B.Tech Information Technology-HITS

Vision & Mission

Vision

To be a globally renowned academic department for quality education and research in the field of Information Technology with ethical values and social commitment.

Mission

- **M 1:** To impart comprehensive technical education to produce highly competent IT professionals and entrepreneurs.
- **M 2:** To provide an academic environment for state of the art research with ethical standards.
- **M 3:** To conduct knowledge transfer programs to enhance the technical knowledge in the field of Information Technology.

PEOs

The program is expected to enable the students to

- **PEO 1:** Demonstrate comprehensive knowledge in IT solution development leading to excellence in professional career and/or higher education including research.
- **PEO 2:** Provide solutions making use of the knowledge gained in Artificial Intelligence, Cloud Computing, Big Data, Cyber Security and Communication.
- **PEO 3:** Adapt themselves to continuously changing technologies to develop innovative applications with ethical and social commitment.

PSOs

At the end of this Program, graduates will be able to

- **PSO 1:** Acquire an ability to use the algorithm's technique and tools for the development of software applications related to Information Technology.
- **PSO 2:** Design, develop and test software intensive systems for IT Industry to provide solutions to real world problems.
- **PSO 3:** Apply the knowledge in Machine learning and Artificial Intelligence to solve real time problems in Cyber Security and Big Data.

PROGRAM OUTCOMES (ALIGNED WITH GRADUATE ATTRIBUTES) (PO)

At the end of this program, graduates will be able to

- **PO 1: Engineering Knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- **PO 2: Problem Analysis:** Identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences and engineering sciences.
- **PO 3: Design/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.
- **PO 4: Conduct Investigations of Complex Problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions for complex problems.
- **PO 5: Modern Tool Usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
- **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.
- **PO 7: Environment and Sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- **PO 8: Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- **PO 9: Individual and Team Work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- **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.
- **PO 11: 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.
- **PO 12: Life-long Learning:** Recognize the need for, and have the preparation and ability to engage in independent and lifelong learning in the broadest context of technological change.