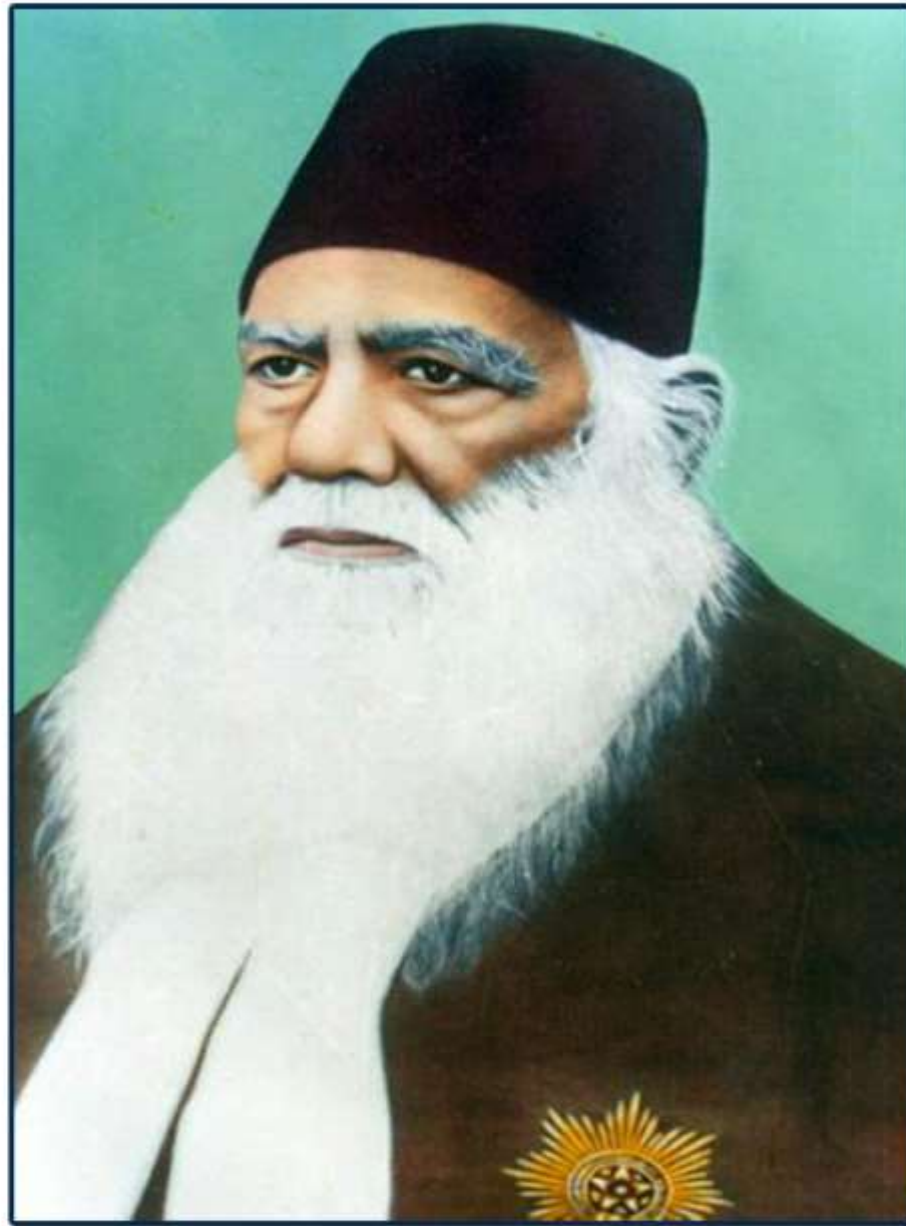


PLACEMENT BROCHURE 2013 - 14

Zakir Husain College Of Engg & Tech





“The purpose of education has always been to enable a man to develop his intellectual powers to the full so that he may grasp the significance of any situation that arises, that he may know the difference between right and wrong and gain the ability to contemplate the divine mysteries of nature. Education should strengthen his character, help him to look after himself and concentrate on the life to come.”

