INTEGRATED B.TECH.-M.TECH. COMPUTER SCIENCE AND ENGINEERING

PROGRAMME EDUCATIONAL OBJECTIVES
PROGRAMME OUTCOMES
PROGRAMME SPECIFIC OUTCOMES

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

UNIVERSITY SCHOOL OF INFORMATION AND COMMMUNICATION TECHNOLOGY
GAUTAM BUDDHA UNIVERSITY, GREATER NOIDA, UP, INDIA

PROGRAM EDUCATIONAL OBJECTIVES: INTEGRATED B.TECH.-M.TECH. CSE

DCSE PEO 1:

To develop students with in-depth knowledge of Computer Science, Computer Applications, Information Technology and also make them familiar to the latest trends in in the field of IT and Information systems which will provide a strong foundation to pursue career in education and computer industry for innovation, research and development.

DCSE PEO 2:

To develop leadership qualities, to lead and work in a team in a professional environment, demonstrate professional integrity and feel responsibility towards the country at an appropriate level in order to address the issues in a responsive, ethical and innovative manner.

DCSE PEO 3:

To excel in career involving higher order and challenging tasks and try to become a part of success and growth and work in collaboration with all organisation.

DCSE PEO 4:

To produce students who are effective in multidisciplinary fields and technology by showing their active participation for betterment of the society.

DCSE PROGRAM OUTCOMES : INTEGRATED B.TECH.-M.TECH. CSE

DCSE PO 1: Engineering Knowledge

Apply the engineering knowledge of mathematics, science, engineering fundamentals with engineering specialization to the solution of complex engineering problems.

DCSE PO 2: Problem Analysis:

Identify, formulate, analyse and give solutions to complex engineering problems by reaching to substantiated conclusion using first principles of mathematics, natural sciences, and engineering sciences.

DCSE PO 3: Design and Development of Solutions

Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

DCSE PO 4: Conduct Investigations of Complex Problems

Use practical-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

DCSE PO 5: Modern Tool Usage

Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including predictive analysis, computational intelligence and optimization techniques to complex engineering activities with an understanding of the limitations.

DCSE PO 6: The Engineer and Society

Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

DCSE PO 7: Environment and Sustainability

Understand the impact of the professional artificial intelligence based engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

DCSE PO 8: Ethics

Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

DCSE PO 9: Individual and Teamwork

Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

DCSE PO 10: Communication

Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

DCSE PO11: Project Management and Finance

Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

DCSE PO12: Life-Long Learning

Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

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DCSE PSO1:

Experiment and prepare programming concepts and provide new ideas and innovations to fulfil the needs of today's generation and also towards societal issues in the field of Computer Science and Engineering.

DCSE PSO2:

Analyse, design and construct computers and computer based systems with the help of more ongoing technologies like artificial intelligence, system security, algorithms, big data analytics, block chain, cyber security, robotics and networking for efficient design of varying complexity. Finally specify, design, develop, test and maintain usable systems that behave reliably and efficiently.

DCSE PSO3:

Apply standard and advanced upgraded technologies related to computer science field, like blockchain, digital image processing, internet of things, wireless networks, fog and cloud computing and mobile computing to create and deliver a quality product that can also be further used for Research, Education and Training and/or E-governance.