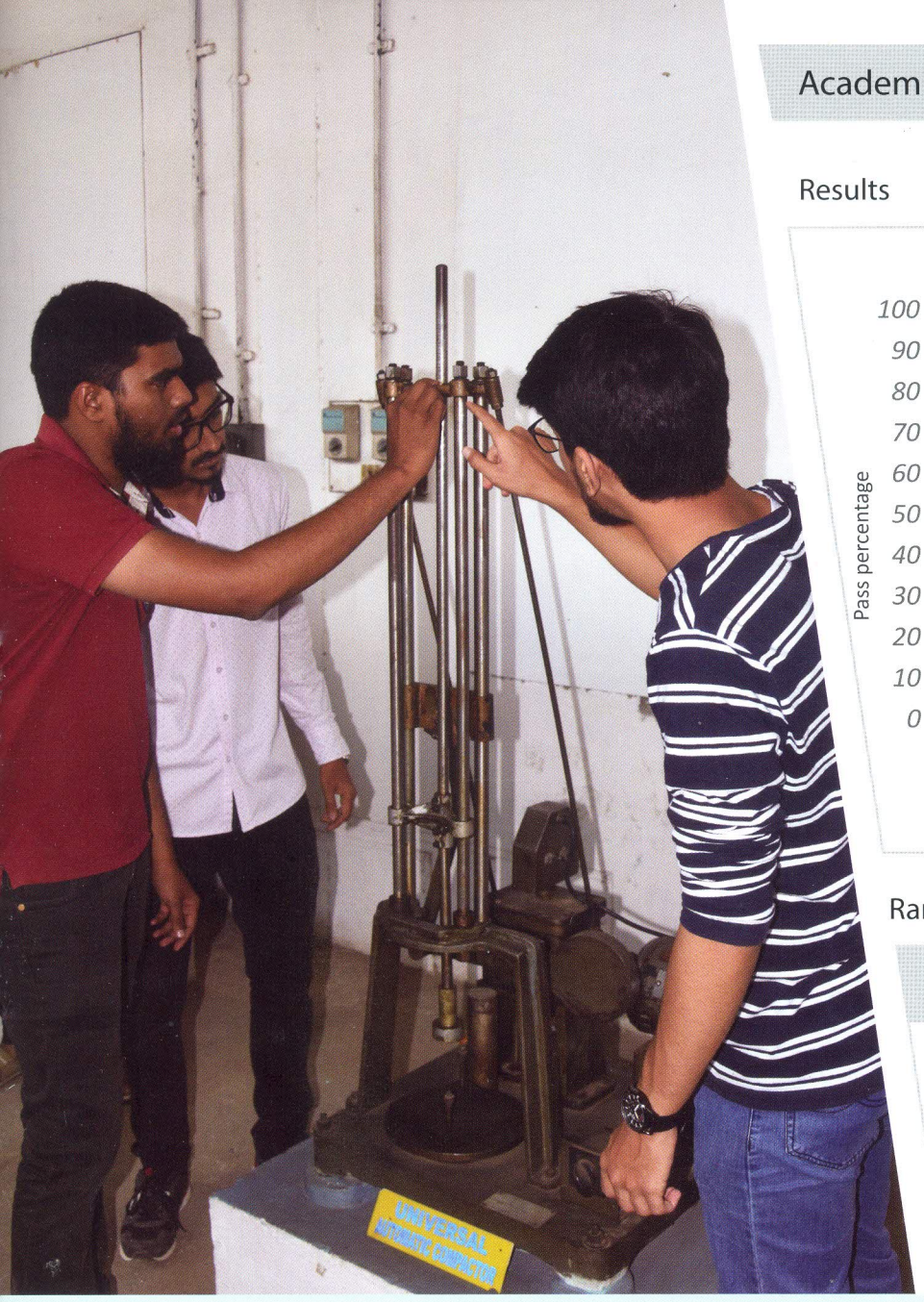
- B.E. in Civil Engineering
- M.E. in Structural Engineering

Research Center

Osmania University has approved Research Centre in the Department of Civil Engineering from academic year 2018 – 2019 and allotted 16 Research Scholars under the guidance of four Professors of the department. Two post graduate R&D projects have been completed during the academic year 2018 – 2019.

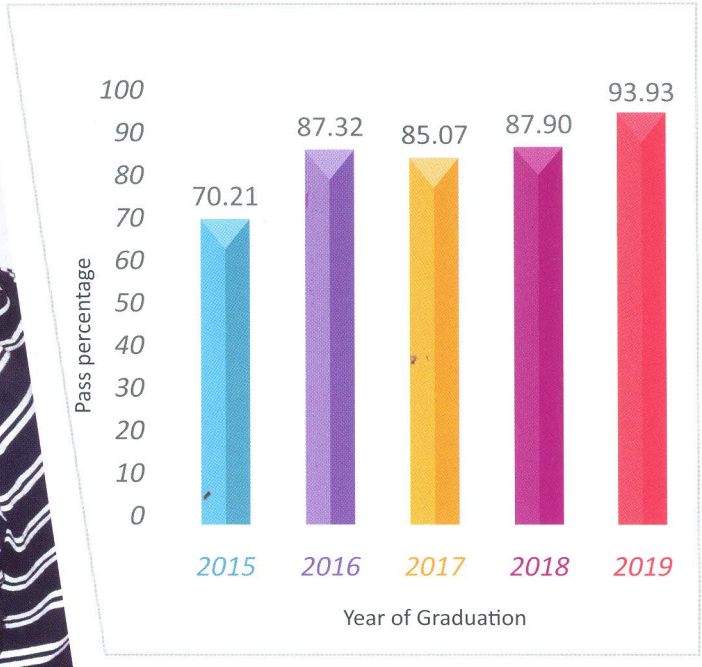
Osmania University Recognized Research Supervisors

Name	Area of Specialization
Dr. Ashfaque Jafari	Water Resources Engg.
Dr. Moinuddin Ahmed	Geo-Technical Engg.
Dr. Mohammed Hamraj	Structural Engineering
Dr. Mohammed Abdullah Shariff	Structural Engineering



Academic Results and OU Ranks

Results



Ranks in Osmania University Merit List:

Year	O U Ranks
2018-19	2,3,8 & 10
2017-18	4,6,8 & 9
2016-17	2,3,6,9 & 10
2015-16	1
2014-15	7,9 & 10
2013-14	7

Faculty

The strength of the department lies in its experienced faculty who are experts in all the areas of specialization of Civil Engineering. The average experience of the faculty members is 13 years. Apart from teaching, the faculty is also involved in many aspects of institutional governance like academics, administration and consultancy. The rich diversity of their specializations and experience is very handy in discharging the duties of counselors and mentors to the young students. Over 100 papers have been published in journals and conferences during the past five years by the civil faculty, which is a testimony to their commitment towards lifelong learning. Currently, ten faculty members are pursuing Ph.D. from various universities.

Cadre

Professors	Associate Professors	Assistant Professors	Total Faculty
05	05	19	29

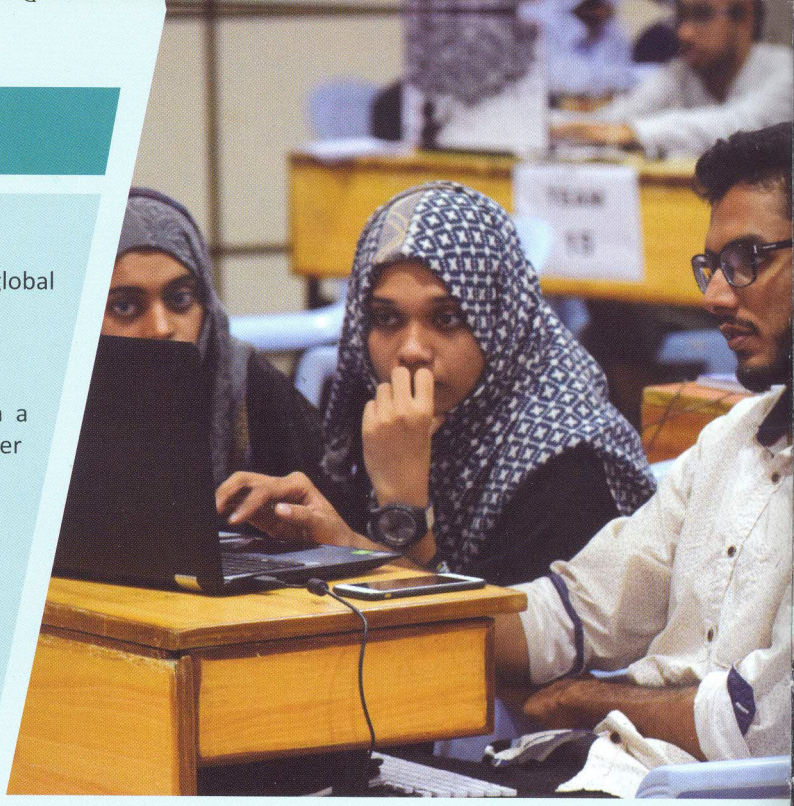
Qualifications

Ph.D	Pursuing Ph.D	M.E./M.Tech
06	10	13

Experience

Over 20 Years	10 to 20 Years	5 to 10 Years
09	12	08

COMPUTER SCIENCE & ENGINEERING DEPARTMENT



Vision

To contribute competent computer science professionals to the global talent pool to meet the constantly evolving societal needs.

Mission

Mentoring students towards a successful professional career in a global environment through quality education and soft skills in order to meet the evolving societal needs.

Program Educational Objectives

1. Graduates will demonstrate technical skills and leadership in their chosen fields of employment by solving real time problems using current techniques and tools.

2. Graduates will communicate effectively as individuals or team members and be successful in the local and global cross cultural working environment.

