

## **COMPUTER SCIENCE AND ENGINEERING**

### **Vision**

To become a leader of education, research and innovation in computing world and to produce professional who are globally recognised as innovative and well prepared.

### **Mission**

1. To create, share and disseminate knowledge through research and education in computing technology.
2. To train the students in different aspects of computing technology for enhancing, augmenting and updating their technical knowledge.
3. To inculcate among the students the spirit of teamwork and professionalism.

### **B. Tech. in Computer Science & Engineering**

#### **Programme Educational Objectives (PEO's)**

1. To inculcate the fundamentals of the mathematics, science and engineering disciplines to develop ability for the formulation & analysis of the new challenges and opportunities of the computer technology.
2. To develop the technical and design aspects of software for coming up with the novel engineering solutions and efficient product developments.
3. To assist the students in the pursuit of the successful career by adopting the ethical practices and social responsibility.
4. To provide the students soft skill capabilities required by the national as well as international competency.
5. To elevate cognizance in the students towards the life-long learning.
6. To give students the knowledge of the contemporary technologies, practical experiences and possibilities in the field of computing technology to develop leadership qualities.

#### **Programme Specific Objectives (PSO's)**

1. To be able to use knowledge to identify research gaps and hence to transform them into reality.
2. Apply the theoretical foundations of the computing technology for the automation needs of industry and society.

#### **Programme Outcomes (PO's)**

1. The students will develop the ability towards the application of fundamental knowledge of computing, mathematics, algorithms and computer science & engineering precepts and rationales for developing the solutions of the critical engineering problems.

2. The under-graduating students will be able to model and carry out the experiments by using the fundamental knowledge of computer science & engineering discipline and derive the conclusions by analysing and interpreting the data.
3. The students will be able to analyse, design, implement and assess a computer-based information system, procedure, module or program to fulfil the requirements along with the consideration of economical, social, privacy and reliability constraints.
4. The students will be able to perform efficaciously in multi-disciplinary teams.
5. The students will develop the analytical skills to critically analyze, recognize, formulate and devise solutions to the engineering problems by using the adequate computing and engineering skills and knowledge.
6. The students will have the awareness towards the professional, ethical practices, legal, security & social consequences and obligation.
7. The students will have the efficient speaking skill and written/interpersonal communication skills.
8. To impart the exhaustive education in the students required to understand and analyze the local and global consequences of computer science & engineering solutions ranging from individuals and organizations to society.
9. The students will develop the realization of the requirement of and the ability to indulge in maintaining professional growth and unending learning.
10. The students will have the cognition towards the current issues and problems.
11. The students will possess the ability to utilize the knowledge of innovative computing equipment's required for engineering tasks.
12. The students will be able to apply the design and evolution precepts in the development of software and hardware computer systems of variable complications.

## **Department of Computer Science & Engineering**

### **Vision**

To become a leader of education, research and innovation in computing world and to produce professional who are globally recognised as innovative and well prepared.

### **Mission**

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- To train the students in different aspects of computing technology for enhancing, augmenting and updating their technical knowledge.
- To inculcate among the students the spirit of team work and professionalism.

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**Department of Computer Sc. & Engineering**  
**MADAN MOHAN MALVIYA UNIVERSITY OF TECHNOLOGY**  
**GORAKHPUR-273 010, INDIA**

**M. TECH. (COMPUTER SCIENCE & ENGINEERING)**

**PROGRAM EDUCATIONAL OBJECTIVES (PEOs)**

1. To be able to go for higher studies, Research & Development and Entrepreneurships in the cutting-edge computing environment.
2. Prepare a responsible citizen responsive to issues of our country that are affected by the application of computing technology.
3. To enhance the employability of the graduates in public/private organization and Institutes.
4. To develop leadership attitude, professional ethical values, and positive team culture.
5. To Serve ever-changing needs of the society with a pragmatic perception.

**PROGRAM OUTCOMES (POs)**

1. Ability for the designing of the solutions of the problem in rapidly changing computing paradigm.
2. Ability to design a system, component, or process to meet out the desired needs within realistic constraints such as economic, environmental, social, ethical, health and safety.
3. Ability to function on multidisciplinary teams.

**PROGRAM SPECIFIC OUTCOMES(PSOs)**

1. Ability to be lifelong learner to adapt innovation.
2. Ability to learn the best practices regarding ideating, innovating and to be able to attain successful career with globally employable capabilities.
3. Ability to be open to international cultures and demands.