Sir Syed Ahmed Khan

Founder - AMU
(1817 - 1898)

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Vision Statement

“ To contribute to India and World through excellence in technical education and research and serve as a valuable resource for industry and society ”

Mission Statement

“To emerge as a center of excellence for education & training undergraduate and postgraduate and doctorate students in different disciplines of Engineering & Technology without any discrimination based on gender, religion, cast, creed and region”

“To create & develop a strong R&D infrastructure”

“To undertake collaborative projects which offer opportunities for long term interaction with academia & industry”

“To create congenial atmosphere for teaching, training and research with a view to develop a technically sound, ethically strong & morally elevated human resource, which could serve mankind at national, as well as global levels”

Message from Dean

ZHCET is one of the oldest institutes of our country & has been providing technical education since many years. Its aim is to produce quality engineers who are technically sound, morally strong and responsible citizens of our country, besides providing quality technical education irrespective of caste, creed & religion.

The alumni of ZHCET have brought laurels to the college at all levels-national, international national and social level. This is a proof of our earnest endeavour for contributing to the overall development of the country & mankind as a whole. Our alumni are placed across the academic, industrial and administrative sectors as well.

To achieve technical expertise we have an excellent faculty comprising of well qualified teachers with many years of teaching experience. Besides knowledge the students are provided with well equipped labs, wi-fi enabled campus and a state of the art on-campus library.

For inculcating the necessary soft skills and to prepare the students for industry there is a Training & Placement Office(TPO) in ZHCET which has been working very enthusiastically and effectively towards coordinating the placement process and to train the students for placements in reputed organisations. I congratulate Prof. (Mrs) Tabassum Naqvi for her dedicated & sincere efforts in ensuring the placements of the students & for contributing to the all round growth of the TPO.

I also congratulate the staff of TPO & the student placement coordinators for their contribution towards the whole process.



Prof Hamid Ali

Dean
Faculty Of Engg & Tech

Message from Principal

ZHCET has been one of the oldest institutions of the country providing quality technical education at par with the industry standards. The B.Tech. & M.Tech. programmes have been designed to make the students learn the different aspects of engineering and act as pioneers in the contemporary competitive environment. In fact, it is the testimony to one of the key strengths of AMU, an institution of National importance, The dynamism is expressed through path-breaking innovations in both, its programmes & research, to keep abreast with the latest. Globally accepted as a vibrant seat of academic & professional excellence, ZHCET is known for its innovative approach, academic rigor & strong culture. Today, thousands of our engineers, managers & entrepreneurs are active across the globe.



The special effort to recruit talented faculty & stringent admission procedures to select brilliant students across the country ensures a pool of formidable intellectual capital at any given time in the campus. This helps in healthy and dynamic exchange of ideas which incubates leaders of the corporate world.

Needless to say, the students of ZHCET have been exhibiting leadership qualities & passion to serve the society as responsible managers of the corporate world, true to the AMU tradition. Students of the earlier batches have carved out a niche for themselves as assets to the organizations. I feel confident that this batch of professionals will be another feather in the illustrious crown of ZHCET. I wish them all the very best in their future endeavour.

Prof. Ekram Husain

ME, Ph.D. (IISC)

Email: principal_zh@yahoo.com
ehusain2001@gmail.com

Message from Training & Placement Officer

"I feel our students have the necessary skills & ability to quickly become a successful & valued member of any organization. Their skills include:

Excellent organizational, time management skills which they develop during their study period. They develop excellent communication skills during their course of studies as they are required to present lectures, seminars to large groups of people. Seminars is an integral part of the curriculum where they present lectures on new technological development.



Our students have sound knowledge of their respective fields as the curriculum is revised frequently as per the needs of the industry. Students of this college enjoy working with people from many different backgrounds, they are team player but they are also capable of working alone using their own initiative. They are keen problem solver & take a great deal of pride in helping people.


Our students are taught to work in an organized & methodical manner with a high degree of accuracy often writing reports and articles detailing their findings. The students are instrumental in writing reports and papers to external bodies which they gain due to participation in various events.

The students here display a high caliber of technical qualities, which helps them in solving difficult problems. They have full grasp & knowledge of their discipline and have an excellent attitude towards innovation & progress. The students are actively involved in extracurricular activities such as sports, NCC, GD's, organizing cultural & literary programs etc which help them in their overall personality development.