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

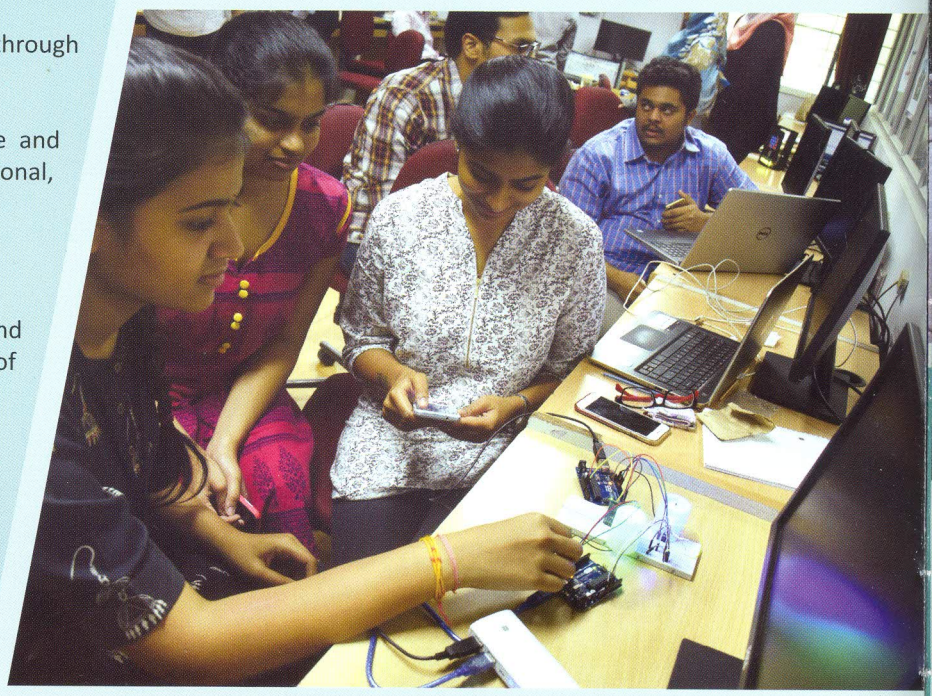
4. Graduates will be successful in providing viable and sustainable solutions within societal, professional, environmental and ethical contexts.

Program Specific Outcomes

1. Demonstrate understanding of the principles and working of the hardware and software aspects of computer systems.

2. Use professional engineering practices, strategies and tactics for the development, operation and maintenance of software.

3. Provide effective and efficient real time solutions using acquired knowledge in various domains.



About the Department

The Computer Science and Engineering Department was established in the year 1986 to support the increasing demand of Computer Science professionals in the software sector. Starting from an intake of 30 students, the Department has moved from strength to strength and today its intake has increased to 120. The department's academic elegance coupled with state-of-the-art infrastructure makes it a comfortable place for the students to excel in computing on par with the industry. The computational skills of the students are strengthened through mini projects offered from second year onwards. An excellent placement record is another feather in the cap of this Department.

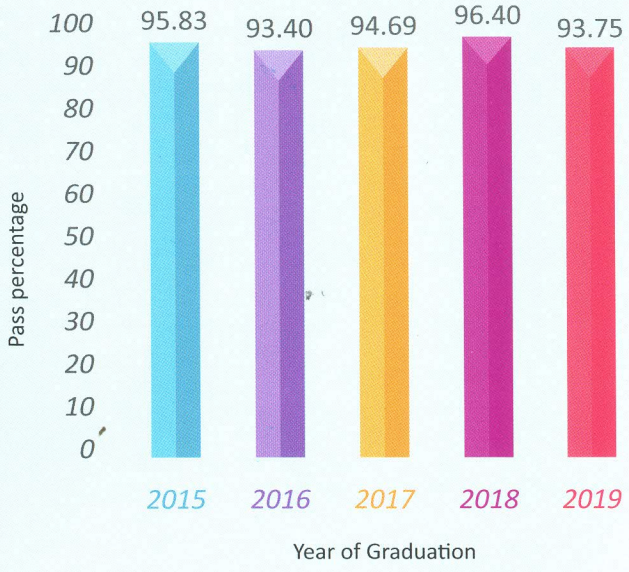
The Computer Science and Engineering program lays importance on principals of computing along with other core computer science themes, concentrating on Data Structures, Algorithms, Programming Languages, Databases, Computation Theory, Data Mining, Software Engineering, Information Security and Embedded Systems. The programs novel approach balances theory and practical courses through mini-projects and real time major project at the final year level.

Programs Offered

- B.E. in Computer Science and Engineering
- M. Tech. in Computer Science and Engineering

Academic Results and OU Ranks

Results



Ranks in Osmania University Merit List:

Year	O U Ranks
2018-19	2, 4, 5, 6 & 10
2017-18	1, 2, 7, 8 & 9
2014-15	1
2013-14	8

Faculty

The CSE Department has a strong faculty team comprising of 30 post graduate teachers, seven of whom possess Ph. D degree and another 19 pursuing it. They are known to blend teaching and research experience in order to deliver a contemporary flair to the courses offered by them. They bring diverse experiences to the realm of class room teaching and thereby expose the students to the latest computational advances. The faculty is easily accessible to the students and it leads to a healthy teacher-student association on campus.

The Department recognizes the significance of the faculty updating themselves with latest development and therefore regularly deputes them to refresher courses, seminars and conference. During the last three years the Departmental faculty has published over 45 papers in journals and conferences on topics like Big Data, Machine Learning, Ad hoc Networks, High performance computing, etc. Many faculty members also review research papers for journals and chair paper presentation sessions in conferences.

Cadre

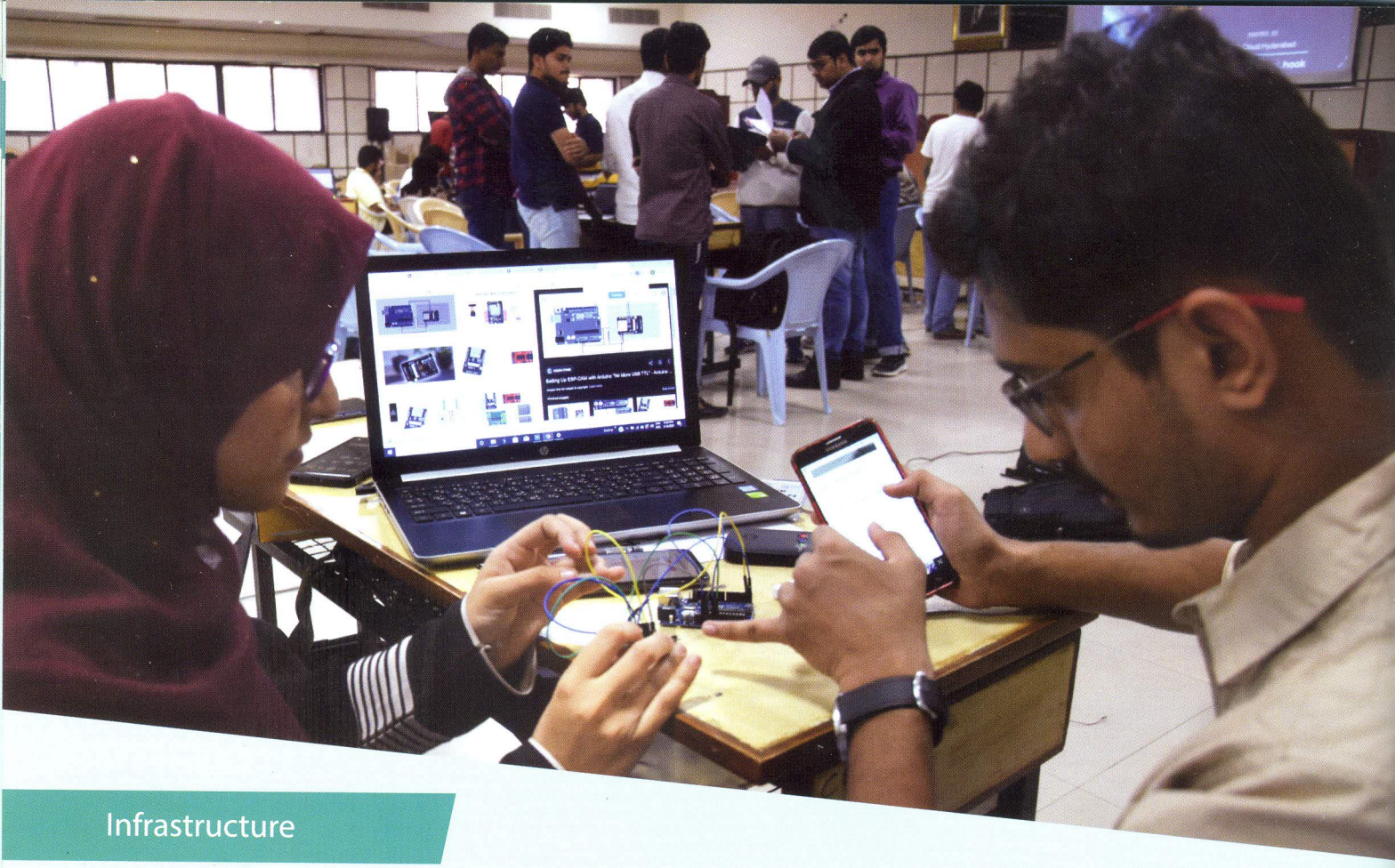
Professors	Associate Professors	Assistant Professors	Total Faculty
04	06	20	30

Qualifications

Ph.D	Pursuing Ph.D	M.E./M.Tech
07	19	04

Experience

Over 20 Years	10 to 20 Years	5 to 10 Years
08	22	00



Infrastructure

The Department has a computer center with 11 laboratories for the B.E. program and 2 computer labs for the M. Tech. Program. Along with this the department also has established a 'Center for Innovative Computing' to cater to the advanced self-learning needs of the B.E. and M. Tech. Students. A research center catering to the needs of research scholars is also available. The computer center infrastructure consists of 8 IBM Servers, 250 latest configuration desktop computer systems connected through LAN, complemented by latest software and has 100 Mbps Internet Leased Line facilities. All the desktop computer systems and servers are under Microsoft Campus and School Agreement (CASA), which facilitates use of latest Microsoft products.

