

Computer Systems Analysis Major

Professor: L. Webster

Assistant Professor: C. Cox, R. Manfredi, C. Webster

Contact: Chris Cox

Email: chris.cox@wcmo.edu

A major in Computer Systems Analysis prepares students to apply programming and systems analysis principles to the selection, implementation, and troubleshooting of customized computer and software installations across the systems development life cycle. It includes instruction in computer hardware and software; the compilation, composition, execution, and operation of information systems; low- and high-level programming languages; programming and debugging techniques; installation and maintenance testing and documentation; process, data flow, and user needs analyses and documentation; cost-benefit analyses; and specification design. Focus is on the entire systems development life cycle including requirements gathering, feasibility analyses, project estimation, system design, quality assurance, implementation, integration, security, documentation, and testing. Established quantitative metrics will be used for identifying project objectives and ensuring quality throughout the systems development life cycle. Students will learn to apply project management principles to a variety of computer-based information systems projects.

The course offerings in Computer Systems Analysis serve majors as well as students majoring in other fields. The lower-level courses present an introduction to information systems concepts and to structured programming. The advanced courses are designed for extended study and include exploration of the theoretical and technical aspects of Computer Systems Analysis.

All courses are taught in a computer laboratory setting, permitting experimentation with the practical application of theoretical concepts. Students also present their work in written, electronic, and verbal formats. In addition to the technical focus, students in the major are provided opportunities to practice techniques to develop professional skills related to becoming successful leaders in a wide variety of organizations. Student I

Students will also be prepared to enter a wide range of graduate programs in related computing disciplines. It is recommended that students planning graduate study in a computing discipline consider taking additional courses in mathematics. Majors must earn a grade of C- or better in all courses for the major.

ACADEMIC REQUIREMENTS SUMMARY SHEET

ACADEMIC YEAR 2024-2025

Major: COMPUTER SYSTEMS ANALYSIS MAJOR

Student's Last Name

First Name

Middle Initial

Advisor

Date Major Declared

Course Code	Title	Hours	Semester	GrT17.648