

## COURSES OFFERED AT HMRITM

Affiliated to Guru Gobind Singh Inraprastha University, and approved by All India Council For Technical Education (AICTE), New Delhi, the HMR INSTITUTE OF TECHNOLOGY & MANAGEMENT offers 4-year

### DURATION OF THE B.TECH. COURSES

1. The Course shall be of four academic years' duration and conducted in eight semesters, each semester having duration of sixteen weeks. The scheme of study and examination for the First Year (1 & 11 Semesters) shall be the same for all branches.
2. The calendar of events in respect of the courses shall be fixed by the University from time to time.
3. Examination for all the subjects of all the eight semesters will be conducted after the end of each semester, except when there are no candidates appearing for any subject.

### ELECTRONICS & COMMUNICATION ENGINEERING(ECE)

Electronics aims at making the life of human beings comfortable. Communication brings them together. The vast application of electronics and the rapid advancements in the field of communications makes the study of this branch a coveted option.

The electronics department concentrates on advance topics as instrumentation, digital electronics, integrated circuits, analog communication, electromagnetic waves etc.

The Department's teaching and research areas include Network, Microprocessor, Communications, Signal and Image Processing, Pattern Recognition, Electronic Circuit, Solid State Electronics, Microwave Electronics, System and Control, Biomedical Electronics, VLSI, CAD, Parallel and Distributed processing. Development of non-technical skills such as communication and team work is also emphasised in this program.

### COMPUTER SCIENCE ENGINEERING(CSE)

Computers have become an indispensable part of our lives. An aid to solving problems of any magnitude, they offer vast opportunities for critical thinking and trigger the analytical process in a human mind. It is a versatile field that lends its services to almost every sphere of human activity. As a branch of Engineering, a course in Computer Science helps the student to put to use the knowledge and skills gained in all possible areas and contribute towards a better way of life for the Generation Next.

There is an unlimited scope for a computer science engineer. Career opportunities include developing software systems for a diverse range of applications such as user interfaces, networks, databases, forecasting, world wide web support, medical communications, satellite and embedded systems, artificial intelligence and neural networks. There are unlimited self employment opportunities also in this exciting field.

### INFORMATION TECHNOLOGY(IT)

Information Science is a field that has shrunk the world, brought distant places closer, made man get in touch with data and people with the speed and power of lightening! The advancements in this sphere have been unbelievably tremendous. In the modern tech-savy world, Information Science as a branch of Engineering has been luring students because of its vast scope and opportunities. The main focus of this branch is the design and implementation of information systems.

This course aims at training the student in designing and managing computerized data processing and decision support. The program is technical-oriented, emphasizing the design and implementation aspects of large scale information systems as well as the traditional managerial and organizational issues.

Career opportunities in this field include developing and maintaining software systems including online internet transactions and security, database management and network design. The course stimulates interest in exploring new fields and create new areas of information systems.

### MECHANICAL & AUTOMATION ENGINEERING(MAE)

The main objective of this branch is to meet the present day industry requirements efficiently and effectively and to impart the necessary skills and knowledge so that the best and the brightest mechanical engineers are produced.

Mechanical engineers are required in almost every sector of the industry. Since the tremendous impact of globalization has been in the field of mechanical manufacturing, a mechanical engineering student has certainly an edge over others. The areas of employment are machine tools, railway engineering, aerospace, the automobile industry, industrial and office machinery, farm equipment, petroleum, pharmaceuticals, fabricated metal products, pulp and paper, heating and ventilation systems and so on. Students of this course develop basic skills of fitting, welding, sheet metal, and pass on to be trained in material testing and foundry. They acquire unique skills in the areas of CAD & CAM, CNC, Robotics, finite element analysis, heat transfer, IC Engines, Hydraulics machinery etc. All this leads to an independent, constructive and creative thinking.

Besides classroom activity and practical sessions, a mechanical engineering student needs to be trained in the industry environment. Short term training courses would be organized to enrich knowledge and skills with the help of professional bodies and institutions like Foreman Training Institute, CMTI - Bangalore, and CAD Center.

## ELECTRICAL & ELECTRONICS ENGINEERING(EEE)

The course aims at producing quality engineers with a strong grasp of both the important fields of Electrical and Electronics and provide them with the Knowledge and skills required for the infinite possibilities of the Future.

With varied career opportunities in the fields of Electrical, Electronics, Communication, Computer Industry, this branch of engineering covers latest areas like Renewable Energy Sources, Fuzzy Logic Control, Solid State Devices and Relays, Artificial Intelligence etc. It is to be noted that PSPICE and Power System Simulation Labs are used in solving electrical circuits and networks with the help of computers.

The Course stimulates, evolves and involves the intellect of the student in a highly effective manner. Being a core branch, there is a strong foundation laid and this helps the student to confidently tackle any problem and give dynamic solutions. Advanced projects in the 6th and 8th semesters help the students of this branch to compete and succeed in the choice of a career in the fields of the Future.

## BUSINESS ADMINISTRATION

HMRITM started its 2-year full time MBA programme in 2007. The learning environment in the department is built, sustained and being grown to meet the learning aspirations of enthusiastic students and to inculcate in them strong conceptual fundamentals and necessary skills to manage business in future. Department endeavors to make students, effective change agent to take leadership role in Global arena. The department explores various practical avenues of management with the support of its dedicated faculty which keep abreast with the latest developments in various areas of Management. Our results have been excellent and HMRITM got the privilege of producing a student with the highest marks in 1st semester itself, among all the colleges of GGSIPU.