INFORMATION SYSTEMS (IS)

IS 220 Service-Learning in Information Systems (1 cr)

Consent: Instructor Consent Required
   • *No credit toward IS major.*

Provides opportunity to obtain practical experience in analysis, design, and implementation of information systems. All assignments must be completed within one calendar year (preferably one semester). Assignments outstanding longer than one year will be graded unsatisfactory.

Attributes: Service-Learning, Full 30 Hours
Grading Basis: S/U Only Grade Basis
Lecture/Discussion Hours: 0
Lab/Studio Hours: 2

IS 240 Information Systems in Business (3 crs)

Prerequisite: Minimum sophomore standing, or consent of instructor.
   • *This course requires access to a laptop computer which can be brought to class when required. Please see the COB laptop requirement: https://www.uwec.edu/academics/college-business/laptop-requirement/.*

A study of information systems in business to include management decision support systems, concepts of systems analysis and design, and information processing. Students will learn to use and apply various software programs as productivity tools.

Lecture/Discussion Hours: 3
Lab/Studio Hours: 0

IS 304 Fundamentals of Business Programming (3 crs)

   • *This course requires access to a laptop computer which can be brought to class when required. Please see the COB laptop requirement: https://www.uwec.edu/academics/college-business/laptop-requirement/.*

Fundamental skills and knowledge for programming business applications including interface design, writing documentation, and using debugging tools. Procedural programming structures and design considerations and interface object use are presented in a state-of-the-art integrated development environment.

Lecture/Discussion Hours: 3
Lab/Studio Hours: 0

IS 307 Introduction to Business Analytics (3 crs)

Prerequisite: Sophomore standing or department consent. No credit if taken after IS 290.
   • *This course requires access to a laptop computer which can be brought to class when required. Please see the COB laptop requirement: https://www.uwec.edu/academics/college-business/laptop-requirement/.*

An introduction to structured data and the relational model. An introduction to querying of structured data, it's extraction and simple analyses in a spreadsheet environment.

Lecture/Discussion Hours: 3
Lab/Studio Hours: 0

IS 308 Business Analytics Programming (3 crs)

Prerequisite: Sophomore standing or department consent.
   • *This course requires access to a laptop computer which can be brought to class when required. Please see the COB laptop requirement: https://www.uwec.edu/academics/college-business/laptop-requirement/.*

Covers fundamentals of programming needed to write scripts to extract, analyze and present data in a business intelligence setting. No previous programming experience is necessary. Provides a foundation for all business analytics courses in the College of Business.

Lecture/Discussion Hours: 3
Lab/Studio Hours: 0

IS 310 Business Process Modeling (3 crs)

Prerequisite: IS 240
   • *This course requires access to a laptop computer which can be brought to class when required. Please see the COB laptop requirement: https://www.uwec.edu/academics/college-business/laptop-requirement/.*

Introduces concept of business processes. Major business processes are described along with their interactions with each other. Flow diagrams and other representations of processes are introduced. Process innovation, improvement and documentation are addressed.

Lecture/Discussion Hours: 3
Lab/Studio Hours: 0

IS 314 Advanced Business Programming (3 crs)

Prerequisite: IS 304, 307.
   • *This course requires access to a laptop computer which can be brought to class when required. Please see the COB laptop requirement: https://www.uwec.edu/academics/college-business/laptop-requirement/.*

Develops object-oriented programming skills at the intermediate level. Develops techniques of data access, input, output, and processing in a business environment using programming tools. Utilizes beginning SQL programming techniques and a state-of-the-art integrated development environment.

Lecture/Discussion Hours: 3
Lab/Studio Hours: 0

IS 324 System Development Methodologies (3 crs)

Prerequisite: IS 304, IS 310
   • *This course requires access to a laptop computer which can be brought to class when required. Please see the COB laptop requirement: https://www.uwec.edu/academics/college-business/laptop-requirement/.*

This course covers systems development methodologies in use by the Information Systems profession. Sequencing, activities and process characteristics are examined for each methodology. Appropriate tools to support each methodology are introduced and used. A decision framework for the selection of an appropriate methodology will be used.

Lecture/Discussion Hours: 3
Lab/Studio Hours: 0

IS 344 Database Management Systems (3 crs)
Prerequisite: IS 307
   • *This course requires access to a laptop computer which can be brought to class when required. Please see the COB laptop requirement: https://www.uwec.edu/academics/college-business/laptop-requirement/.*

Study of physical and logical design and structure of relational databases; Advanced SQL; hands-on experience with enterprise database management software. Introduction to storage and manipulation of semi-structured and unstructured data.

Lecture/Discussion Hours: 3
Lab/Studio Hours: 0

IS 345 Networking with Client Operating Systems (3 crs)
Prerequisite: IS 240.
   • *This course requires access to a laptop computer which can be brought to class when required. Please see the COB laptop requirement: https://www.uwec.edu/academics/college-business/laptop-requirement/.*

Study of enterprise networking from a client operating system perspective. Theory and practice of topics such as networking models, domains, Active Directory, domain client, desktop/user profiles, resource sharing, authentication, and network security.

