

# INFORMATION SYSTEMS MANAGEMENT (ISM)

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## ISM2139C ADVANCED DATA VISUALIZATION WITH EXCEL (3.00 Credits)

This course will give students the ability to add BI techniques to Excel data analysis. The course goes beyond the capabilities of tables and charts and uses Pivot Charts, the Excel Data Model, and Power BI.

Total Contact Hrs: 48.00

Lecture Hrs: 24.00

Lab Hrs: 24.00

Complete all the courses in the following option:

- Prerequisite: CGS1510C (minimum grade: C)

## ISM2200C APPLIED BUSINESS ANALYTICS (3.00 Credits)

This course provides a foundation for students to understand and apply the core principles and tools of a relational database. This combination of knowledge and skills will allow students to create tables, manage data within those tables, and create customized reports derived from data stored in relational databases.

Total Contact Hrs: 48.00

Lecture Hrs: 16.00

Lab Hrs: 32.00

## ISM2308C AGILE FUNDAMENTALS (4.00 Credits)

This course will cover the Agile mindset, values, principles, and general concepts. Students will explore the concepts of what it means to "be agile while doing agile" and achieve professional agility. The course is the foundation to Project Management Delivery and does not include a specific focus on a particular agile methodology or framework. A focus will be provided to the International Consortium for Agile (ICAgile) content domains for the Agile Fundamentals professional certification (ICP). Students will understand the history of the agile movement, the distinctions among Agile values, principles, and practices, key aspects of value-driven development, adaptive planning techniques, and how to cultivate the collaboration with customers, within organizations and within teams.

Total Contact Hrs: 64.00

Lecture Hrs: 32.00

Lab Hrs: 32.00

## ISM2311C IT PROJECT MANAGEMENT: CAPSTONE (3.00 Credits)

This capstone course puts project management into an IT context, and thoroughly prepares students for the PMP or CAPM certification exam offered by the Project Management Institute (PMI).

Total Contact Hrs: 48.00

Lecture Hrs: 32.00

Lab Hrs: 16.00

Complete all the courses in the following option:

- Option 1 - Prerequisite: ACG2001 (minimum grade: C) and CIS2028 (minimum grade: C) and CIS2321C (minimum grade: C) and CTS2131C (minimum grade: C) and CTS2148C (minimum grade: C) and GEB2430 (minimum grade: C) and MAN2021 (minimum grade: C) and MNA1161 (minimum grade: C) and MNA2345 (minimum grade: C), Pre or Corequisite: CTS1214C (minimum grade: C)

## ISM2410C ANALYZING AND VISUALIZING DATA WITH POWER BI (4.00 Credits)

This course will enable students to maximize the value of their data assets by using Power BI. Students will design and build scalable data models, clean and transform data, and enable advanced analytic capabilities that provide meaningful business value through easy-to-comprehend data visualizations. Students will also gain a fundamental understanding of data repositories and data processing both on-premises and in the cloud. Practice will also be provided to thoroughly prepare students for a Microsoft Certification Exam in Analyzing Data with Microsoft Power BI.

Total Contact Hrs: 64.00

Lecture Hrs: 32.00

Lab Hrs: 32.00

Fees: LABORATORY FEE \$36.00

Complete all the courses in one of the following options:

- Option 1 - Prerequisite: COP1700C
- Option 2 - Prerequisite: COP2071C
- Option 3 - Prerequisite: ISM3212C

ISM3013C INFORMATION SYSTEMS MANAGEMENT (3.00 Credits)

This course introduces fundamental concepts of information systems and will explore approaches to managing technology. This course will equip students with an applied knowledge of management information systems for use in supporting business decisions. A focus will be provided on the application of IT service management best practices, enabling students to look at IT service management through an end-to-end operating model for the creation, delivery and continual improvement of tech-enabled product and services.

Total Contact Hrs: 48.00

Lecture Hrs: 32.00

Lab Hrs: 16.00

Fees: LABORATORY FEE \$40.00

ISM3054C WEB SYSTEMS AND TECHNOLOGIES (3.00 Credits)

This course covers the design, implementation and testing of web based applications including related software, databases, interfaces and digital media. It also covers social, ethical and security issues arising from the web and social software.

Total Contact Hrs: 48.00

Lecture Hrs: 32.00

Lab Hrs: 16.00

Fees: LABORATORY FEE \$44.00

ISM3212C DATASYS+ (3.00 Credits)

This course provides students with the knowledge and skills required to deploy, manage, and maintain databases, including employing the fundamentals of scripting and programming in a database environment while using security and business continuity best practices. Practice will also be provided to thoroughly prepare students for the DataSys + certification exam offered by CompTIA.

