

FREQUENTLY ASKED QUESTIONS

BTech Chemical Engineering, GSFC University

1. What's the difference between Chemical Engineering and Chemistry?

- Chemistry focuses on developing novel materials and processes, analyzing substances, measuring the physical, chemical and bio-chemical properties of substances and investigating theories.
- Chemical engineering focuses more on the design, manufacturing and operation of plants and machinery; turning new ideas into useful products for profit, scaling up the entire production processes which are invented in a chemistry laboratory on a small scale.
- So basically if a chemist can answer about the structure of the chemical compound or how a reaction is possible between two different molecules, a chemical engineer can answer how large scale products can be manufactured using these compounds or which equipment and processing conditions are more suitable to get more profit.

2. How is Chemical Engineering at GSFC University different from other universities?

- The campus situated within the vicinity of the esteemed organization of GSFC Limited gives immediate exposure to the students to the real time aspects of Chemical Engineering.
- Cutting edge curriculum meeting industry demands.
- Industrial internships provision for overall development of students focussing the curriculum application and allied sectors.
- Access to 22 process plants of GSFC Limited along with internship opportunities in GACL, L&T, GFL, IOCL, Deepak Nitrate, GNFC etc.
- Fully equipped laboratory facilities for indulging students in the basic knowledge for becoming industry ready.
- Qualified faculty members from reputed universities like IIT, NIT, etc.
- Continuous linkage of experts from industry, research and academics for overall development of students.

3. What are the potential career paths for chemical engineers?

Chemical Engineers find career opportunities in processing industries, plant operations and research & development sectors. Specifically to address the sectors Chemical Engineers can build a career in different aspects such as

- Petroleum Industries
- Instrumentation and control systems.
- Design of process plant.
- Petrochemicals, plastics and rubber industries
- Fertilizer industry, glass and specialty chemicals.
- Pharmaceutical, healthcare, food and drink industries.
- Waste and water treatment, environmental regulations and recycling.
- Research in all the above fields and in academics.

4. How does Chemical Engineering GSFCU provide Industrial exposure to students ?

- The GSFC University in Vadodara, Gujarat is situated at the heart of the chemical belt comprising of major chemical industries like GSFC Limited, IOCL, GACL, Reliance - IPCL, Prakash Chemicals, Deepak Nitrite in the nearby vicinity along-with various chemical industries like ONGC, Reliance Jamnagar Refinery, Atul Chemicals, etc.in others parts of Gujarat.
- For industrial exposure, internships are organized for students focussing the curriculum application and allied sectors after every semester throughout the engineering program, followed by the final six months of industrial project in the last semester. Apart from this students are provided with immediate access to GSFC limited plants to look for concepts which are taught in class during the curriculum proceedings.

5. What are the laboratory facilities in Chemical Engineering at GSFC University?

Well equipped laboratories for conducting experiments on Chemistry , Mass Transfer, Heat transfer, Fluid Flow Operations, Chemical Reaction Engineering, Mechanical Operations Instrumentation and Process Control etc.

6. What are the courses taught in Chemical Engineering at GSFC University?

- Core courses like Mass Transfer Operations, Heat Transfer Operations, Process Equipment Design, Modeling Simulation Optimization, Fluid Flow Operations, etc. are offered in Chemical Engineering at GSFC University.
- Apart from the core chemical engineering elective subjects like Petroleum Refining Engineering, Plant Utilities, Polymer Science & Technology, Energy Technology, Industrial Management, Bioprocess Engineering are also offered.

- Keeping abreast with the latest developments in chemical fields, several courses are offered matching the emerging technologies like Industrial Pollution Control, Chemical Process Safety, Advanced Separation Techniques, Corrosion science, Process Technology, Soft Skills & Technical Writing and Environmental Science, and also MOOC courses are offered via platform of NPTEL to students.

7. Is Hostel facility available on campus?

Fully developed, safe and secured hostel facilities with canteen available within the GSFC Fertilizernagar Township for both girls and boys with a total capacity of 72 rooms for boys and 20 rooms for girls. All the hostels are Wi-Fi enabled and well furnished with entertainment, food and other essential infrastructure. Maintaining the COVID protocol at present only one student is allowed per room in the hostel.

8. Is there any sports facility available on campus?

GSFC University has indoor and outdoor sports facilities like badminton, cricket, golf, swimming and gym.

9. Apart from curricular activities, are there any co-curricular and extracurricular activities or platforms in chemical engineering at GSFC University?

- Along with the course curriculum, the students of chemical engineering also participate in various co-curricular and extra-curricular activities through different student managed clubs like Environmental Club, Photography Club, Robotics, Cultural Club, Sports Club, etc. and specially AIChE GSFCU student chapter.
- AIChE (American Institute of Chemical Engineers) student chapters are a great way for chemical engineering students to connect both locally and globally with other students and experts in the field of chemical engineering all over the world for networking, scholarships, career placement, education opportunities etc. Any student enrolled in a curriculum in Chemical Engineering, GSFCU is eligible for a free student membership in AIChE . It is a completely student managed chapter who organize and take part in different events. Our students have won Rs.10,000 prize money in the Chem-e-Car competition organized by AIChE.

10. What is the placement scenario after completing Chemical Engineering in GSFCU?

- Our students have been placed in reputed industries like GSFC Ltd., Alembic Pharma, Prakash Chemicals, Sterling Biotech, Atul Ltd., Deepak Nitrate and Axtel Industries.

- Apart from this students are also encouraged to give examinations and pursue career growth in Public Sector Undertakings (PSU's) like Bhabha Atomic Research Centre (BARC), IOCL, ONGC, BPCL, HPCL, SAIL etc. Many of our students are pursuing higher studies in several international institutes abroad.
- Students also have exposure to the incubation and innovation center at GSFC University named GSFC University Incubation, Innovation, Technology & Applied Research Centre (GUITAR); which helps them orient, develop, tinker and create their own business platforms as a career path option.

11. What are the other facilities and infrastructure in GSFC University?

The University is located on the outskirts of Vadodara city. Campus lies within the sprawling and lush green surroundings of GSFC Ltd. which enables students to relax, interact and study. Recently an open-air Amphitheatre was inaugurated and a New Lab Building (NLB) is getting ready to be operative soon. Some of the established facilities on the campus are tabulated below:

- Library with Digital & Printed Resources
- Wi-Fi enabled campus
- Medical facilities with hospital & ambulance service
- Bank & ATM facility
- Cafeteria
- GSFC's officers club
- Golf Course

12. How is GSFC University campus girl friendly?

The Campus is situated inside the GSFC Ltd township, which has 24 x 7 surveillance. The University also offers comfortable and convenient residence for girls. The residential complex provides accommodation on a sharing basis and ensures safety and well-being for all girls. The complex is designed to give the residents a sense of home and living in a big family.

13. Do you provide transportation facilities to reach GSFC University?

The University campus can be reached by public transport from Vadodara city. All the buses going to Dashrath village can be used for this purpose. The University also runs

buses on chargeable basis as per University timing. The information regarding the same can be collected from the administration office.

13. How to apply for admission ?

To know the admission procedure and other details please visit <https://www.gsfcuni.edu.in/apply-for-admission> and register yourself.