

About Chemical Engineering:

Chemical Engineering involves the design, development and operation of complex industrial processes, to safely and efficiently produce products with minimum of environmental impact.

Chemical Engineers have traditionally played a key role in industries such as petroleum processing, fertilizers, energy, food, agriculture, polymers, synthetic fibers, pharmaceuticals, ceramics, gases, consumer products and specialty chemicals. With the recent developments in the world, chemical engineers can also find opportunities in the field of pollution prevention technologies, new drugs, development and the manufacture of artificial organs and limbs etc.

Chemical engineering is highly interdisciplinary and is continuously evolving with advances in other branches of engineering, sciences and humanities. It takes the inputs and applies the knowledge to areas of biomedical sciences, nanotechnology, drug delivery, micro electro-mechanical sensors (MEMS) and devices, artificial intelligence for sustainable development of the world.



Laboratories:

The Department has four well-equipped laboratories in order to enable the students to understand the practical aspects of the theoretical knowledge imparted to them in the classrooms.

The four laboratories are:

(1) Transport Processes (Unit Operations) Laboratory consists of experiments on Fluid flow, Mechanical Operations, Heat Transfer, Mass Transfer

(2) Chemical Reaction Engineering Laboratory consists of various reactors like the batch reactor, plug flow reactor, continuously stirred tank reactor, semi-batch reactor and setups to study the residence time distribution in a continuously stirred tank reactor and in a plug flow reactor.

(3) Instrumentation and Process Control Laboratory has several systems to study the closed loop feedback control of temperature, pressure, level and flow, using different type of controller modes like proportional, proportional-integral (PI) and proportional-integral-derivative (PID), responses of interacting and non-interacting systems, pneumatic control valve trainer etc.

(4) Process Simulation Laboratory is equipped with computer terminals having licensed CHEMCAD-7 software provided by Chemstations Inc. for simulation studies.



CHEMICAL ENGINEERING

UNIVERSITY INSTITUTE OF
ENGINEERING & TECHNOLOGY
(SCHOOL OF ENGINEERING AND TECHNOLOGY)

CSJM UNIVERSITY, KANPUR



About the Department:

Keeping in view the need to provide competent and well-trained professionals for the chemical industries of this country, the Department of Chemical Engineering was established in 1996 in UIET, CSJM University. The students are provided with the skills and knowledge required to confront technical challenges so that they can assume leadership positions within the chemical and other associated industries in future.

The Department offers a 4 year B. Tech degree in Chemical Engineering with an intake of 66 students through an entrance examination as decided by the University/State Government. The current annual fee for the course is Rs. 83,643

Courses taught include:

- Compulsory courses on Fluid Mechanics, Heat Transfer, Mass Transfer, Reaction Engineering, Chemical Engineering Thermodynamics, Process Control, Chemical Technology, Process Equipment Design, Transport Phenomena etc.
- Wide variety of electives on Numerical Methods, Optimization Techniques, Safety and Hazard Prevention, Environmental Pollution and Control, Polymer Engineering, Petroleum Engineering, Non-conventional Energy Sources etc.
- All classrooms are equipped with LCD projectors for effective teaching and presentation.

Career opportunities:

Our graduates can be found working in both public and private sector organizations:



Several students go for higher studies (M. Tech and PhD) to IITs and NITs



Faculty:

The department has well qualified and experienced faculty members:

- Dr. Brishti Mitra (PhD, IIT Kanpur)
- Dr. Vinay K. Sachan (PhD, IIT Kanpur)
- Dr. Arun K Gupta (PhD, IIT Kanpur)
- Dr. Abhishek K. Chandra (PhD, MNNIT Allahabad)
- Dr. Praveen B. Patel (PhD, MNNIT Allahabad)
- Dr. Umesh C. Sharma (PhD, MNNIT Allahabad)
- Mr. Vaibhav Saxena (B. Tech-M. Tech, IIT Kharagpur)



For Queries:

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