Total Contact Hrs: 48.00

Lecture Hrs: 24.00

Lab Hrs: 24.00

Fees: LABORATORY FEE \$38.00

ISM3309C AGILE PRODUCT OWNERSHIP (4.00 Credits)

This course will cover customer needs to effectively deliver valuable products and services through key agile practices such as adaptive prioritization and planning. Students will learn how to align backlogs to the product vision and balance the needs of the business, teams, and customers to maximize the value delivered. A focus will be provided to the International Consortium for Agile (ICAgile) content domains for the Agile Product Ownership professional certification.

Total Contact Hrs: 64.00

Lecture Hrs: 32.00

Lab Hrs: 32.00

Fees: LABORATORY FEE \$36.00

ISM3314C APPLIED PROJECT MANAGEMENT (3.00 Credits)

This course will enhance an understanding of Project Management through applied projects. Students will engage in project selection and initiation, work breakdown structure and scope management, scheduling, budgeting and cost analysis, quality control, project communication plans, project risk analysis, resource leveling and procurement issues. All activities will support the Project Management Institute (PMI) global standards, and the Project Management Body of Knowledge (PMBOK) standards.

Total Contact Hrs: 48.00

Lecture Hrs: 32.00

Lab Hrs: 16.00

Fees: LABORATORY FEE \$38.00

Complete all the courses in the following option:

- Prerequisite: CIS1513C (minimum grade: C)

ISM3545C DATA ANALYTICS (3.00 Credits)

This course is designed to introduce students to fundamental data concepts such as the difference between data and information, big data, and the process of manipulating and analyzing data through the use of statistics. It covers current topics relating to big data and explains how organizations use data to add value.

Total Contact Hrs: 48.00

Lecture Hrs: 24.00

Lab Hrs: 24.00

Fees: LABORATORY FEE \$100.00

Complete all the courses in the following option:

- Prerequisite: CGS1510C (minimum grade: C)

**ISM4201C APPLIED DATA INTEGRATION AND MANIPULATION (3.00 Credits)**

In this course, students extract data from a wide variety of data sources, such as files and relational data sources, perform data integration and transformation solutions, and load data into single or multiple destinations including data warehouses. Students will solve data integration business problems using best practices and troubleshooting techniques.

Total Contact Hrs: 48.00

Lecture Hrs: 24.00

Lab Hrs: 24.00

Fees: LABORATORY FEE \$36.00

Complete all the courses in the following option:

- Prerequisite: ISM3545C (minimum grade: C)

**ISM4318C AGILE PRACTITIONER (4.00 Credits)**

This course will cover the knowledge of agile principles and improve skills with agile techniques. Students will explore many approaches to agile such as Scrum, Kanban, Lean, extreme programming (XP) and test-driven development (TDD.) A focus will be given to Project Management Institutes (PMI) content domains for certification for agile practitioners, known as the PMI Agile Certified Practitioner (PMI-ACP).

Total Contact Hrs: 64.00

Lecture Hrs: 32.00

Lab Hrs: 32.00

Fees: LABORATORY FEE \$36.00

Complete all the courses in the following option:

- Prerequisite: CIS1513C (minimum grade: C)

**ISM4415C DATA REPORTING (4.00 Credits)**

This course provides intermediate level concepts and procedures for data manipulation and visualization. Using data visualization software, students will create various chart types and visualizations, use calculations for the purpose of data manipulation, use parameters to control data values, create visualizations using geo-mapping techniques, combine data sources for blending and prepare data for analysis.

Total Contact Hrs: 64.00

Lecture Hrs: 32.00

Lab Hrs: 32.00

Fees: LABORATORY FEE \$36.00

Complete all the courses in the following option:

- Prerequisite: ISM3545C (minimum grade: C)

**ISM4547C DATA VISUALIZATION (3.00 Credits)**

This course provides students with an understanding of data extraction and interpretation and their roles in creating business value. Topics covered include data quality, data visualization and exploration, and data structures and information policies. The course covers a variety of tools used for data analysis and gives the student an understanding of how to obtain, manipulate, and interpret data using current software and techniques.

Total Contact Hrs: 48.00

Lecture Hrs: 24.00

Lab Hrs: 24.00

Fees: LABORATORY FEE \$100.00

Complete all the courses in the following option:

- Prerequisite: ISM3545C (minimum grade: C)

**ISM4940 STEM IT INTERNSHIP (3.00 Credits)**

A course designed to provide training in a student's field of study through work experience. students are graded on the basis of documentation of learning acquired as reported by student and employer. Prerequisite: Co-Op Department approval. Student will be assigned specific course prefixes related to their academic major prior to registration. All students must contact the Co-operative Education Office to obtain registration approval.

Total Contact Hrs: 144.00

Other Hrs: 144.00