Server Room: Equipped with 8 IBM X3500 series IBM servers with RAID for data storage and backup it caters to the computing needs of students and staff of CSE department. All the desktop systems of the department are connected to these servers through Cisco/D-Link switches for better connectivity and access.

Center for Innovative Computing: The department has an exclusive Center for Innovative Computing where students harness their innovative skills, and learn to participate in workshops and gain hands-on experience on latest technologies. This facility has 60 Core i5 computer systems with webcam and multimedia accessories and ICT facilities.

Major Laboratories

- Computer Programming and Computer Skills Lab - 03
- Database Management Systems and Data Mining Lab
- Microprocessor and Distributed Systems Lab
- Network Programming Lab
- Mini-Project and Project Lab
- Compiler Construction and Computer Graphics Lab
- Embedded Systems and Web Programming Lab
- Operating Systems and OOSD Lab
- Data Structures and Java Programming Lab
- M.Tech. CSE Lab
- Centre for Innovative Computing

Software

- Oracle 11g Client
- WEKA Data Mining Tool
- COGNOS Data Mining Tool
- MySQL
- KEIL Version 2 and 3
- IBM Rational Enterprise Suite (RES)
- IBM Rational Software Architect (RSA)
- QUALNET Network Simulator
- MATLAB
- Macro Media

Research Center

Osmania University has approved a Research Centre in the CSE Department from academic year 2018-2019 and allotted 08 Research Scholars under the guidance of 2 Supervisors. The Research Centre is a valuable resource for Ph.D., M. Tech. & B.E students and faculty to carry out research studies for advancement of scientific knowledge.

Osmania University Recognized Research Supervisors

Name	Area of Specialization
Dr. Ahmed Abdul Moiz Qyser	Software Engineering, Machine Learning, Databases
Dr. Uma N Dulhare	Data Mining, Big Data Analystics, Semantic Web

Workshops/Conferences Organized

Academic Year	Workshop/Conference	Date	Duration
2019-20	Faculty Development Program on "Computational Intelligence: Techniques, Tools and Applications"	6 - 11 Jan 2020	1 Week
2018-19	Faculty Development Program on "Data Science Technologies and Next Generation AI"	03 - 08 Jan 2019	1 Week
2017-18	Faculty Development Program on "Big Data and Deep Learning"	03 - 08 Jan 2018	1 Week

Professional Chapters

Name of the Chapter	Year of Establishment	Faculty Coordinator	Membership
IEEE Computer Society (IEEE CS)	2011	Dr. Krishna Keerthi Channam, Assistant Professor, CSED	22
Computer Society of India (CSI)	2014	Mr. Zainuddin Naveed, Assistant Professor, CSED	139
Microsoft Student Society (MSS)	2017	Mr. Ahmed, Assistant Professor, CSED	80

ELECTRICAL ENGINEERING DEPARTMENT

Vision

To produce proficient engineers who illuminate the nation, drive the industry and innovate in the field of power and automation.

Mission

Provide futuristic and comprehensive technical education to equip students with core competencies and relevant skill sets through effective teaching learning methods and state of art laboratories thus preparing them for global careers.

Pursue need based research and provide consultancy and testing services to address contemporary issues in the fields of electrical and instrumentation engineering

About the Department

The department was established in 1997 with BE Instrumentation Engineering with an intake of 40 students, which was increased to 60 in 2001. Keeping in view the requirement of the industry, a course in Electrical and Electronics Engineering was introduced in 2002 with an intake of 60 students. Later in 2013, a post graduate course on Power Electronic Systems was introduced with an intake of 18 students. In the year 2017, the Osmania University recognized the department as a research centre for guiding the students leading to their Ph.D.

The Department's qualified faculty with rich experience, both in academics and industry, exposes the students to the practices in industry through Guest Lectures, Seminars, industry based projects, and Internships. The department has also signed an MoU with TSSPDCL.

Programs Offered

The Electrical Engineering Department offers two B.E. programs and one M.E. program

- B.E. in Electrical and Electronics Engineering
- B.E. in Electronics and Instrumentation Engineering
- M.E. in Power Electronic Systems

The department is also recognized as a research centre by Osmania University for Doctoral degree.

Program Educational Objectives

1. Graduates will demonstrate core competence and leadership in their chosen fields of employment by identifying, formulating, analyzing and implementing engineering solutions using current techniques and tools.

2. Graduates will communicate effectively as individuals or team members and be successful in local and global cross cultural 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 contexts.

EEE

Program Specific Outcomes

PSO1: Apply Knowledge of power system configuration, electrical equipment and protection practices to the design and specification of electrical generation, transmission, distribution and utilization system.

PSO2: Design, analyze, test and evaluate the performance of the electrical machines and transformers.

PSO3: Develop the expertise in the technology associated with efficient conversion and control of electrical power by static means from available form to the required form

Research Center

With the growing population, rise in electrification and per capita usage several new avenues have opened up for research in conventional and renewable sources for the Electrical Engineers. The onset of automation is a profound reason for the growing field of Instrumentation which encompasses the various facets of engineering like the Chemical, Biomedical, Robotics, Electronics, Automobile and oil and gas to mention a few. Research in these areas is the prominent part of the market.

Currently, major research is being carried out in the area of renewable sources of power generation, distributed generation, improvement of power quality, power electronic and its applications. Eight Research Scholars are pursuing Doctoral Program in the Department.

Recognized Research Supervisors

Name	Area of Specialization	University
Dr. Md. Haseeb Khan	Power Electronics and its Applications	Osmania University
Dr. J. Namratha Manohar	Power Systems	Osmania University
Dr. Shaik Qadeer	Industrial Automation and Signal Processing	Visvesvaraya Tech. University

Faculty

The Department has well qualified and distinguished faculty with cutting edge knowledge in the areas of Instrumentation and Electrical Engineering with vast experience in their area of expertise. The department faculties have more than 270 research publications in various reputed National & International Journals and Conferences while one faculty Prof. Shaik Qadeer, has a patent to his credit. Five faculties of the department are reviewers of reputed journals/conferences such as IEEE, Science direct, Springer research journals.

Cadre

Professors	Associate Professors	Assistant Professors	Total Faculty
03	05	18	26

Qualifications

Ph.D	Pursuing Ph.D	M.E./M.Tech
06	09	11

Experience

Over 20 Years	10 to 20 Years	5 to 10 Years
06	13	07

EIE

Program Educational Objectives

1. Graduates will demonstrate core competence and leadership skills in their chosen fields of employment by diagnosing, modeling and designing engineering solutions using latest tools and techniques.
2. Graduates will be successful as professional engineers, academicians, researchers, software developer and entrepreneur appropriate to their background, interest and education equipped with soft skills, as an individual or in a team.
3. Graduates will demonstrate lifelong learning process by means of further studies and professional development.
4. Graduates will provide practical and sustainable solutions within social, environmental and ethical contexts.

Program Specific Outcomes

PSO1: Apply concepts of measurement and sensor selection to specify, calibrate, and troubleshoot various process instruments commonly used in industry.

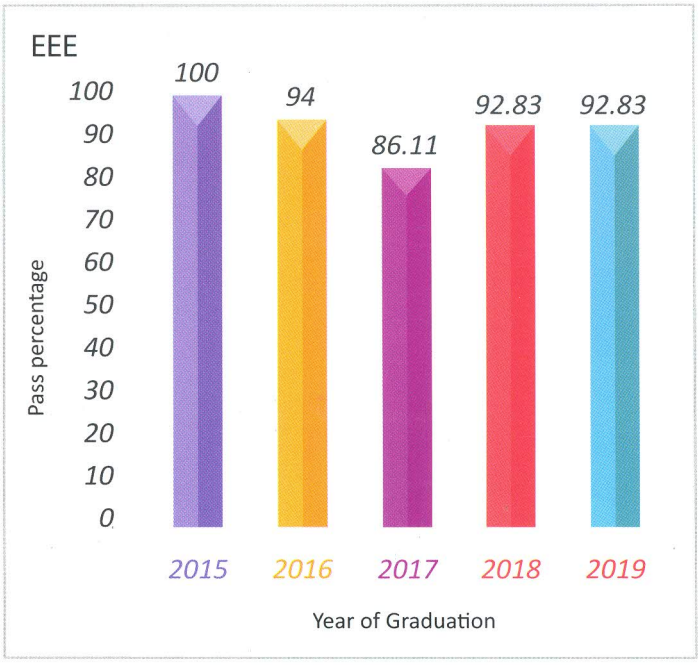
PSO2: Use basic engineering principles and knowledge of industrial control systems to design the control and safety systems for an industrial process.

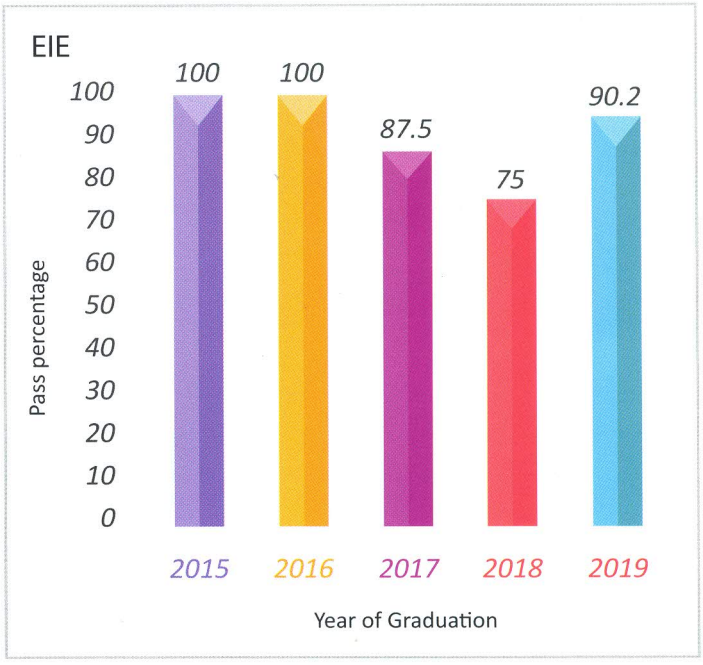
PSO3: Specify, select, design, and build microprocessor or microcontroller-based systems for engineering applications.

