

DEPARTMENT OF INFORMATION SYSTEMS

1. PROGRAMME AIMS AND RATIONALE

This programme is a cooperative education programme which focuses on the applications of information technology in business and leads to a career in business information technology. It is a broad-based programme, with core content ranging from computer programming to business analysis.

The programme has two major aims; to provide students with an understanding of the role of information technology in business; and to prepare them for leadership and consulting roles.

The programme teaches fundamental concepts as well as the application of information technology in business. In addition, graduates should be able to relate their university studies to the world of business and to offer employers a competitive advantage in business operations.

2. PROGRAMME LEARNING OUTCOMES

A. Knowledge and Understanding

At the end of this programme students should be able to demonstrate knowledge and understanding of:

- A1. The use of information technology within organizations
- A2. The fundamentals of business programming; the techniques used to develop business information systems
- A3. Current trends, technologies, products, and practices in business information systems.
- A4. Business processes and business analysis
- A5. Understanding of processes that support the delivery and management of information systems within a specific application environment
- A6. Innovative and efficient solutions to solve organizational problems
- A7. Information technology methods used to protect the confidentiality, integrity, and availability of information and its delivery systems
- A8. Professional, ethical, legal, security and social issues and responsibilities
- A9. The potential global impact of specific information systems solutions

A10. The definition, analysis, and application of information system requirements

B. Cognitive/Intellectual skills/Application of Knowledge

At the end of this programme students should be able to:

B1. Develop business applications

B2. Use current techniques, skills, and tools necessary for computing practice

B3. Design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs

B4. Solve quantitative business problems

B5. Evaluate and implement organizational planning, design, and integration of information systems solutions in a competitive environment

B6. Plan and design organizational communications infrastructure and networking topology

B7. Rapidly learn and apply emerging ICT technologies

B8. Improve business productivity using information technology and communicate at a professional level with clients, system users and peers

C. Communication/ICT/Numeracy/Analytic Techniques/Practical Skills

At the end of the programme students should be able to:

C1. Establish, from scratch, a small IT-based business of their own

C2. Offer IT business consultancy

C3. Apply analytical and critical thinking skills, and information systems concepts for solving organizational problems

C4. Analyze and interpret business data

C5. Design, implement, and administer effective information technology solutions based on requirements

C6. Analyze the local and global impact of computing on individuals, organizations, and society

C7. Justify the implementation of ICTs in any business enterprise

C8. Supervise and offer advice on ICT projects at all levels of business enterprises

C9. Follow and appreciate ICT trends and developments on global scale

C10. Commit to the professional and ethical standards established by related professional societies

D. General transferable skills

Having successfully completed the programme, students should be able to:

D1. Apply Information Technology to any form of business

D2. Perform analysis and interpretation of business data

D3. Improve strategic information management procedures and processes

D4. Demonstrate a thorough understanding of Business Systems Development within organizations

D5. Use information systems to support business processes and decision making within organizations

D6. Perform a leading role in the management of IT projects

D7. Identify and incorporate relevant ethical, legal, security, and social issues in a technology environment

D8. Use appropriate project management methods in the creation of an information technology project plan

D9. Work with others to develop software systems that meet the needs of society

D10. Demonstrate written and oral communication skills in a collaborative environment