

ME (Chemical Engineering), Intake: 24; Year of starting: 2014-15

Preamble to M.E (Chemical Engineering) programme

Chemical Engineering is a vibrant discipline with a central role in many new and emerging technologies - to impact across all scales - systems, processes, products, and molecules. It is fair to say that today the chemical engineer on a professional platform is highly acknowledged by industry and society at large. The intellectual opportunities and career paths for the profession are exciting. Chemical Engineers create innovative solutions to important industrial and societal problems in areas such as development of clean energy sources, advancement of life sciences, production of pharmaceuticals, responsible environmental stewardship, and discovery and production of new materials.

Department of Chemical Engineering of G H Patel College of Engineering & Technology (GCET) has started M.E. (Chemical Engineering) programme under Gujarat Technological University (GTU) from the academic year 2014-15. Our undergraduate programme (B.E), which is accredited by the National Board of Accreditation, has so far produced 17 batches of graduates, and we hope to continue our high academic standard by introducing a research-oriented and industry-linked M.E Programme for all the prospective students.

Chemical Engineering is dynamic and evolving. It provides many solutions to problems facing industries in the pharmaceutical, biotechnological, oil, energy and food and drink sectors. It is vital to many issues affecting our quality of life; such as better and more economical processes to reduce the environmental burden, and more delicious and longer lasting food due to the right combination of chemistry, ingredients and processing. Chemical engineering now extends beyond its traditional roots in oil and gas processing. In this course you will learn about the aspects of chemical engineering that deal with the design and development of processes and products.

Objective

A Master's degree provides additional breadth and depth of knowledge, positioning graduates for technical leadership and specialization in industry. Candidates develop skills such as analysis, resourcefulness, ingenuity, responsibility and perseverance through research activities. These skills make employees more successful and give them greater opportunity to work on more interesting projects.

The economy of the future will be driven by innovation and knowledge. R&D to fuel innovation is largely conducted by postgraduate degree holders, yet India lags seriously in producing them. A Master's degree in Chemical Engineering will definitely provide additional breadth and depth of knowledge, positioning graduates for technical leadership and specialization in industry. Candidates develop skills such as analysis, resourcefulness, ingenuity, responsibility and perseverance through research activities. These skills make employees more successful and give them greater opportunity to work on more interesting projects.

Research

Our faculty members have involved themselves in basic and applied research in several priority areas of Chemical and biochemical engineering. The faculty members have a good frequency of publications in peer reviewed national and international journals. The presence of Sophisticated Instrumentation Centre for Advanced Research & Testing (SICART), A DST supported organization under our management Charutar Vidya Mandal (CVM), has become stimulus to the research and development in the campus. Our research strengths are in the design and characterization of products, in heat and mass transfer, fluid flow, particle technology, separation processes and materials engineering across chemical, biological and physical systems. We shall collaborate with near-by industry and with the leading research organizations nationally.