

## **(070-CSE-05-02) INFORMATION TECHNOLOGY (INDUSTRY INTEGRATED)**

### **Significance of the Programme:**

Bachelor of Technology in information and Communication Technology is a comprehensive course that includes studying the hardware and software along with the various communication technologies that help and aid current communication factors and technologies to run smooth and obstacle-free. It allows students to learn about image processing, data communication, networking, data mining, testing, and software design. This course focuses on communication and information devices and their applications such as radio, television, cellular phones, computer network hardware and software, satellite systems, and more.

### **Career Options:**

- Website Developer
- Database Analyst
- Online Community Coordinator
- Web Marketing Manager
- Digital Technology Engineer
- Communications Engineer
- Technical Director
- ICT Governance
- Network Administration

### **Programme Objectives:**

- To apply the theoretical concepts of computer engineering and practical knowledge in analysis, design and development of computing systems and interdisciplinary applications.
- Develop system solutions involving both hardware and software modules
- To work as a socially responsible professional by applying ICT principles in real-world problems.

### **Outcomes of the Program:**

- Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

- 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.
- The ability to develop computational knowledge and project development skills using innovative tools and techniques to solve problems in the areas related to Deep Learning, Machine learning, Artificial Intelligence.

**Major Course Modules:**

- Mathematics for AI & ML
- Programming & Algorithms
- Databases & Storage Systems
- Software Engineering
- Computer System Architecture, Signals and Systems, Introduction to Communication Systems, Analog Circuits, Microprocessor and Microcontroller
- Computer Networks- WSN, Satellite Communication and Networking