

## Department of Information Technology

### 1. About the Department:

The Department of Information Technology is focused on equipping students with the necessary skills and knowledge to thrive in the ever-evolving field of technology. The primary objective is to prepare students for careers in areas such as software development, systems analysis, network administration, cybersecurity, data science, and emerging technologies like artificial intelligence (AI) and the Internet of Things (IoT).

The department emphasizes a balanced approach, combining theoretical foundations with practical hands-on experience, ensuring that students gain a comprehensive understanding of IT concepts and are prepared to meet the demands of the industry.

### Industry Collaboration:

#### List of MoUs signed by the Dept. of IT:

- 1) Juniper Networks India Pvt. Ltd., Bangalore (MoA)
- 2) Zacco Cyber Security Private Limited, Coimbatore
- 3) KwantumG Research Labs Private Limited, Bangalore

#### Thrust Area:

- 1) Software Engineering
- 2) Networking
- 3) Cybersecurity
- 4) Data Science & Analytics
- 5) Quantum Computing

### 2. Facilities Available for Industry Collaboration

- State-of-the-art facilities and laboratories are available with the department to carry out the industry consultancy project, research and development activities

### 3. Consultancy Services

#### Focus Area for industry consultancy:

- 1) Custom Software Development
- 2) Design and development of Virtual and Augmented Reality Application
- 3) Web and Mobile Application Development
- 4) Designing and managing scalable cloud-based applications
- 5) Assisting in the implementation of BI tools like Tableau, Power BI, or custom dashboards to visualize key performance metrics and facilitate decision-making

### 4. Executive Development Programs

Digital Transformation: **Duration:** 2-3 Days

The above mentioned training programme focuses on how businesses can leverage emerging technologies for the innovation, and operational efficiency. The course covers digital strategy development, leading digital change, and adopting technologies that disrupt traditional business models.

#### Key Topics:

- Understanding Digital Transformation
- Developing a Digital Strategy
- Technology Adoption Models

- Leading Change in the Digital Era
- Case Studies of Successful Digital Transformation

### 1. Cybersecurity and Risk Management

**Duration:** 4-5 Days

Given the growing concerns around digital security, this program focuses on cybersecurity fundamentals and best practices to safeguard business systems and data. The course also covers risk management strategies to mitigate cyber threats.

#### **Key Topics:**

- Cybersecurity Fundamentals
- Risk Assessment and Management
- Protecting Sensitive Data and Systems
- Security Threats and Mitigation Techniques

### 2. IT Project Management and Agile Methodologies

**Duration:** 4-5 Days

The above mentioned training programme focuses on best practices for managing IT projects, emphasizing the Agile methodology. Participants will learn how to plan, execute, and monitor IT projects effectively, ensuring they are delivered on time and within budget.

#### **Key Topics:**

- Agile Methodology and Scrum Framework
- IT Project Lifecycle Management
- Risk Management in IT Projects
- Resource Planning and Cost Estimation
- Measuring Project Success and KPI

### 5. Research and Development Collaborations

The **Department of Information Technology (IT)** can collaborate with the industry for **Research and Development (R&D)** in the following critical areas and that can lead to impactful outcomes, technology transformation, technology advancement, and product development.

1. Quantum computing
2. Cloud Computing
3. Cybersecurity and Data Privacy
4. Augmented Reality (AR) and Virtual Reality (VR)
5. Smart Cities and Sustainable Technologies

### 6. Achievements and Success Stories

Industry consultancy and product developed by the students and faculty members of the department of Information Technology:

- ❖ Title of the product: Developing Google App script module. Company: KGIT Services Pvt. Ltd., Bangalore
- ❖ Title of the product: E-Learning platform for course related to quantum technology - Module 1 and Module 2. Company: KwantumG Research Labs Private Limited, Bangalore