MANAGEMENT INFORMATION SYSTEMS (MIS)

MIS 139 - Foundations of Academic Discovery
Foundations of Academic Discovery serves as the entry point to the Rock Integrated Studies Program. With its strong faculty-student interaction, the course promotes intellectual inquiry, critical and creative thinking, and computer skills needed for academic success. Through varied content, the course introduces students to academic discourse and information literacy while exploring topics such as diversity and inclusion and global awareness. This course will set students along the path to becoming engaged with issues and scholarship important to a 21st century education while they learn about themselves and their place in the world.

Credits: 3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1 or Freshman 2.
Enrollment limited to students with the ROCK STUDIES 2 STUDENT or ROCK STUDIES STUDENT attributes.

MIS 190 - Experimental
A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

MIS 198 - Selected Topics
A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

MIS 210 - Productivity Software
An in-depth, practical study of existing productivity software packages that focuses primarily on decision-support systems for microcomputers. Projects will involve the use of intermediate and advanced features of various software packages, as well as the use of several packages in finding computer-based solutions to information storage and retrieval problems.

Credits: 3
Term(s) Typically Offered: Offered Every Term

MIS 211 - Information Systems Application Development
The purpose of this course is to introduce the students to the fundamental concepts and models of application development so that they can understand the key processes related to building functioning applications and appreciate the complexity of application development. Students will learn the basic concepts of program design, data structures, programming, problem solving, programming logic and fundamental design techniques for event-drive programs. Program development will incorporate the program development life cycle: gathering requirements, designing a solution, implementing a solution in programming language and testing the completed application.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms

MIS 265 - Management Information Systems
Managerial and technological issues that are necessary to understand, establish, manage and use information systems in all functional areas of organizations.

Prerequisites: CPSC 210[D] or MIS 210[D]
[D] Requires minimum grade of D.
Credits: 3
Term(s) Typically Offered: Offered Fall & Spring Terms

MIS 290 - Experimental
A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

MIS 298 - Selected Topics
A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed

MIS 300 - Challenges of Computer Technology
An in-depth study of the critical issues related to the computerization of society. Ethical, legal, and moral issues raised by the evolution of computer technology will be discussed.

Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Thematic Thread(s): Conservation, Technology & Imagination, Transfer Thread Completion Course, United Stated in Global Context
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

MIS 301 - Practical Computer Security
A practical introduction to the threats present to the online, electronic community, and how to protect yourself and your organization from them. We will explore the connectivity structure of the Internet, along with the security and criminal threats to members of the online community. The legal, ethical and technical issues related to threats such as viruses, worms, and identity theft will be covered.

Prerequisites: CPSC 099[D] or CPSC 110[D] or CPSC 130[D] or CPSC 100[P]
[D] Requires minimum grade of D.
[P] Requires minimum grade of P.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

MIS 310 - Business Data Analysis and Visualization
This course covers how data analysts can process data sets from a variety of sources to create information that guides leaders in crafting strategy and tactics which allow an organization to survive and thrive in a turbulent environment. Students will review how business data analysis has been successfully used in the past and learn appropriate processes and a variety of techniques to accomplish effective analyses. Emphasis is on analyzing data, visualizing and interpreting the results of those analyses and translating results into clear and simple insights to aid managerial decision making.

Prerequisites: MIS 210[C] or STAT 152[C]
[C] Requires minimum grade of C.
Credits: 3
Term(s) Typically Offered: Offerings Vary
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.

MIS 323 - Data Base Systems
Database Systems is a study of relational database concepts as applied to comprehensive information systems. These concepts include data design; modeling; normalization; the use of Structured Query Language (SQL) to define, manipulate and test the database; programmatic access to a database; and practical issues faced by database developers.

Prerequisites: CPSC 130[D] or CPSC 146[D] or CPSC 210[D] or MIS 210[D]
[D] Requires minimum grade of D.
Credits: 3
Term(s) Typically Offered: Offered Fall & Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.
Enrollment is limited to students with a program in Information Systems.

MIS 328 - Exploring Big Data for Business I
Due to the explosion of social media and the computerization of every aspect of social and economic activity, large volumes of structured and unstructured data currently exist. They include weblogs, videos, speech recordings, photographs, health data, e-mails, Tweets and business data. Also, improvements in technology have led to the development of powerful computers that can store and process large volumes of data. This course is to introduce students to the essential information systems and technologies used in manipulating, storing, and analyzing big data. Students will be familiar with highly scalable systems that can be used to accept, store, and analyze large volumes of unstructured data in batchmode and/or real-time.

Prerequisites: MIS 210[C] and (ECON 219[C] or MGMT 219[C]) and (MIS 323[C] or CPSC 323[C])
[C] Requires minimum grade of C.
Credits: 3
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.
Enrollment limited to students in a Bachelor of Science degree.
Enrollment limited to students in the College of Business college.

MIS 333 - Introduction to Computer Forensics
This is a fundamental course which covers computer forensics. This class covers methods and tools for gaining forensic information from computer systems and networks. It includes case studies of cyber crimes as well as the application and management of cyber forensics. The course introduces students to forensics tools using hands-on experience and the Internet.