PSO 4: Use programmable logic controllers (PLC) and supervisory control systems for control of manufacturing and processing systems

Academic Results and OU Ranks

Results





Ranks in Osmania University Merit List:

EEE

Year	O U Ranks
2018-19	5
2017-18	4 & 9
2016-17	1 & 2
2015-16	2
2014-15	8
2013-14	2

EIE

Year	O U Ranks
2018-19	1 & 2
2017-18	2, 3, 4 & 5
2016-17	1, 2, 3, 4, 5 & 7
2015-16	1, 2 & 3
2014-15	1, 2, 3, 4 & 5
2013-14	2, 4, 5, 6, 8 & 9

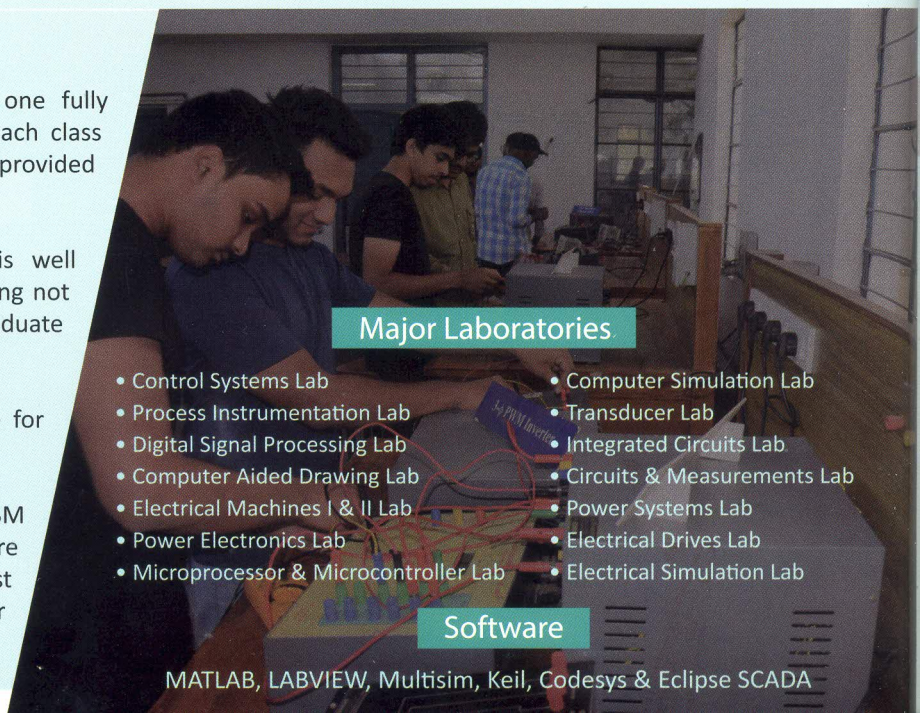
Infrastructure

Classrooms: The department has 7 class rooms, one fully equipped seminar hall, and a department library. Each class room as well as the seminar hall in the department is provided with LCD projector for ICT based delivery of lectures.

Labs: The department of Electrical Engineering is well equipped with 14 state of the art laboratories catering not only to the needs of the Undergraduate & Post graduate students but also research scholars.

Department Library: It serves as a ready reference for both the students and faculty.

Computing Facilities: Three computer labs with one IBM server and 95 computers in the department are connected through LAN and are equipped with latest MATLAB, LABVIEW, Multisim & Keil software for experimental and research needs of the students.



Workshops/Conferences Organized

Academic Year	Workshop/Conference	Date	Duration
2019-20	AI Applications in Power Electronic Systems	20 - 25 January 2020	1 Week
2018-19	Machine Health Monitoring using IOT	25 - 29 March 2019	1 Week
2017-18	Hardware in the Loop Simulation for Smart Grid Application	9 - 13 October 2017	1 Week
2017-18	Electric Power System	12 June - 15 July 2017	2 Weeks
2014-15	Control Systems	2 - 12 December 2014	2 Weeks

Professional Chapters

Name of the Chapter	Year of Establishment	Faculty Coordinator	Membership
Institute of Engineers (India)	2004	Dr. Shaik Qadeer, Professor, EED	30
IEEE-Power and Energy Society Chapter	2012	Mr. Md. Imran, Assistant Professor, EED	35

R & D Projects

Year	Title of the Project	Name of the Faculty
2018 - 2019	IOT based vehicle parking system with cloud computing	Mrs. Narjis Begum, Assistant Professor
2017 - 2018	Analysis of Air pollution using quadcopter	Mrs.P. Bharati, Assistant Professor
2016 - 2017	Smart power saving kit for class and staff rooms	Dr.Shaik Qadeer, Professor
2016 - 2017	Low cost data acquisition system for lab view	Dr.Shaik Qadeer, Professor
2015 - 2016	Design, Analysis And Development Of Prototype 30KVAR STATCOM	Mr. Mohammad Rafi, Assistant Professor Mr. J.V.R Vithal, Associate Professor
2015 - 2016	Smart Street Lighting	Mrs. Ajaz Fatima, Associate Professor
2015 - 2016	Design of Magnetic Levitated Wind Turbine	Mrs. Fabia Akbar, Associate Professor

ELECTRONICS & COMMUNICATION ENGINEERING DEPARTMENT

Vision

To be recognized as a premier education center providing state of the art education and facilitating research and innovation in the field of Electronics and Communication Engineering.

Mission

We are dedicated to providing high quality, holistic education in Electronics and Communication Engineering that prepares the students for successful pursuit of higher education and challenging careers in industry, R & D and academics.

Program Educational Objectives

1. Graduates will demonstrate technical competence and leadership in their chosen fields of employment by identifying, formulating, analyzing and providing engineering solutions using current techniques and tools.

2. Graduates will communicate effectively as individuals or team members and demonstrate leadership skills to be successful in the local and global cross-cultural 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 contexts.

Program Specific Outcomes

1. The ECE graduates will acquire state of the art analysis and design skills in the area of digital and analog VLSI design using modern CAD tools.

2. The students will be able to develop preliminary skills and capabilities necessary for embedded system design and demonstrate understanding of its societal impact.

3. The ECE graduates will be able to obtain the knowledge of working principles of modern communication systems and be able to develop simulation models of components of a communication system.

4. The ECE graduates will develop soft skills, aptitude and programming skills to be employable in IT sector.

About the Department

The Electronics and Communication Engineering department was established in the year 1980 along with the inception of the institution. Being one of the oldest departments, it has acquired a stable profile with a good blend of experienced, young and enthusiastic faculty coupled with state of the art infrastructure. The department trains the students towards overall growth and holistic development in all aspects of life. Many of the graduates from the ECE Department have excelled in their professional life by virtue of the rigorous training imparted to them during their four years of course work.

There is tremendous employability scope, both, in core ECE and IT sector for the students who expertise in areas of Electronics and Communication Engineering, as there are many R&D, design and product based industries that span a vast area of consumer electronics, mobile technology, and communication and defense applications including the IT sector.