Lecture/Discussion Hours: 3
Lab/Studio Hours: 0

IS 365 Information Assurance (3 crs)
Prerequisite: BCOM 206, IS 345. Minimum junior standing.
   • *This course requires access to a laptop computer which can be brought to class when required. Please see the COB laptop requirement: https://www.uwec.edu/academics/college-business/laptop-requirement/.*

Conceptual frameworks for information assurance: asset valuation, security threats, risk assessment, policy development, policy implementation, controls, business continuity planning, and disaster recovery. Communication and analytical skills are enhanced through a case-based approach.

Attributes: Undergraduate/Graduate Offering
Lecture/Discussion Hours: 3
Lab/Studio Hours: 0

IS 375 Server-based Networking & Security (3 crs)
Prerequisite: IS 345
   • *This course requires access to a laptop computer which can be brought to class when required. Please see the COB laptop requirement: https://www.uwec.edu/academics/college-business/laptop-requirement/.*

Study of theory and practice of enterprise networking from a server operating system perspective. Topics include domain creation, Active Directory management and delegation, scripting, security policies, roaming profiles, access permissions, and security auditing.

Lecture/Discussion Hours: 3
Lab/Studio Hours: 0

IS 391 Selected Topics in Information Systems (1-3 crs)
   • *Admission to College of Business not required. Available to non-business students.*

Selected topics in information systems. Small groups will study topics selected because of a special interest in them on the part of students or faculty.

Repeat: Course may be repeated for a maximum of 6 credits
Lecture/Discussion Hours: 1-3
Lab/Studio Hours: 0

IS 399 Independent Study - Juniors (1-3 crs)
Consent: Department Consent Required
• Enrollment form available in IS department office.

Repeat: Course may be repeated

IS 420 Internship in Information Systems (1-3 crs)
Prerequisite: Limited to IS majors.
Consent: Department Consent Required
   • *IS 310, IS 344, and IS 345 are recommended prior to enrollment in this course. Internship enrollment form available in IS department office.*

Coordinated on-the-job business experience in information systems. Gives students an opportunity to participate actively in daily business activities related to the IS major.

Attributes: LE-I1 Integration, Internship, Special Course Fee Required
Repeat: Course may be repeated for a maximum of 6 credits

IS 455 Project Management (3 crs)
Prerequisite: IS 304 and IS 310. Minimum junior standing.
   • *This course requires access to a laptop computer which can be brought to class when required. Please see the COB laptop requirement: https://www.uwec.edu/academics/college-business/laptop-requirement/.*

Focus on information systems projects: methodology selection, initiating, planning, executing, control and closing. Issues of time, scope, cost, quality and risk are investigated. Writing and software development skills are enhanced.

Attributes: Special Course Fee Required
Lecture/Discussion Hours: 3
Lab/Studio Hours: 0

IS 460 Seminar in Information Systems (3 crs)
Prerequisite: BCOM 206, IS 344, and IS 345. Limited to IS majors.
   • *This course requires access to a laptop computer which can be brought to class when required. Please see the COB laptop requirement: https://www.uwec.edu/academics/college-business/laptop-requirement/. Limited to graduating seniors.*

In-depth study of current IS topics and discussion of current IS issues and trends. Includes integrated communication component and team-based information systems development project.

Attributes: Capstone Course, Special Course Fee Required
Lecture/Discussion Hours: 3
Lab/Studio Hours: 0

IS 480 Advanced Business Analytics (3 crs)
Prerequisite: IS 344
The course introduces students to an array of sophisticated techniques related to business data analytics and data mining. Students will learn how to use analytical approaches to meet business needs using diverse datasets. Topics include big data, data transformation, classification, prediction, association, clustering, and performance evaluation. Practical application of these techniques in the business arena will be enabled through student experiences with appropriate software. The course is designed to provide advanced experiences in theory and practice that can be enhanced when the student moves into the workforce.

Grading Basis: A-F Grades Only
Lecture/Discussion Hours: 3
Lab/Studio Hours: 0

IS 491 Selected Topics (1-3 crs)
Prerequisite: Minimum junior standing.
Selected topics in information systems. Small groups will study topics selected because of a special interest in them on the part of students or faculty.

Repeat: Course may be repeated for a maximum of 6 credits
Lecture/Discussion Hours: 1-3
Lab/Studio Hours: 0

IS 495 Directed Studies (1-3 crs)
Prerequisite: Limited to IS majors. Minimum junior standing.
Consent: Department Consent Required
Internship-type experiences in business situations relevant to the student's major field of study, under supervision of a faculty member.

IS 499 Independent Study - Seniors (1-3 crs)
Consent: Department Consent Required
• Enrollment form available in IS department office.

Repeat: Course may be repeated