ISM 120  Bus Prob Solving w/ Comp Apps  3 Credit Hours
Full Course Title: Business Problem Solving with Computer Applications-This course introduces students to business problems, processes, and professional practices with an emphasis on structuring and solving business problems using computer applications. Drawing on problems from a range of business disciplines such as accounting, finance, marketing, and operations management, students will define, model, and solve business problems using spreadsheet and database software. They will practice critical thinking and business communication through oral and written presentation of problem analysis and results. Credit cannot be given for ISM 120 and any of ITM 120, CIS 121, 122, 123. (F,W,S)

ISM 301  Bus Application Programming  3 Credit Hours
This course is an introduction to basic concepts in computer programming with an emphasis on business applications. In the course, students will develop an understanding of fundamental programming logic and learn to use basic programming structures to solve business problems. Students are introduced to program development cycle and programming principles. The course covers principles of program design, programming structures, data types and structures, program testing, and debugging. Emphasis is placed on the implementation of programs with procedural structures, along with graphical user interfaces and event driven code. Upon completion, students should be able to design, code, test, and debug programs based on business requirement using a selected programming language. Credit cannot be given for both ISM 301, ITM 301 and MIS 301.

ISM 302  Object-Oriented Programming  3 Credit Hours
This course introduces the basic concepts of object-oriented programming with an emphasis on business applications. Students will develop an understanding of object-oriented modeling and learn to use object-oriented analysis and design techniques to solve simple business problems. Students are introduced to OO application development methodology and environment. The course covers principles of object-oriented programming, objects and classes, abstract data types, implementation of inheritance and polymorphism, database access, and graphic user interfaces. Upon completion, students should be able to design, code, test, and debug programs based on business requirements using a selected object-oriented programming language. Credit cannot be given for both ISM 302, ITM 302 and MIS 302.
Prerequisite(s): ITM 301 or MIS 301 or ISM 301
Restriction(s):
Can enroll if Level is Undergraduate

ISM 303  iCreate: Mobile Apps  3 Credit Hours
In this course, the technologies of mobile computing are introduced. Prior knowledge of programming logic and object-oriented concepts are applied in building mobile applications. Topics include mobile development environment, user interface elements of a mobile device, gesture, location awareness, and file operations. Creative thinking and entrepreneurship are introduced and fostered via creating a student-initiated mobile application from idea to sale.
Prerequisite(s): ITM 301 or ISM 301
Restriction(s):
Can enroll if Level is Undergraduate

ISM 310  Info Systems in Management  3 Credit Hours
This course provides an overview of information systems in the business world. It presents an organizational view of how to use information technology to create competitive firms, manage global organizations, and provide useful products and services to customers. Topics include hardware, software, databases, telecommunications systems, the strategic use of information systems, and social and ethical issues involved with information systems, Credit cannot be given for ITM 310, ISM 310 and MIS 310.
Restriction(s):
Can enroll if Class is Sophomore or Junior or Senior

ISM 311  Mgmt Information Sys Lab  1 Credit Hour
ISM 311 is a lab component of ISM 310. Students will complete weekly laboratory assignments to reinforce the concepts of ISM 310 to use information technology to solve business problems. In addition, the use of several common applications (e.g., Word, Excel, Access, and PowerPoint) will also be covered at the beginning to advanced levels.
Prerequisite(s): ITM 310 or ISM 310
Restriction(s):
Can enroll if Class is Sophomore or Junior or Senior
Can enroll if College is Business

ISM 321  Database Systems I  3 Credit Hours
This course examines the processes and tools used to design and implement database systems in business. The goal of this course is to provide adequate technical detail while emphasizing the organizational and implementation issues relevant to the management of computerized data in an organizational environment. A class project involving the design and implementation of a database using a microcomputer database management system is performed. Topics include concepts of database systems, conceptual database design, logical database design, physical database design, database implementation, and data retrieval. Credit cannot be given for ISM 321, ITM 321, MIS 321 and CIS 421.
Prerequisite(s): ITM 310 or MIS 310 or ACC 380 or ISM 310

ISM 331  Info Systems Development  3 Credit Hours
This course provides a foundation in systems analysis and design concepts, methodologies, techniques, and tools. Students will learn to analyze an organizational problem, define user requirements, design an information system, and plan an implementation. Methodologies covered will include the traditional life cycle approach as well as newer methodologies such as object-oriented approach, joint applications development (JAD), and prototyping. A semester-long project gives students the opportunity to apply these techniques to a business problem. This project will use technologies such as a computer-aided software engineering (CASE) tool, a database management system (DBMS), or a fourth-generation language. Credit cannot be given for ISM 331, ITM 331 and MIS 331.
Prerequisite(s): ITM 310 or ISM 310 or MIS 310 or ACC 380 and (ITM 321 or MIS 321 or ISM 321)
Restriction(s):
Can enroll if Level is Undergraduate
This course examines the management of information system projects in business organizations as well as human and organizational reactions to the changes brought about by new information systems. Topics include project planning, project controls, project reporting, information system projects and organizational changes, factors affecting project success and failure, and project management software.

**Prerequisite(s):** ITM 310 or ISM 310 or MIS 310 or ACC 380
ISM 492  Research: Manag Info Systems  3 Credit Hours
To provide the advanced student with the opportunity to undertake a research project under the supervision of a faculty member. At least two weeks prior to registration in the term when such a course is to be elected, an interested student must submit to the dean of the school a written request for permission to elect a research course, on a form available in the school office. The request will include a description of the proposed research project. The dean will review the proposal with faculty members to ascertain availability of relevant faculty supervision and to establish appropriate credit. Permission of College of Business.

Restriction(s):
Can enroll if Class is Senior