Programs Offered

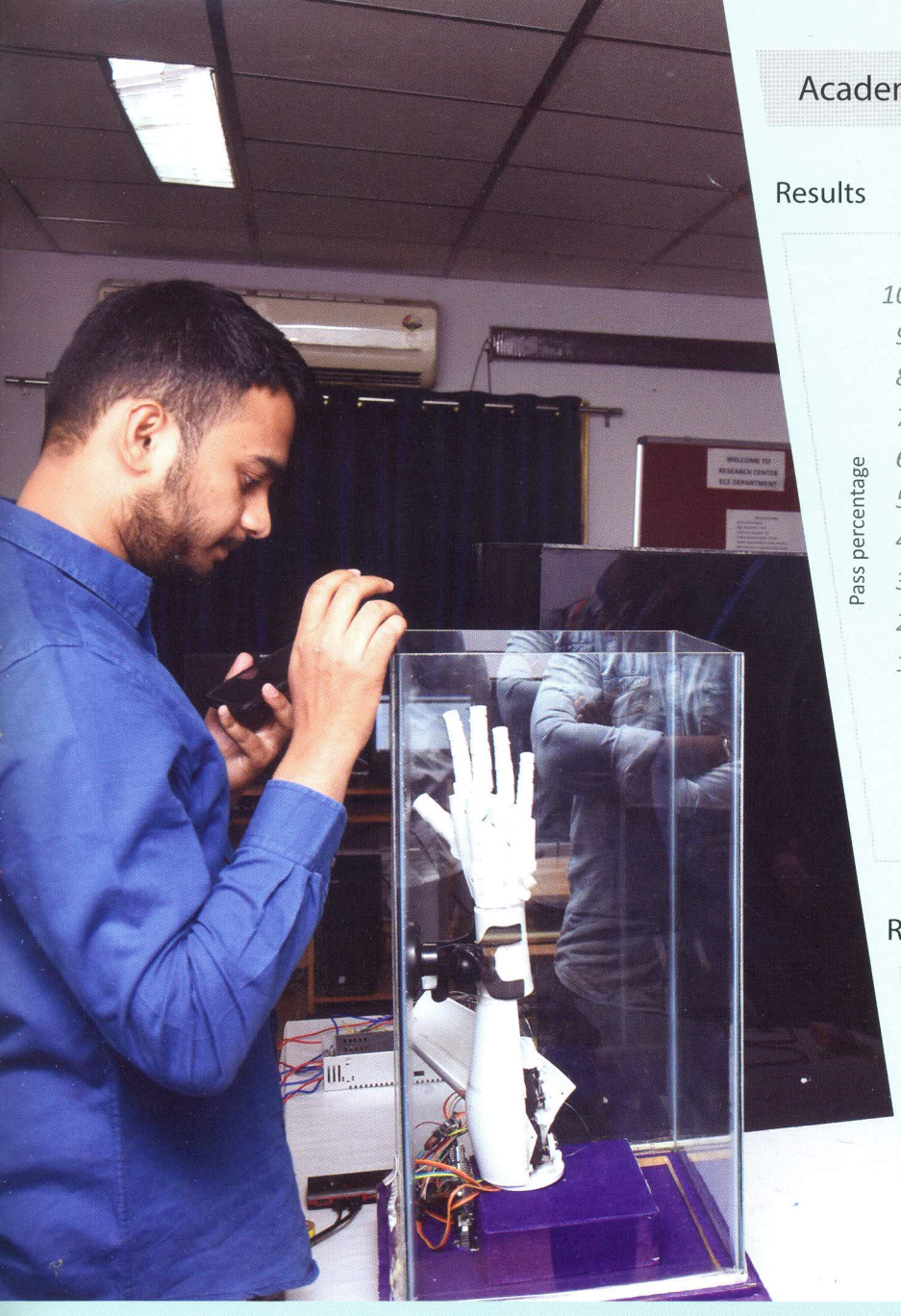
- B.E. in ECE
- M.E. in Digital Systems

Research Center

OU approved Research Center has been established in the ECE Department in the year 2012. The center is equipped with 20 high end PCs, a server with 10 user Cadence design suit – research bundle. Research is been pursued in analog and digital VLSI, image, video, speech and sparse signal processing, IOT and Embedded systems, security, mobile and FSO- mobile adhoc networks and RF & communications. The facility is also used by PG or UG students for Cadence, MATLAB based projects.

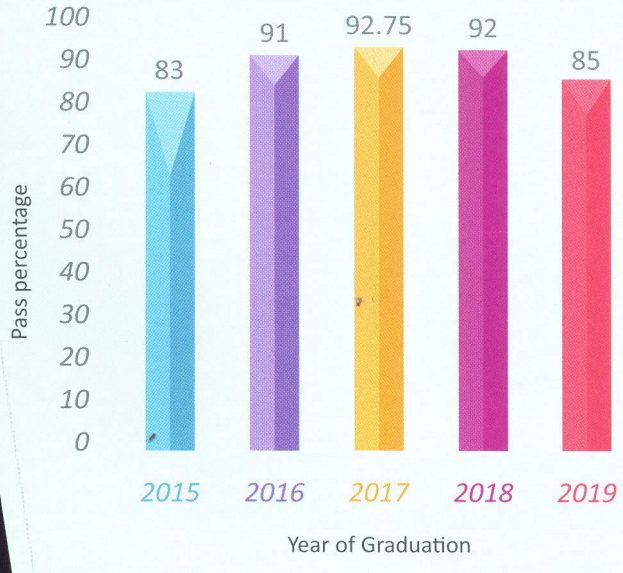
Osmania University Recognized Research Supervisors

Name	Area of Specialization
Dr. Kaleem Fatima	Digital Electronics and Communication Systems



Academic Results and OU Ranks

Results



Ranks in Osmania University Merit List

Year	OU Ranks
2018-19	10
2017-18	1,2,4,5 & 9
2016-17	4,6 & 9
2015-16	1
2013-14	5 & 6

Faculty

The ECE Department has 26 well qualified, dedicated and experienced faculty members for the BE & ME programs. The faculty team consists of 4 Professors, 2 Associate Professors and 20 Assistant professors of whom 4 are Ph.D qualified and 12 are pursuing Ph.D. The faculty is involved in carrying out current and futuristic research projects in their field of specialization. They have published a total of 51 research papers in Journals and 37 in Conferences. 18 of these papers have been published in IEEE Xplore.

Cadre

Professors	Associate Professors	Assistant Professors	Total Faculty
04	02	20	26

Qualifications

Ph. D	Pursuing Ph. D	M.E./M.Tech
04	12	10

Experience

Over 20 Years	10 to 20 Years	5 to 10 Years
05	11	10

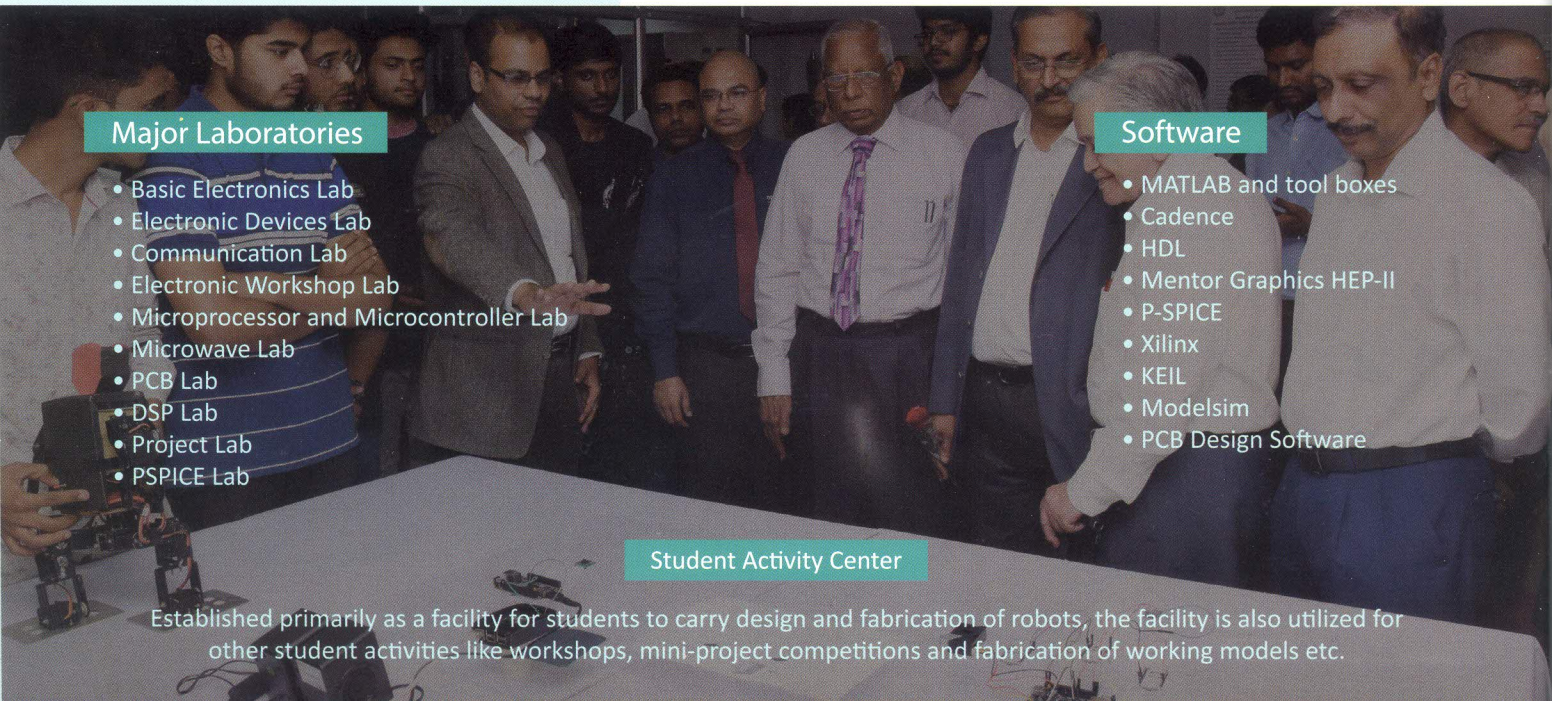
Infrastructure

The 12 Laboratories of the Department are well equipped with state of the art equipment fulfilling the requirements of the curriculum and beyond. All the laboratories have adequate number of work benches thereby enabling the students to assimilate the theoretical concepts through hands-on training. Apart from 3 Basic Electronics labs with 12 work benches in each, the department also has specialized labs like Communication Engineering lab, Microprocessor and Microcontroller lab Microwave lab and the EDA labs. High end equipment in these labs include 1 GHz HP spectrum Analyzer, Agilent DSO, Agilent MPLS, Logic Analyzer for 8085 MP, Arm based kits, Xilinx FPGA kits, DSP Kits etc.

Classrooms: The department has 07 class rooms, one Smart Classroom, one fully equipped seminar hall, and a departmental library for undergraduate course. It has one class room and a shared seminar hall for post graduate students.

Labs: The department has 10 well equipped laboratories, 2 computer centres and 1 Research Centre catering the needs of undergraduate, post graduate and research scholars.

Computing Facilities: The computing facility consists of 86 latest configuration PCs and 3 high configuration servers spread in five laboratories. All the systems are connected through LAN with 100 Mbps lease line. The PCs are loaded with licensed software like MATLAB and tool boxes, Cadence, HDL, Mentor Graphics HEP-II, P-SPICE, Xilinx, KEIL, Modelsim, PCB Design Software which are essential for the course work, projects and research.



