

SCIENCE AND TECHNOLOGY

Data Transmission

Objectives

To prepare highly trained professionals capable of designing and developing information systems established nationwide and internationally, troubleshooting or improving processes within companies or organizations via information technology.

Student Profile

The student in this program should:

- Be interested in computer technology and telecommunications;
- Be able to observe and analyze;
- Be creative and proactive with a dynamic personality;
- Be organized;
- Have good interpersonal skills;
- Consistently keep abreast of new technological developments;
- Be fluent in English.

Areas for Potential Employment

Graduates of this program will be able to perform at levels of technological development as expert designers and developers of information systems based on computer technology and telecommunications, for those organizations that call for the use of computer resources for their optimal performance or for those dedicated to the development of the computer industry.

First Semester

- Introduction to Computer Science
- Computational Tools
- Basic Administration
- Algebra and Analytical Geometry
- Techniques for Oral and Written Expression

Second Semester

- Structured Programming
- Introduction to Accounting
- Differential and Integral Calculus
- Organizational Analysis
- Philosophical Anthropology

Third Semester

- Advanced Programming
- Data Structures
- Economic Engineering
- Principles of Cost Accounting
- Descriptive Statistics

Fourth Semester

- Computer Organization
- Database Design
- Systems Analysis and Design I
- Data Transmission I
- Inferential Statistics
- Quality Systems
- Human Resources Management

Fifth Semester

- Database Administration
- Systems Analysis and Design II
- Data Transmission II
- Operating Systems
- Computer Architecture
- Telephone Systems
- User Interface Design

Sixth Semester

- Open Multi-User Systems
- Management Information Systems
- Computer Network Administration
- Planning of Investment Project
- Advanced Operating Systems
- Communication Protocol I
- Software Project Administration

Seventh Semester

- Strategic Planning for Information Systems
- Research Methodology
- Legal Framework for Computer Science
- Professional Ethics
- Computer Network Design
- Communication Protocol II
- Closed Multi-User Systems

Eighth Semester

- Business Development
- Computer Science Seminar
- Internship
- Distributed Systems Design
- Multimedia Technology
- Expert Systems