I am sure that they will have good working relationship with their bosses and thus I recommend them for a position at your firm and I am confident that they will be an outstanding staff member."

Prof. (Mrs) Tabassum Naqvi

Training & Placement Officer

A flag is shown flying against a cloudy sky. The flag has a white section on the left with black Arabic calligraphy and a red section on the right. The calligraphy includes the words 'MUSLIM' and 'HAR'. The red section is a solid color. The flag is attached to a black pole.

The foundation stone was laid on 21st November, 1938 and it was named after a great scholar of AMU and former President of India

Dr Zakir Husain

ZHCET

Leading the Innovation

Leaders in Innovation

Zakir Husain College of Engineering and Technology has been one of the oldest institutions of the country providing quality technical education for around 75 years. It is an in-house engineering college of Aligarh Muslim University. The university itself is over 135 years old and since its inception has been providing quality education to one and all without any discrimination on any grounds whatsoever. Currently, the university offers around 280 courses in modern as well as traditional branches. Around 30,000 students are enrolled in it whose minds are honed by over 2000 highly reputed faculty members. To impart western technical education, faculty on engineering and technology was established in the university.

The foundation stone of ZHCET was laid on 21st November, 1938. The graduate and post-graduate programmes have been designed to make the students learn the different aspects of engineering and act as pioneers in the contemporary competitive environment. The dynamism is expressed through path-breaking innovations in both, its programmes & research, to keep abreast with the latest. The Doctoral programs were started in 1969 and has been the center of research and innovation since their inception.

Globally accepted as a vibrant seat of academic & professional excellence, ZHCET is known for innovative approach, academic rigor and strong culture. Today, thousands of our engineers, managers & entrepreneurs whose technical know-how was trained at ZHCET are now active across the globe.

The college has 11 academic department/faculties. Seven of them are offering Bachelor Of Technology, Master Of Technology, Bachelor Of Engineering and Post Doctorate degrees, one of them is offering Bachelor of Architecture degree and rest three departments are support departments offering Master of Technology, M.Phil and P.h.D. degrees. The college has distributed 19 doctorate degrees in the current session. It is also a partially residential institution with majority of students being allocated residential facilities in the university campus itself. They are accommodated in 5 hostels which are further sub-divided into a number of halls.

NBA ACCREDITATION

One of the few colleges in the country to have all their courses accredited by the National Board of Accreditation(NBA) for a period of 5 years (maximum duration awarded) with effect from 10th February, 2009.

NPIU RANKING

The National Project Implementation Unit (NPIU) which works under the Ministry of Human Resource and Development, Government of India recently ranked ZHCET at number 4 out of the 236 institutes surveyed for the purpose of funding under Technical Education Quality Improvement Program (TEQUIP). The survey all the major government and private colleges, including all National Institute of Technology.

MIT OPEN COURSEWARE (OCW)

It is a web-based publication of virtually all the MIT (Massachusetts Institute of Technology) course content. The program has been realized in partnership with ZHCET and the open courseware henceforth is available to the students. It stimulates their knowledge base by giving them a peak into one of the greatest institutes of the world.


RESEARCH PERFORMANCE

Department of Science & Technology (DST) has sanctioned its prestigious PURSE scheme to support the departments of ZHCET as more than 1500 research papers have been published by the faculties (in the last 5 years). It has also awarded INR 1.3 Crores under FIST scheme to Department of Electrical engineering and 1.4 Crores to Department of Mechanical engineering.

Department of Electronics has been accorded the prestigious Department Research Support (DST) status by the University Grant Commission (UGC).

PRIVATE RANKINGS

The institute has been constantly ranked among the top institutes in the country by various private magazines/ survey industries. Aligarh Muslim University recently was ranked 5th best university in the country by the India Today - Nielsen Survey.



“Under the TEQUIP Programme of Government of India, ZHCET has received a grant of INR 10 Crore, one of the largest amounts given to any government college”

“ Identified out of 400 institutions across the country and put in the list of seven selected institutions to be upgraded to the level of

IIT”



Academic **Strucutre**

Academic Structure

“The ZHCET family comprises of 11 Academic departments and admits 1500 students for the undergraduate programmes and an average of 250 students for the different post graduate/Phd programmes.”