Major Laboratories

- Basic Electronics Lab
- Electronic Devices Lab
- Communication Lab
- Electronic Workshop Lab
- Microprocessor and Microcontroller Lab
- Microwave Lab
- PCB Lab
- DSP Lab
- Project Lab
- PSPICE Lab

Software

- MATLAB and tool boxes
- Cadence
- HDL
- Mentor Graphics HEP-II
- P-SPICE
- Xilinx
- KEIL
- Modelsim
- PCB Design Software

Student Activity Center

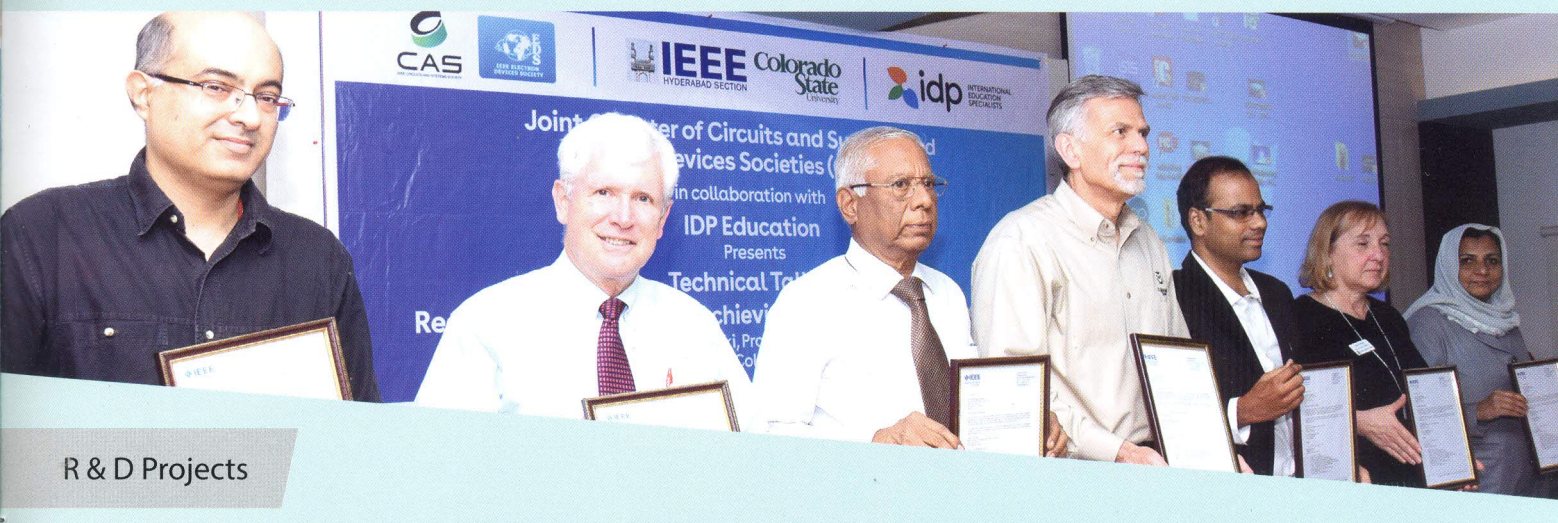
Established primarily as a facility for students to carry design and fabrication of robots, the facility is also utilized for other student activities like workshops, mini-project competitions and fabrication of working models etc.

Workshops/Conferences Organized

Academic Year	Workshop/Conference	Date	Duration
2018-19	FDP on Analog IC Design	02 - 07 Dec 2019	1 Week
2016-17	CMOS, Mixed signals & Radio frequency VLSI Design	30 Jan - 04 Feb 2017	1 Week
2014-15	National Conference on Circuits, Signals and Systems	22 - 24 Jan 2015	3 Days

Professional Chapters

Name of the Chapter	Year of Establishment	Faculty Coordinator	Membership
IEEE Student Branch	2001	Dr. Mohammed Arifuddin Sohel	125
IEEE - Circuit and Systems Chapter	2012	Dr. Kaleem Fatima	15
IEEE - Robotics Automation Society Chapter	2015	Dr. Mohammed Arifuddin Sohel	20
IEEE - Women in Engineering Affinity Group	2015	Ms. Maliha Naaz	45



R & D Projects

Year	Title of the Project	Name of the Faculty
2018 - 2019	Humanoid Robot - Phase 3	Dr. Arifuddin Sohel, Professor, ECED Mr. J.K. Nag, Associate Professor, ECED
2018 - 2019	GIMMIC - A Semi-Humanoid Face Recognition Robot	Dr. Arifuddin Sohel, Professor, ECED Ms. Sucharita, Assistant Professor, ECED Mr. Shaik Irfan Sadaq, Assistant Professor, MED
2017 - 2018	IoT based Smart 3D Printer	Dr. Arifuddin Sohel, Professor, ECED
2017 - 2018	Fabrication of oxide nano particles for gas sensor applications	Mr. M.A. Raheem, Assistant Professor, ECED
2017 - 2018	Pneumatic Quadruped Robot	Dr. Kaleem Fatima, Professor, ECED
2016 - 2017	IoT based Sustainable Plant Habitat and Smart Farming	Dr. Arifuddin Sohel, Professor, ECED
2016 - 2017	Voice Controlled Prosthetic arm	Ms. Maliha Naaz, Assistant Professor, ECED Salma Fauzia, Assistant Professor, ECED
2015 - 2016	Wheel chair movement using Hand Gesture Recognition	Ms. Sucharita, Assistant Professor, ECED
2014 - 2015	Semi-controlled Aerial Vehicle	Dr. Kaleem Fatima, Professor, ECED
2014 - 2015	Automated Guided Vehicle	Dr. Arifuddin Sohel, Professor, ECED
2014 - 2015	Sign Language for Visually Challenged	Ms. Nazeerunnisa, Assistant Professor, ECED

MECHANICAL ENGINEERING DEPARTMENT

Vision

To produce high caliber, competent, industry oriented Mechanical Engineers

Mission

To impart quality education by providing state of the art technical facilities and enhance the professional abilities to meet the demands of ever-changing manufacturing industry

About the Department

Mechanical Engineering Department, established in the year 1980 with an intake of 40-students and offering B.E. four-year degree program, is one of the oldest and largest departments of the institution. It has a current intake of 120-students in Mechanical engineering, 60-students in production engineering - started in the year 1989, and 18-students in M.E. CAD/CAM - started in the year 2004. While managing this increased strength, the department is committed to impart quality education and all round development of its students.

The role of a mechanical engineer is to take a product from an idea to the marketplace. In order to accomplish this, a broad range of skills is needed. Mechanical engineers play a central role in almost all industries like automotive, aerospace, computers and electronics, micro-electro-mechanical systems, biotechnology, energy conversion, HVAC, air-conditioning, refrigeration, compressors, automation and manufacturing.

With 32 well-qualified faculty and state of the art laboratories, the department is well suited to meet the aspirations of all levels of students.

Programs Offered

The Mechanical Engineering Department offers two B.E. programs and one M.E. program

- B.E. in Mechanical Engineering
- B.E. in Producation Engineering
- M.E. in CACAM

The department is also recognized as a research centre by Osmania University for Doctoral degree.

Program Educational Objectives - Mechanical Engineering

1. Graduates will be capable of demonstrating analytical and practical engineering skills using various techniques and tools in solving engineering problems.

2. Graduates will communicate efficiently as professional engineers in a team or as an individual in local and global cross cultural working scenario.

3. Graduates will demonstrate lifelong learning through higher education, skill improvement and professional development.

4. Graduates will be successful in devising sustainable solutions to environmental, socio economic and professional problems, with due regard to professional ethics.

Program Educational Objectives - Production Engineering

1. Graduates will be capable of demonstrating analytical and practical engineering skills using various techniques and tools in solving engineering problems.

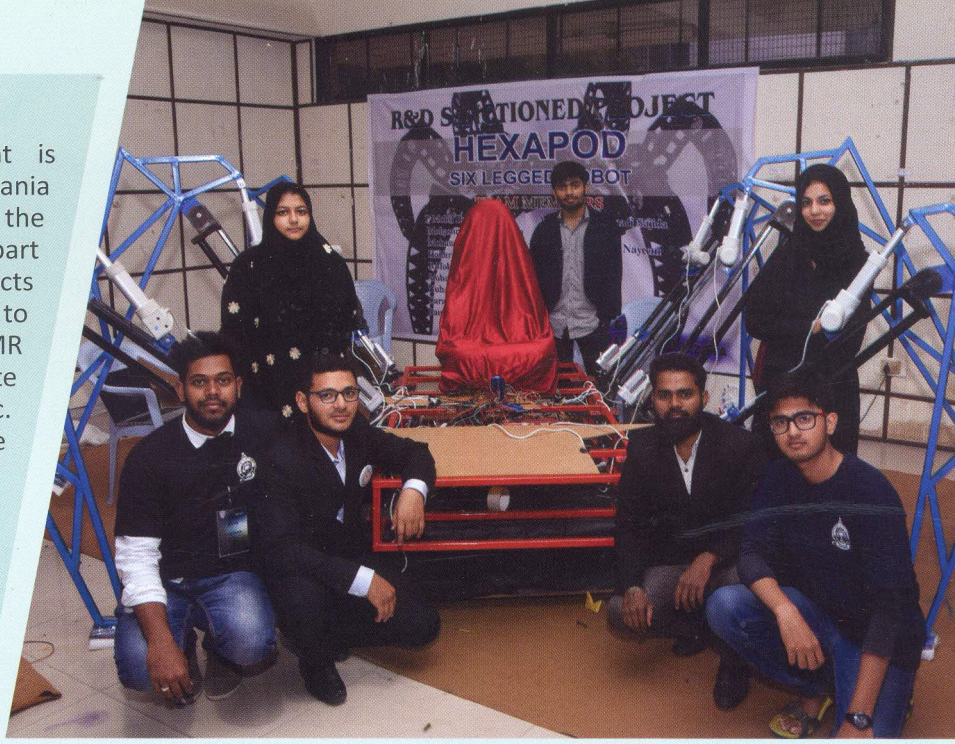
2. Graduates will communicate efficiently as professional engineers in a team or as an individual in local and global cross cultural working scenario.

3. Graduates will demonstrate lifelong learning through higher education, skill improvement and professional development.

4. Graduates will be successful in devising sustainable solutions to environmental, socio economic and professional problems, with due regard to professional ethics.

Research Center

The Mechanical Engineering Department is recognized as a research center by Osmania University. The department has established the required research facilities for full time and part time research scholars. The research projects undertaken by the department are related to Metal Casting or Foundry technologies, MR fluid technologies, green composite technologies and thermal / IC engines, etc. The department has software programes like UG CAM, Hypermesh, ANSYS, Solidworks, MicroCAM and SolidCAST which are used extensively by research scholars to perform modeling, simulations, and analysis. The required machines for secondary manufacturing processes are also available along with required quality measurement set ups.