Prerequisites: CPSC 099[P] or CPSC 100[P] or CPSC 110[D] or CPSC 130[D] or CPSC 210[D] or MIS 210[D] or PE 202[D]
[P] Requires minimum grade of P.
[D] Requires minimum grade of D.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

MIS 353 - Business Data Communications and Technologies
This course provides an introduction and overview of computer networks and data communications. provides an understanding of the underlying concepts of computer networking, email, instant messaging (e.g. texting, multimedia messaging). Introduces several software packages used in business data communications. Emphasis is placed on terminology, techniques and issues in business data communications.

Prerequisites: CPSC 210[D] or MIS 210[D]
[D] Requires minimum grade of D.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

MIS 390 - Experimental
A unique and specifically focused course within the general purview of a department which intends to offer it on a "one time only" basis and not as a permanent part of the department's curriculum.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Enrollment limited to students with a semester level of Freshman 1, Freshman 2 or Sophomore 1.

MIS 398 - Selected Topics
A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

MIS 401 - Information Systems Security
This course covers key bodies of knowledge and specializations in security and privacy associated with information systems. The course explores the management of various technologies in emerging areas of information assurance including computer and network security, digital forensics, cryptography and biometrics. course concepts include information Assurance, Information Security Governance and Risk Management, Operations Security, Cryptography, Access Control, Physical Security, Telecommunications Security, Business Continuity and Disaster Recovery Planning, Legal and Ethical Issues.

Prerequisites: CPSC 301[D] or MIS 301[D]
[D] Requires minimum grade of D.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

MIS 403 - Introduction to Healthcare Information Systems
This course will give an introduction to computer-based information systems as they are applied to the health care industry. Topics will include characteristics of health care data, design and life cycle of HCIS, the information technology supporting HCIS and management issues.

Prerequisites: CPSC 210[D] or MIS 210[D]
[D] Requires minimum grade of D.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

MIS 413 - Systems Analysis
A course in computer-based information systems. Course content includes: foundations of information science, techniques for system development, information architectures, and resource allocations. Case studies are discussed and utilized as class projects.

Prerequisites: CPSC 323[D] or MIS 323[D]
[D] Requires minimum grade of D.
Credits: 3
Term(s) Typically Offered: Offered Fall Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

MIS 423 - Advanced Business Database Systems
This course will provide students with advanced skills in database implementation and management with a focus on business systems. It will provide students with a hands-on experience of client-server databases, and the skills to develop one using reputable enterprise relational database management system. They will develop knowledge of creating, querying and maintaining relational database. Students will also learn to use advanced Structured Query Language (SQL) extensively to create integrated business systems to access, retrieve and manipulate business data. Students taking this course are expected to have a basic understanding of relational database concepts, and knowledge of a programming language.

Prerequisite: MIS 323[C]
[C] Requires minimum grade of C.
Credits: 3
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.
Enrollment is limited to students with a program in Information Systems or Information Systems.
Enrollment limited to students in a Bachelor of Science degree.
Enrollment limited to students with the QUIE attribute.
Enrollment limited to students in the College of Business college.

MIS 428 - Exploring Big Data for Business II
This course focuses on Big Data tools and technologies. It is for students who want to become conversant with the terminology and the core concepts behind big data problems, applications, and systems. It is for those who want to start thinking about how utilizing big data might be useful in their business or career. Students will gain skills to implement data-driven approach to decision-making, develop big data solutions to create business intelligence and competitive advantage through the use of analytical techniques and Big Data.

Prerequisites: MIS 210[D] and (ECON 219[D] or MGMT 219[D]) and (MIS 323[D] or CPSC 323[D]) and MIS 328[D]
[D] Requires minimum grade of D.
Credits: 3
Enrollment limited to students with a semester level of Junior 1, Junior 2, Senior 1 or Senior 2.
Enrollment is limited to students with a program in Information Systems or Information Systems.
Enrollment limited to students in a Bachelor of Science degree.
Enrollment limited to students with the QUIE attribute.
Enrollment limited to students in the College of Business college.

MIS 443 - Project Management
An introduction to project management in the information systems, or IT development, area. Provides an understanding of the purpose, methods and benefits of process management by exposing the student to the concepts, practices, processes, tools and techniques used in process management for software development.

Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

MIS 450 - Internship
Professional work experience performed as an intern at selected agencies supervised both by the agency and by the Computer Science Department.

Credits: 1-12
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

MIS 453 - Fundamentals of Enterprise Architecture
This course explores the design, selection, implementation and management of enterprise IT solutions. The focus is on applications and their fit with the hosting organization.

Prerequisites: MIS 323[D] and MIS 413[D]
[D] Requires minimum grade of D.
Credits: 3
Term(s) Typically Offered: Offered Spring Terms
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

MIS 490 - Independent Study
Supervised study in a special interest area. Prerequisites: Two computer science courses selected from 370 or above, permission of the instructor, departmental chairperson, and dean of the college where the study will be conducted. Independent Study courses give students the opportunity to pursue research and/or studies that are not part of the university's traditional course offerings. Students work one on one or in small groups with faculty guidance and are typically required to submit a final paper or project as determined by the supervising professor.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.

MIS 498 - Selected Topics
A Selected Topics course is a normal, departmental offering which is directly related to the discipline, but because of its specialized nature, may not be able to be offered on a yearly basis by the department.

Credits: 1-3
Term(s) Typically Offered: Offered as Needed
Students with a semester level of Freshman 1, Freshman 2 or Sophomore 1 may **not** enroll.