The greatest strength of a man is his ability to adapt. The sheer number of the courses offered and the flexibility provided in them ensures a dynamic development of the student. Structured so as to adapt to the various changes in the technical scenario, it helps in development and diversification of the thinking capacity. The Open Electives/ give the students the opportunity to pursue the courses that fit their interest. The seven academic departments are imparting the best education in their respective field of study.

Mechanical Engineering

The Department of Mechanical Engineering was established with the start of the curriculum in 1941 at Aligarh Muslim University. It is renowned for its faculty and alumni all over the globe and is one of the oldest departments of the engineering college. The department is one of the biggest departments of the university with a total students strength of 502. It presently offers programs in Ph.D., M.Tech., B.Tech. and B.E. (Evening). The admissions to various programs in the Department are done on the basis of All-India entrance tests conducted by the University and selections are made on merit.

The Department conducts M.Tech. programs in the three areas, namely:

- a. Thermal Engineering
- b. industrial & Production Engineering
- c. Machine Design

The total number of seats is 42. Fifty candidates are also admitted each year in B.E. (Evening) program on the basis of written competitive test on All- India basis. The department offers about 85 UG (for B.Tech, B.E. programs) and 33 PG (for M.Tech., Ph.D. programs) courses in various subjects and disciplines of Mechanical Engineering. The faculty has published over 600 research papers in the International & National Journals of repute.

An Instructional & Research Resource Centre (IRRC) has been established in the dept.

to impart modern education through Multimedia Projection system including dozens of audiovisual cassettes on state of the art on current topics, software packages, over forty computers and fully furnished Conference room. Also conducted are a series of lectures by invited experts from Industries and institutions.

Labs & Facilities:

Turbine & Pump, Fluid Mechanics, Aerodynamics & Turbo machines, Microprocessor Applications, Heat Power, Computational Fluid Dynamics (CFD), Internal Combustion Engines (IC), Refrigeration & Air Conditioning, Combustion Pollution Control, Heat Transfer, Machinery Dynamics, Stress Analysis & Tribology, Production Engineering, Computers and Robotics, Material Science, Metrology & CNC, Quality Refrigeration & Air conditioning, Assurance, CAD & CAM.

Electrical Engineering

The department of Electrical Engineering was established in 1935 with an intake of 20 students and first graduate program started in 1940. A new phase of major developments in the department started during third five-year plan when the intake was raised to 90. A postgraduate course in "Instrumentation and Control", the first postgraduate course in the Faculty of Engineering & Technology, was sanctioned and started in 1964 with an intake of 10 students.

Since then, it has been availing various National & International scholarships to send the faculty members abroad, boosted by Quality Improvement Program (QIP). The faculty members of the EED have till date, published more than 800 research papers. The EED has organized several shortterm training courses and the national level seminars/conferences for young Engineers in industries and academics. The faculty members have doctoral degrees in diverse fields.

Labs & Facilities:

Power System Dynamics and Control (including Parallel AC/DC & Simultaneous AC/DC Transmission system), Electrical Machines & Drives, High Voltage Engineering, Control systems, Instrumentation, Biomedical Engineering, Microprocessors & Computers, Center for Renewable Energy, Artificial Intelligence and Soft Computing.

“Under the MODROB and TAPTEC programmes of the All India Council for Technical Education (AICTE), a large number of projects of the faculty have been funded this year”



“ ZHCET has been ranked fifth in the Faculty Student Ratio computed by the Outlook Magazine for engineering colleges all over India. (2011-12)”

“Aligarh Muslim University secured 5th spot on India Today - Neilsen Universities Rankings 2012”

Electronics Engineering

Created in 1988, the department has made remarkable progress in terms of developing infrastructure, updating course structure & syllabi and upgrading laboratories. The department has credit of being first department in the faculty of Engineering & Technology to have the Departmental Research Support (DRS) scheme funded by UGC. Currently phase-II of this scheme is running in the department. In addition, the department has floated a number of projects to various agencies including DRDO, MHRD, UGC, etc.

