INFORMATION SYSTEMS MANAGEMENT

Information Systems Management

Course Description:

This course is designed to provide students with an understanding of information systems management principles and practices. Topics covered will include database management, data analytics, network security, and cloud computing. Through a combination of lectures, case studies, and hands-on projects, students will develop the skills and knowledge needed to manage information systems effectively.

Course Goals:

- Understand the principles and practices of information systems management
- Develop the skills to design and manage databases effectively
- Learn how to analyze and interpret data using data analytics tools
- Gain insights into network security and risk management practices
- Understand the principles of cloud computing and its applications in business

Course Outline:

Week 1: Introduction to Information Systems Management

- Overview of information systems management
- The role of information systems in business
- Trends and challenges in information systems management

Week 2: Database Management

- Designing and developing databases
- Managing database operations and maintenance
- Ensuring data quality and security

Week 3: Data Analytics

- Understanding data analytics tools and techniques
- Analyzing and interpreting data using statistical methods
- Visualizing and presenting data effectively

Week 4: Network Security

- Understanding network security threats and vulnerabilities
- Implementing network security controls and policies
- Conducting risk assessments and audits

Week 5: Cloud Computing

- Understanding cloud computing and its applications in business
- Assessing the benefits and risks of cloud computing
- Developing and implementing a cloud computing strategy

Assessment and Evaluation:

Participation and Attendance: 10%
Homework Assignments: 30%
Midterm Exam: 20%
Final Exam: 40%

Required Readings:

1. Database Management Systems by Raghu Ramakrishnan and Johannes Gehrke
2. Data Analytics Made Accessible: 2023 Edition by Anil Maheshwari
3. Network Security Essentials: Applications and Standards by William Stallings
4. Cloud Computing: Concepts, Technology & Architecture by Thomas Erl, Ricardo Puttini, and Zaigham Mahmood
5. Information Systems Management by McNurlin, Sprague, and Bui
6. Data Science for Business: What You Need to Know about Data Mining and Data-Analytic Thinking by Foster Provost and Tom Fawcett
7. Computer Networking: A Top-Down Approach by James Kurose and Keith Ross
8. Cloud Computing: A Practical Approach for Learning and Implementation by Aman Ahuja and Pallavi Jain

Course Assignments:

1. Design and develop a database for a business application
2. Analyze and interpret data using data analytics tools and techniques
3. Develop a network security plan and implement network security controls
4. Develop and present a cloud computing strategy for a business

Classroom Policies:

- Attendance and participation are expected in every class.
- Late homework assignments will not be accepted without prior approval from the instructor. If you have an emergency or an unexpected situation that prevents you from completing an assignment on time, please contact the instructor as soon as possible.
- Academic dishonesty, including plagiarism and cheating, will not be tolerated and will result in a failing grade for the course. It is the responsibility of each student to ensure that their work is original and properly cited.
- Students are expected to treat each other and the instructor with respect and professionalism. Inappropriate behavior, including harassment and discrimination, will not be tolerated and may result in disciplinary action.
- Accommodations for students with disabilities are available through the Disability Services Office.

Course Resources:

- Online resources, including articles, videos, and tutorials, will be assigned throughout the course.
- Guest speakers from industry and academia will be invited to share their insights and experiences in information systems management.
- The course website will include links to information systems management resources and tools, such as software and hardware vendors, industry associations, and research reports.