MIS 116. Business Use of Computers. 3 Credits.
Exploration of how microcomputers are used in business with an emphasis in developing proficiency in Microsoft Excel and introduction to Microsoft Access. Credit will be awarded only for MIS 116, CSCI 114, or CSCI 116 but not more than one.

MIS 194. Individual Study. 1-5 Credits.

MIS 196. Field Experience. 1-15 Credits.

MIS 199. Special Topics. 1-5 Credits.

MIS 277. Introduction to UNIX. 3 Credits.
This course introduces students to the UNIX operating system environment. Topics include basic UNIX commands, operating system installation and administration, application installation, use of alternative shells, web servers, and system security. Cross-listed with CSCI 277.

MIS 291. Seminar. 1-3 Credits.

MIS 292. Study Abroad. 1-15 Credits.

MIS 294. Individual Study. 1-5 Credits.

MIS 299. Special Topics. 1-5 Credits.

MIS 315. System Analysis and Design. 3 Credits.
Introduction to the front end of the software development life cycle. Includes various modern concepts, techniques, and tools for analyzing and designing well-structured software systems. Prereq: CSCI 161 or CSCI 228.

MIS 320. Management Information Systems. 3 Credits.
Introduction to basic concepts and developments in information technology. Overview of the opportunities and challenges in the development and management of organizational information systems from a socio-technical perspective. Prereq: CSCI 116 or MIS 116. Restricted to College of Business professional major or minor and a 2.50 minimum NDSU grade point average.

MIS 340. Applied Business Intelligence. 3 Credits.
A hands-on look at Business Intelligence as applied to managerial decision making by exploring techniques for information creation including business analytics, data visualization, scorecards, dashboards and data mining. Prereq: MIS 320.

MIS 350. Enterprise Systems. 3 Credits.
Introduction to the theoretical and practical issues related to the application of enterprise systems within organizations. Prereq: MIS 320 and CSCI 161 or CSCI 228 and students must be College of Business professional major or minor and a 2.50 minimum NDSU grade point average.

MIS 371. Web Scripting Languages. 3 Credits.
This course examines Scripting Languages and their applications. Emphasis will be placed on web scripting. A representative set of scripting languages will be covered. Prereq: CSCI 122 or CSCI 160 or CSCI 227 or ECE 173. Cross-listed with CSCI 371. Restricted to College of Business professional major or minor, Jr or Sr classification, and a 2.50 minimum NDSU grade point average.

MIS 375. Database Design for Business Application. 3 Credits.
Fundamentals of conceptualizing and implementing databases. Emphasis is on using query languages to obtain information for decision-making. Includes managerial topics related to database administration, security, integrity, optimization, and distributed databases. Prereq: MIS 320, CSCI 228. Restricted to College of Business professional major or minor, Jr or Sr classification, and a 2.50 minimum NDSU grade point average.

MIS 376. Data and Telecommunications Administration. 3 Credits.
Introduction to a wide variety of topics in the voice and data communications field. Prereq: MIS 320, CSCI 228. Restricted to College of Business professional major or minor, Jr or Sr classification, and a 2.50 minimum NDSU grade point average.

MIS 391. Seminar. 1-3 Credits.
Restricted to College of Business professional major or minor, Jr or Sr classification, and a 2.50 minimum NDSU grade point average.

MIS 392. Study Abroad. 1-15 Credits.
Restricted to College of Business professional major or minor, Jr or Sr classification, and a 2.50 minimum NDSU grade point average.

MIS 394. Individual Study. 1-5 Credits.
Restricted to College of Business professional major or minor, Jr or Sr classification, and a 2.50 minimum NDSU grade point average.

MIS 397. Fe/Coop Ed/Internship. 1-4 Credits.

MIS 399. Special Topics. 1-5 Credits.
Restricted to College of Business professional major or minor, Jr or Sr classification, and a 2.50 minimum NDSU grade point average.

MIS 412. Computer Crime, Forensics, and Investigation. 3 Credits.
Introduction to the technical and legal aspects of obtaining and analyzing digital information for use as evidence in civil, criminal, or administrative cases. Prereq: MIS 320 and ACCT 410 or MIS 376 or CSCI 372 and students must be College of Business students who have been admitted to the professional program and have a cumulative GPA of 2.5 or higher. Cross-listed with ACCT.
MIS 413. MIS Service Internship. 3 Credits.
Supervised professional information technology experience in a non-paid position. Offered on a Pass/Fail basis only.

MIS 415. Managing Information Technology Security. 3 Credits.
Introduction to information security, impact of cyber-attacks on everyday Information Technology operations, the regulatory environment surrounding today’s enterprise, and mitigation techniques. Prereq: MIS 320 or CSCI 161. Students must have a minimum cumulative 2.50 GPA and be at least junior standing.

MIS 460. Enterprise Infrastructure I. 3 Credits.
This course provides an intensive hands-on coverage of the design, implementation and maintenance of a basic enterprise information technology infrastructure. The role of network administrator and security will be emphasized. Prereq: MIS 375 or CSCI 366 and MIS 376 or CSCI 459.

MIS 470. Information Systems. 3 Credits.
Exploration of managerial issues pertaining to administration of the information systems function in organizations. Issues include planning, operations, control, electronic commerce, and other current topics. Prereq: MIS 375, CSCI 315. Coreq: MIS 376. Restricted to College of Business professional major or minor, Jr or Sr classification, and a 2.50 minimum NDSU grade point average.

MIS 479. Decision Support and Intelligent Systems. 3 Credits.
Information system support and modeling of the decision-making process via expert systems, neural networks, and hybrid intelligent systems are the primary focus of this course. The state-of-the-art in knowledge management will be explored. Prereq: CSCI 228 and MIS 320.

MIS 491. Seminar. 1-5 Credits.
Restricted to College of Business professional major or minor, Jr or Sr classification, and a 2.50 minimum NDSU grade point average.

MIS 492. Study Abroad. 1-15 Credits.
Restricted to College of Business professional major or minor, Jr or Sr classification, and a 2.50 minimum NDSU grade point average.

MIS 494. Individual Study. 1-5 Credits.
Restricted to College of Business professional major or minor, Jr or Sr classification, and a 2.50 minimum NDSU grade point average.

MIS 496. Field Experience. 1-15 Credits.
Restricted to College of Business professional major or minor, Jr or Sr classification, and a 2.50 minimum NDSU grade point average.

MIS 499. Special Topics. 1-5 Credits.
Restricted to College of Business professional major or minor, Jr or Sr classification, and a 2.50 minimum NDSU grade point average.

MIS 770. Information Resources Management. 3 Credits.
Role of information resources in supporting organizational functions by providing a managerial perspective on use, design, and evaluation of information systems; use of information technologies for making and communicating decisions, and interacting with business functions. Prereq: Departmental approval.

MIS 796. Special Topics. 1-5 Credits.