Osmania University Recognized Research Supervisors

Name	Area of Specialization
Dr. Sk. Khadar Vali	CAD/CAM
Dr. Mohd. Mohinoddin	Turbo-machinery

Faculty

The faculty adopts student-centric approach with an emphasis on 'self-learning' as a means of improving the process of knowledge transfer resulting in a thorough understanding of complex fundamentals. While delivering lectures on theoritical concepts, the faculty also stresses on applications in real life and the latest developments in the area. For this, the faculty is continuously updated with the latest global developments, through regular participation in seminars and conferences. The faculty have published over 120 papers in various journals and conferences and 8 text books during the past five years.

Cadre

Professors	Associate Professors	Assistant Professors	Total Faculty
06	05	21	32

Qualifications

Ph.D	Pursuing Ph.D	M.E./M.Tech
11	18	03

Experience

Over 20 Years	10 to 20 Years	5 to 10 Years
07	20	05

Program Specific Outcomes - Mechanical Engineering

PSO1: Function effectively in the areas of Design and development of application software tools such as AUTO CAD, Solid works, Ansys.

PSO2: Work in power plants and manufacturing industry in the sphere of operation and maintenance.

Program Specific Outcomes - Production Engineering

PSO1: The Production Engineering graduates will be able to function in Software & Manufacturing sectors in the areas of software development and applications of CAD/CAM.

PSO2: The Production Engineering Graduates will be able to work as production engineer in design and manufacturing industries.

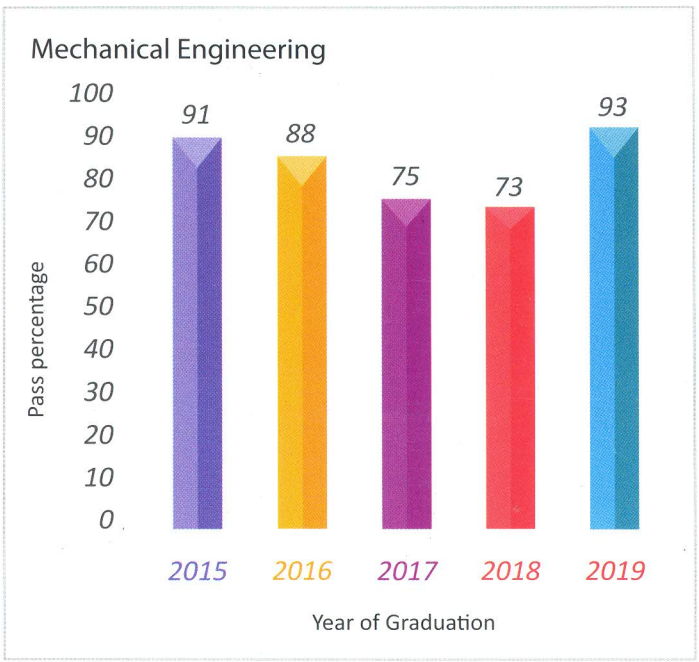
Infrastructure

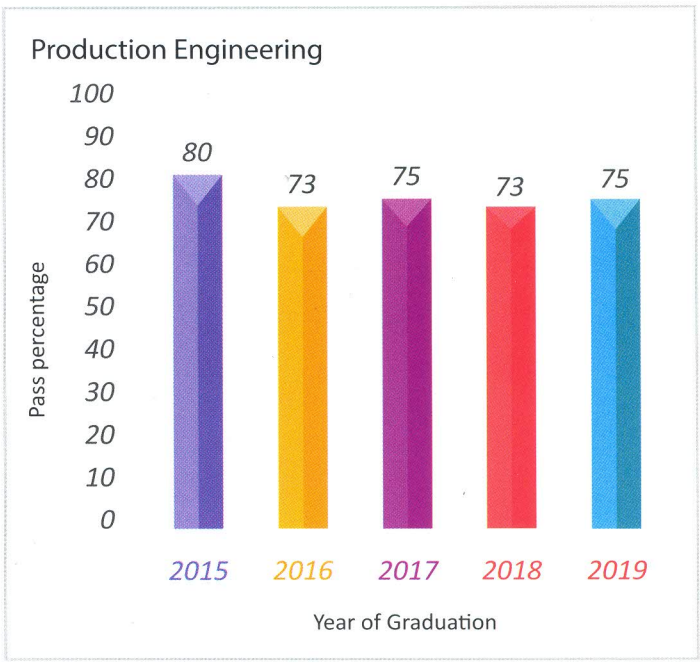
Department has 12 well equipped class rooms, adequate faculty rooms and a drawing hall facility to accommodate the students and faculty of mechanical and production engineering programs. Every class-room has latest LCD projector with screen and Wi-Fi connection. The department also has a Student Activity Center to carry out student project fabrication activities. A well equiped seminar hall is available for organizing seminars and conferences.

The department has 11 well equipped state-of-art Laboratories/workshops to give hands on training and practical experience to the students. There are three computer labs equipped with latest workstations with LAN connections. The Central and Departmental Libraries have books and journals facilities for carrying out literature survey.

Academic Results and OU Ranks

Results





Ranks in Osmania University Merit List

Mechanical Engineering

Year	O U Ranks
2018-19	1, 2, 4, 5, 6, 8 & 9
2017-18	2, 3, 5, 6, 8, 9 & 10
2016-17	8 & 9
2015-16	4
2014-15	6

Production Engineering

Year	O U Ranks
2017-18	1
2016-17	1
2014-15	8

Major Laboratories

Heat & Power
Thermodynamics
Metallurgy
Hydraulic machinery
Metrology & Instrumentation
Machine Shop
Carpentry/Pattern making
Welding/Fabrication
Fitting
House Wiring Shop
Sheet Metal Work
Foundry/Metal Casting
Smithy and Metal Forming
Dynamics of Machines Lab
U.G. CAD/CAM Lab
PG CAD/CAM Lab

Software

AutoCAD, Solid Works
ANSYS, SOLIDCast
MicroCAM, MTAB

Workshops/Conferences Organized

Academic Year	Workshop/Conference	Date	Duration
2018-19	Technologies for Sustainable Ecosystem (TSE-19)	22 - 24 Mar 2019	3 Days
2017-18	Technologies for Sustainable Ecosystem (TSE-18)	10 - 11 Feb 2018	2 Days
2016-17	Advances in Research and Innovations in Mechanical Engineering - ARIME 2017	30 Jan - 1 Feb 2017	3 Days

Professional Chapters

Name of the Chapter	Year of Establishment	Faculty Advisors	Membership
Society of Automotive Engineers (SAE)	2006	Dr. Mohd. Viquaruddin, Professor, MED Dr. D Srinivas Rao, Associate Professor, MED	55

R & D Projects

Year	Title of the Project	Name of the Faculty
2018 - 2019	Six Legged ROV	Dr. Ishrat Meera Mirzana, Professor, MED
2018 - 2019	Laser Engraver	Dr. Md. Viquar Mohiuddin, Professor, MED Ms. MalihaNaaz, Assistant Professor, ECED
2018 - 2019	Wanderway - An improved Segway	Dr. O. Hemalatha, Associate Professor, MED Mrs. B. Sucharitha, Assistant Professor, ECED
2018 - 2019	Flexible Manufacturing System	Dr. Hakeemuddin Ahmed, Professor, MED
2017 - 2018	Humanoid Robot- Phase 2	Dr. Arifuddin Sohel, Professor, ECED Mr. J. K. Nag, Associate Professor, ECED Dr. Hakeemuddin Ahmed, Professor, MED
2017 - 2018	Pneumatic Quadruped Robot	Dr. Ishrat Meera Mirzana, Professor, MED Dr. Kaleem Fatima, Professor, ECED
2015 - 2016	Investigation of dynamic behavior of structure using magneto-rheological fluid dynamics	Dr. G Sailaja, Associate Professor, MED

INFORMATION TECHNOLOGY DEPARTMENT

Vision

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

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 contexts

Program Specific Outcomes

1: Work as Software Engineers for providing solutions to real world problems using Structured, Object Oriented Programming languages and open source software.

2: Function as Systems Engineer, Software Analyst and Tester for IT and ITeS.

About the Department

Information Technology Department was established in the year 2000, with an intake of 60 students in B.E. (IT) program. The current intake is 120 students. The department has 20 qualified teaching staff, out of which 3 are Doctorates and 13 are pursuing Ph. D program from different universities. There are five computer laboratories and one hardware laboratory in the department which are equipped with the latest hardware and software to meet the curriculum requirements. Trained support staff is deployed in each computer laboratory in order to aid the teaching staff.

The department organizes informative seminars and talks by distinguished industry leaders to expose the students to the latest computing advancements in the field of IT. The department also organizes Faculty Development Programs on a regular basis in which eminent resource persons drawn from reputed institutions and industry deliver lectures and aid hands-on training.

'Envisage' - An Annual Project Exhibition

Throughout their course of study, the students of IT Program are encouraged to implement full scale projects as part of their Mini Projects as well as final year project course. Projects are carried out in the emerging technology areas such as Machine Learning, Data Science and AI. The department organizes an annual inter-college event – "Envisage" – in which students demonstrate working models of their projects. External Judges having Industry background are invited to assess the projects and select the top three projects for award of certificate and cash prize.

About the Program

In a broad sense, Information Technology encompasses all technologies used for the creation, management and use of information. The IT program is a blend of software-oriented Computer Science courses and hardware-oriented Electronic courses with an emphasis on VLSI and Embedded Systems components. The program prepares the students to efficiently handle jobs in software development along with computer hardware, internet and communication technologies.

In order to keep the students abreast with latest developments in the field of IT, the students are offered advanced certification courses like Microsoft Technology Associate (MTA) certification under Microsoft IT Academy. Hands on experience is provided through mini projects in which students fabricate working models and develop application software. Students are also encouraged to participate in various Hackathons.

Faculty

The Department is supported by qualified, experienced, and dedicated staff. The faculty constantly endeavor to upgrade themselves through participation in seminars, conferences etc., which is an essential demand for IT sector employees where half-life of knowledge is very short. In the last three years the faculty has published about 83 papers in journals and conferences.