The Department offers an undergraduate (B. Tech.) course in Electronics Engineering and two postgraduate (M. Tech.) courses in

- Electronic Circuits & Systems Design
- Communication & Information System

The subjects offered at both, UG & PG levels cover almost all upcoming and areas of significance. Beside UG & PG programmes the Department encourages research activities in the emerging areas and provides facilities for the same. In addition, the faculty members are also working in collaboration with universities abroad on joint research projects. Also some faculty members regularly visit abroad for collaborative research.

Labs & Facilities:

Electronic Circuits & Systems Lab, Communication Systems & Radar Lab, Communication Systems Simulation Lab, IC Design & Fabrication Lab, Digital Systems & Microprocessors Lab, Instrumentation & Control Lab, Optical Communication Lab, Signal Processing Lab, Computer Lab, Telematics Lab, DRS Lab etc. Computational Hardware/Software Infrastructure and **Direct Access to the DEC-ALPHA HP Mainframe.**

Civil Engineering

Established in 1942, the Department offers an undergraduate course (B.Tech) in Civil Engineering & three post graduate (M Tech) course in

- Structural Engineering
- Hydraulic Structures
- Environmental Engineering

At the Doctorate level, the department offers Ph.D in Structural

Engineering, Hydraulic Structures, Environmental Engineering & Geotechnical Engineering. The training and education of the personnel in a wide range of fields has been a constant endeavour of the Department over these years. The Department has highly qualified faculty supported by excellent laboratories and state of art computing facilities. The Department owns a rich library having over 12000 text and reference books. Many research projects sponsored by AICTE, UGC, DST, CSIR, DRDO, CST (U.P), Ministry of Environment and Forest (MOEF), have been successfully completed and many are under progress. The faculty members have published 62 Research papers in international journals and 85 in National journals and proceedings of various International and National Seminars, Conferences, Symposia and Workshops. The faculty members have also published several textbooks and prepared appreciable number of Technical Reports, Laboratory Manuals and other Teaching Aids.

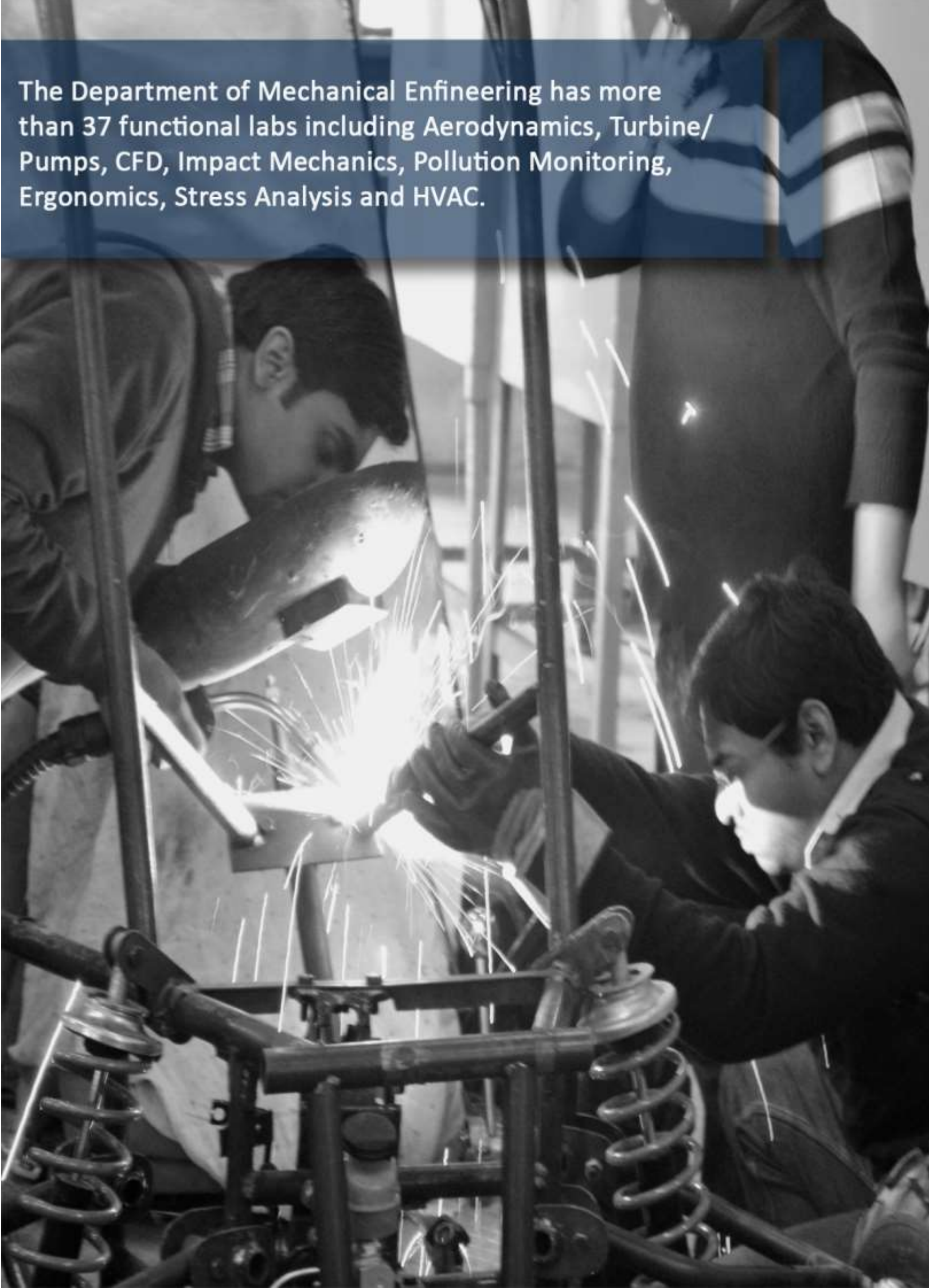
The Department organized two international conferences one in 2009 and other in 2011 in the area of environmental engineering in collaboration with foreign university. In addition a number of seminars and workshops including training programs have also been successfully organized in last five years. There has been tremendous thrust in the consultancy work in the Department over the last five years. The revenue generated from externally funded R&D projects and consultancies has been whopping 250 lac rupees

