



C-ID Descriptor

Computer Information Systems, Computer Concepts, Information Technology Concepts

Descriptor Details

- **Descriptor Title:** Computer Information Systems, Computer Concepts, Information Technology Concepts
- **C-ID Number:** 120
- **Units:** 3.0
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General Description

Examination of information technologies and information systems used in business. Focus on information systems, database management systems, networking, ethics and security, computer hardware, and software applications and development. Application of these concepts and methods through hands-on projects developing computer-based solutions to business problems.

Prerequisites

N/A

Corequisites

N/A

Advisories

N/A

Content

1. Information systems and information technology concepts
2. System and application software categories and concepts
3. Digital communication and networking concepts, systems, and applications, including machine-to-machine communication (IoT)
4. Computer and system infrastructure concepts, with a focus on Cloud Computing
5. Cybersecurity, cybercrime, and ethics concepts
6. Types of information systems and technologies used in organizations
7. Systems development life cycle concepts and activities
8. Organization and management of structured and unstructured data using database management systems and spreadsheets
9. Programming language categories, concepts, and algorithms
10. Practical exercises in electronic spreadsheet development
11. Practical exercises in using database software
12. Practical exercises in Internet technologies

Lab Activities

No information provided

Objectives

At the conclusion of this course, the student should be able to:

1. Describe existing and emerging information technologies and systems, and their impact on organizations and society.
2. Discuss the development and use of information technologies and information systems in organizations.
3. Solve common business problems using appropriate Information Technology applications and systems.

Evaluation Methods

Evaluation will include hands-on projects and a combination of examinations, presentations, discussions, or problem-solving assignments.

Textbooks

- Parsons, J., *New Perspectives on Computer Concepts – Comprehensive*, Cengage
- Rainer, R. K & Prince, B., *Introduction to Information Systems*, Wiley
- Martin, K., Evans, A. & Poatsy, M.A., *Technology in Action – Complete*, Pearson