Cadre

Professors	Associate Professors	Assistant Professors	Total Faculty
02	03	15	20

Qualifications

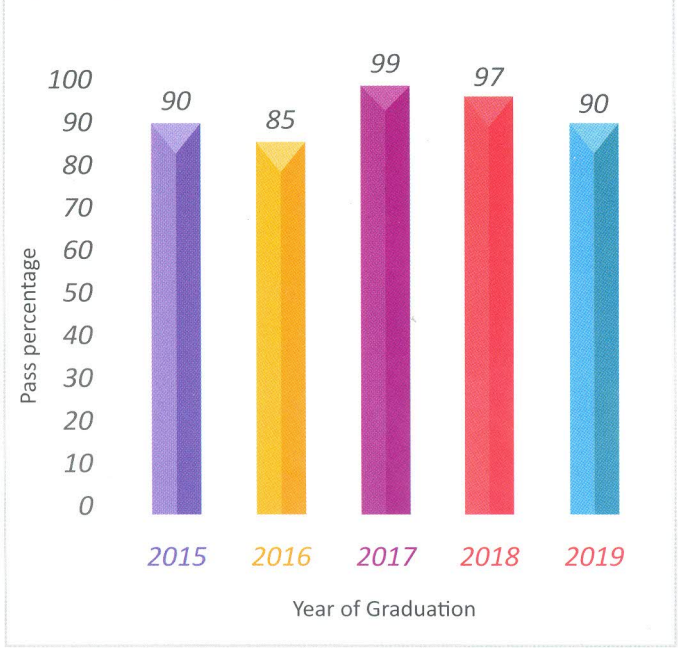
Ph.D	Pursuing Ph.D	M.Tech
03	13	04

Experience

Over 15 Years	10 to 20 Years	5 to 10 Years
01	10	09

Academic Results and OU Ranks

Results



University Ranks:

Year	OU Ranks
2018-19	1, 5 & 6
2017-18	1,3,6,7,9 &10
2016-17	6 & 7
2015-16	4
2014-15	9
2013-14	3,8 & 9

R & D Projects

Year	Title of the Project	Name of the Faculty
2018 - 2019	Automated Navigation System with Indoor Assistance for the Blind (ANISAB)	Dr. Mousmi Ajay Chaurasia, Professor Mr. Shaik Rasool, Assistant Professor
2018 - 2019	Wall Climbing Robot for Surveillance with AI technology (WCRAI)	Dr. Mousmi Ajay Chaurasia, Professor Mr. Shaik Rasool, Assistant Professor
2018 - 2019	Trebax Chess Board	Dr. Devasish Pal, Professor Mr. M. A. Rasheed, Assistant Professor
2018 - 2019	The Next Generation Band	Dr. Mousmi Ajay Chaurasia, Professor Dr. Ishrat Meera Mirzana, Professor Mr. Shaik Rasool, Assistant Professor

Infrastructure

ITD is well equipped with 7 classrooms one of which is a smart classroom, 1 seminar hall, 5 programming and 1 non-programming labs. Each programming lab has 23 computer systems and three dedicated servers. Printers are available in all labs for the usage of students and faculties. There is 1 departmental library catering to the needs of students and faculty.

Software

Oracle 11g Client, WEKA Tool, MySQL, KEIL, IBM Rational Suite Enterprise, MATLAB, IBM Rational Software Architect.

Workshops/Conferences Organized

Academic Year	Workshop/Conference	Date	Duration
2018-19	Computational Intelligence: Theory, Implementations & Applications.	22 - 27 Nov 2018	1 Week
2017-18	Data Science Applications and Practices in "R"	13 - 18 Dec 2017	1 Week
2015-16	Big Data Analytics	15 - 17 Dec 2015	3 Days
2014-15	Computer Programming	16 - 21 June 2014	1 Week

Professional Chapters

Name of the Chapter	Year of Establishment	Faculty Coordinator	Membership
ACM	2010	Mr. Md. Afroze, Assistant Professor, ITD	60
IEEE-CIS	2015	Dr. Mousmi Ajay Chaurasia, Professor, ITD	15

BASIC SCIENCES & HUMANITIES DEPARTMENT

About the Department

The fundamental principles of Engineering & Technology are provided by the various branches of Basic Sciences and Humanities. In the initial semesters of the Engineering programmes, these courses help the freshers aquire the necessary theoretical basics and practical skills in the areas of Mathematics, Physical Sciences and English.

In the increasingly globalized work spaces, effective communication skills, gender senitivity and work ethics have gained prominence. In recent years there is a lot of emphasis for the learners to get an exposer of constitutional provisions, traditional knowledge bases and technical competence in research industry. Exposure in these areas is also imparted by this department.

The Basic Sciences and Humanities Department has been set up recently comprising of the following sections which are headed by coordinators who report to the Head of the BS & H Department.

1. Mathematics
2. Physics
3. Chemistry
4. English

The Orators' Club, under English Section, is a platform for the budding writers, poets, and orators which furnish them with necessary soft skills and life skills and thus contributes to shape their personality.

Infrastructure

There are two spacious laboratories in the Physics section which can accommodate sixty students at a time. While one laboratory is based on instrumentation experiments, the other is an optics laboratory. The Chemistry section has three laboratories, two of which have facilities for instrumental chemical analysis and one for volumetric analysis. All laboratories are equipped with latest digital and analytical instruments.

The highlight of the English section is the Computer Assisted Language Learning (CALL) laboratory which is equipped with 25 computers for enhancing the learners' communication skills through SKY pronunciation suite. The other two laboratories in the Department are interactive labs in which activities like role play, debate, group discussion, mock interviews and presentations are carried out.

Faculty

The BS & H Department has 22 qualified and experienced faculty members spread across the four sections. The Mathematics section has 7 faculty members and the remaining sections of Physics, Chemistry and English have 5 faculty members each. The average experience of the faculty is 16 years.

The faculty research interests include areas of ELT, Linguistics, Indian & American Literature effective language teaching strategies, molecular modeling, drug design, synthetic organic chemistry, glasses, material sciences, solar cells astrophysics, applied mathematics dealing with fluid mechanics, finite element method and graph theory. The faculty have published 23 papers in journals and conferences in the last five years and four books.

Cadre

Professors	Associate Professors	Assistant Professors	Total Faculty
01	06	15	22

Qualifications

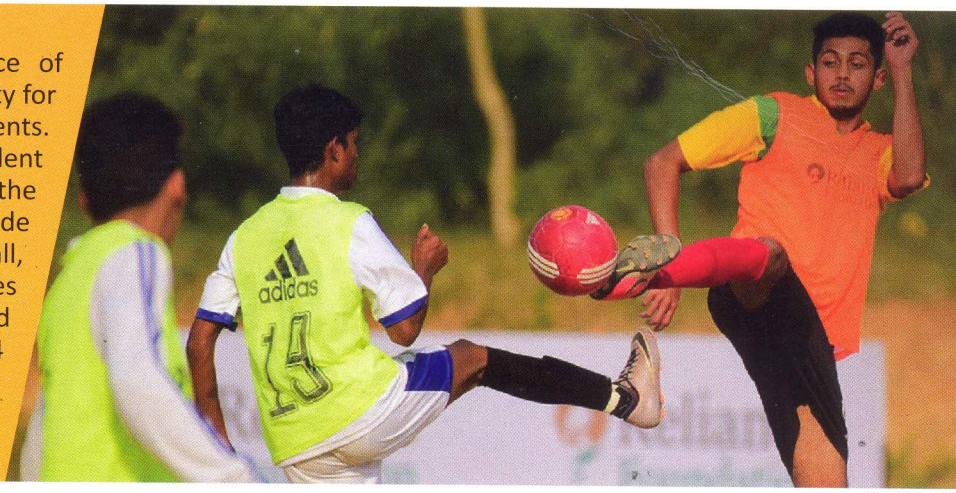
Ph.D	Pursuing Ph.D.	M.A./M.Sc./M.Phil.
14	04	04

Experience

Over 20 Years	10 to 20 Years	5 to 10 Years
06	11	05

SPORTS

The institution recognizes the importance of sports as an essential extra-curricular activity for the overall development of the students. Towards this end, it has established excellent outdoor & indoor sports facilities in the campus. The outdoor playfields include football, cricket, basketball, volleyball, badminton & tennis. The indoor facilities comprise of athletics, table tennis, chess and carroms. A gymnasium with 12 station and 4 station multi gyms, exercise cycles, bench press and weight lifting equipment are the highlights of the facility.



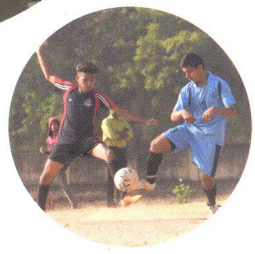
Sports Development Council

The 'Sports Development Council' (SDC) of Sultan-ul-Uloom Education Society has appointed qualified coaches for training the basketball, cricket and football teams. The SDC organizes the 'Telangana Inter Engineering Tournaments' every year in which basketball and football teams participate. The campus has a sophisticated flood-lighted basketball court which is used for the tournament.

MJCET has also been organizing 'Inter-Collegiate Football Tournament' for the Amjad Ali Khan rolling Trophy for the past 30 years on behalf of the Osmania University.

MJCET NATIONAL RANKING 2018 - 2019

INDIA TODAY	28th among top 200	THE WEEK	42nd among top 164
OUTLOOK	62nd among top 100	THE TIMES OF INDIA	36th among top 100 5th among top 25 in Telangana



MUFFAKHAM JAH

COLLEGE OF ENGINEERING & TECHNOLOGY

Mount Pleasant, 8-2-249 to 257, Road No. 3
Banjara Hills, Hyderabad - 500 034
Telangana, India

Phone: 040-2328 0301, 2328 0305
Fax: 040-2335 3428
e-mail: principal@mjcollege.ac.in
www.mjcollege.ac.in