Labs & Facilities:

Structural Engg (Fiber Composites & New Construction Materials, Transient Dynamic Analysis, Structural Masonry, Numerical Modeling & Optimization Techniques, Reliability Analysis & Risk Assessment of Structures, Earthquake Resistant Low Cost Housing, Wind Engineering, Corrosion Engineering, Fly ash Utilization, Hydraulic Engg (Sediment Transport & Flow through Porous Media, Geotechnical Engineering, Environmental Engineering (Hazardous and Solid Waste Management, Physicochemical Treatment Processes, Corrosion Control, Air Pollution).

Accolades won by faculties

Khosla Award
Suchit Kumar memorial Award
Institution of Engineers
ISET Best Paper award
Deshpande Award
Jai Krishna Award
Sir Arthur Cotton Memorial
Gold Medal
and many more.....



The Department of Mechanical Engineering has more than 37 functional labs including Aerodynamics, Turbine/Pumps, CFD, Impact Mechanics, Pollution Monitoring, Ergonomics, Stress Analysis and HVAC.

Chemical Engineering

The idea of the creation of the Department of Chemical Engineering at Aligarh Muslim University was born with the visit of His Highness Sheikh Zayed Bin Sultan Al-Nahyan of the UAE in 1975. The approval of the UGC was obtained for the creation of the Department in the fifth Five Year Plan and it came into existence in 1978, when the first undergraduate course in Chemical Engineering started with an intake of thirty students.

A Post-graduate Diploma in Petroleum Processing was started in the Department in 1987, which was upgraded to full-fledged degree in M.Sc. Engg. (Petroleum Processing) in 1988. A Masters programme of M.Tech. (Chemical Engineering) was started in 1999 with specialization in

- a. Process Modeling and Simulation
- b. Computer Aided Design of Process Plant

Two PhDs have been completed in the Department and two have been submitted. Work on three PhDs is under progress.

Labs & Facilities

Fuel Testing & Resources Testing, Heat & Mass Transfer Operation Testing, Fluid Mechanics & Transport Analysis, Fluid Particle Operations, Thermodynamics and Chemical Reactions Engg, Process Instrumentation & Control, Product Development & Testing, Safety & Environment Laboratory.

Petroleum Studies

The UGC sanctioned the establishment of Institute of Petroleum Studies & Chemical Engineering in 1983, in a phased manner. Later this Institute was renamed as the Department of Petroleum Studies under the Faculty of Engineering & Technology. The Department is offering a Four year B.Tech (Petrochemical Engineering) & a Two year M.Tech (Petroleum Processing & Petrochemical Engineering) Programs. The Department is successfully serving the much felt need of deploying young men in petro based industries and is bridging the gap between academic institutions and industrial requirements.

“The Maulana Azad Library is the second largest library in ASIA and apart from having more than 1,100,000 books it contains collections of great historical importance.”

“Three UGC aided Centers, namely Center of Islamic Architecture, Center for Disaster Management (CE) and Center of Renewable Energy (EE) has been set up in last 5 years”

It is pioneer in the northern India to offer the courses with focus for the training of the students in the field of:

- a. Petroleum
- b. Petrochemicals,
- c. Polymer and Gas processing

It houses well equipped laboratories in the areas of crude evaluation, petroleum products testing, petroleum processing, fuel combustion studies, instrumental analysis, process control and instrumentation, polymer, reaction engineering, etc. The department with its well qualified staff is actively engaged in teaching and research and also contributes to the residential life of campus.

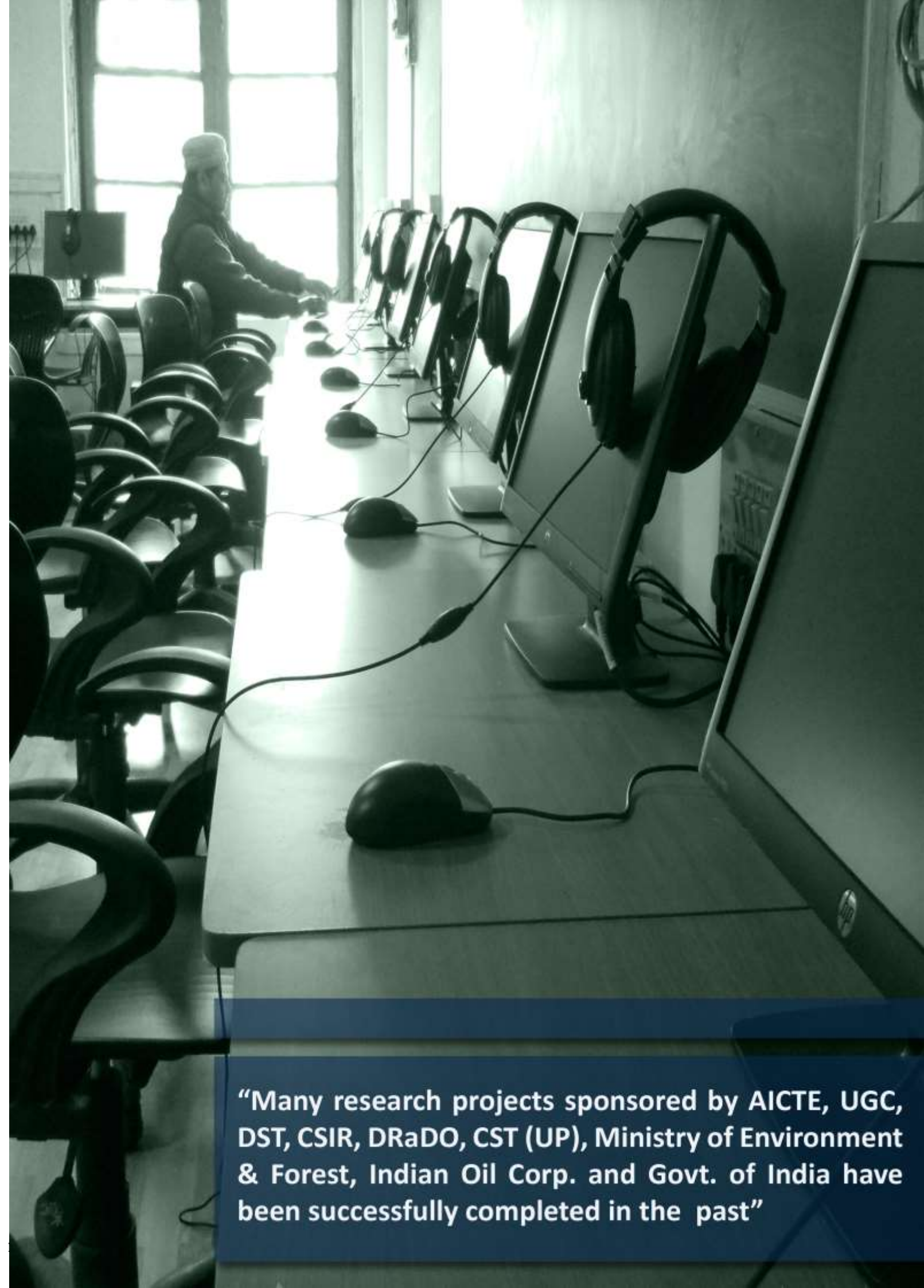
Labs & Facilities:

Crude Evaluation Lab, Petroleum Products Testing Labs, Fuel Technology & Combustion Lab, Computer controlled process control lab, Reaction Engineering & High Pressure Lab, Instrumental Analysis Lab, Computational Lab.

Computer Engineering

The Department of Computer Engineering was created in the Faculty of Engineering in the year 1991. The Department is currently running an eight Semester B. Tech. programme in Computer Engineering and a four semester M.Tech programme in Computer Science & Engineering with specialization in Software Engineering. The Department also offers Ph.D. Programme in emerging areas of Computer Engineering.

There are several state of the art equipment including desk top Computers and Servers based on Windows, and Linux platforms. The teaching staffs are actively involved in R&D activities in the emerging areas of Computer Engineering. Faculty members of the Department of Computer Engineering are highly qualified, educated from reputed institute, dedicated and dynamic. Currently research is being carried out in the areas of Computer Networks, Artificial Intelligence & Soft Computing, Parallel Computing, Web Mining & Searching, Multimedia Technologies, Embedded Systems, E-Learning and software Engineering.



“Many research projects sponsored by AICTE, UGC, DST, CSIR, DRaDO, CST (UP), Ministry of Environment & Forest, Indian Oil Corp. and Govt. of India have been successfully completed in the past”



The success of a Department is best judged by the performance of its students. Our B.Tech students have achieved almost 100% placement in prestigious both at national as well as international level. The students have fared commendably in various national as well as international level competitions like, GATE, CAT, GRE, SAT etc. They have secured admissions to higher studies at institutions of repute.

Labs & Facilities:

Software Laboratory, Hardware Laboratory, Advanced Computing Laboratory, Networking Laboratory, Basic Computing Laboratory, etc.

Department of Architecture

Department of Architecture is the youngest department of ZHCET. It started in the year 1993-94 from internal resources and was established as a Department in 1998. UGC also adopted the department in 1998 i.e. IX plan (1997-2002). The course is approved by Council of Architects (COA) & AICTE. The department offers Bachelor of Architecture degree having intake of 20. The duration of study is 5 years.

The major thrust areas of study are: Islamic Architecture, Energy Efficiency, Urban Design, Sustainable Architecture & Development, Building Conservation. The students maintain their competitive edge by incorporating tools such as Revit- the industry standard for BIM (Building Information Modeling), Sketch Up etc in their Design Process. The department aims to develop into a great seat of learning for young Architects with high intellectual qualities to meet the challenges of the changing scenario of the world. It requires taking stock of what exists and what needs to be developed/ required in tune with time as per standards prescribed by COA in a phased manner. The department has "Centre (of excellence) of Islamic Architecture" sanctioned by the UGC during the XI Plan. The faculty members also chair the University Conservation Cell for conservation of Heritage Structures.

LATEST MILESTONES ACHIEVED:

- 2008: M.Tech in Nano Technology, with DST funding of INR 2.75 Crores under Nano Mission, GOI
- 2009: All Undergraduate programs accredited by NBA for a period Of 5 years
- 2009: Ergonomics Reseach Division established
- 2011: Biosignal Research Division established
- 2012: 93 additional scholarships to M.Tech students (under TEQIP - II fund)

Various departments also organizes parallel short term courses in collaboration with other institutes such as CDAC (Pune), Innsvent (Bangalore).

Admission Process



“More than 45,000 students applied for the entrance exam that took place at 5 centers for an intake of 400 students.....”