

Computer Science - Management Information Systems (AS)

Associate in Science

Minimum of 62 credit hours

If you are organized and analytical and interested in playing a role in company management, a career in Management Information Systems (MIS) could be right for you. MIS is a planned system of collecting, processing, storing and giving out data in the form of information needed to carry out the functions of a company's management team. It involves analyzing computer-stored data relating to employees, business documents, technologies and procedures and using that data to aid in business decision-making processes. This career field is made up of a unique blend of computer system and business knowledge. According to the U.S. Department of Labor, employment of computer and information systems managers is expected to grow faster than average through the year 2016. OCCC provides a strong foundation in management information systems with excellent transfer to the University of Oklahoma and other four-year colleges and universities.

Course Sequence

Course ID	Course Name	Credits	Type	Min Gd
Suggested Freshman 1st Semester				
SCL 1001	SUCCESS IN COLLEGE AND LIFE	1	Life Skills	
CS 1103	INTRODUCTION TO COMPUTERS AND APPLICATIONS	3	Gen Ed	C
CS 2113	COMPUTER BASED INFORMATION SYSTEMS	3	Major	C
ENGL 1113	ENGLISH COMPOSITION I	3	Gen Ed	
HIST 1483	U.S. HISTORY TO THE CIVIL WAR	OR	Gen Ed	
HIST 1493	U.S. HISTORY SINCE THE CIVIL WAR	3	Gen Ed	
MATH 1513	COLLEGE ALGEBRA FOR BUSINESS, LIFE SCIENCES AND SOCIAL SCIENCES	3	Gen Ed	
Suggested Freshman 2nd Semester				
CS 1143	BEGINNING PROGRAMMING	3	Major	C
POLSC 1113	AMERICAN FEDERAL GOVERNMENT	3	Gen Ed	
ENGL 1213	ENGLISH COMPOSITION II	3	Gen Ed	
MATH 1743	CALCULUS I FOR BUSINESS, LIFE SCIENCES, AND SOCIAL SCIENCES	3	Gen Ed	
BIO	BIOLOGICAL SCIENCE	3-4	Gen Ed	
Suggested Sophomore 1st Semester				
CS 2163	JAVA	OR	Major	C
CS 2453	VISUAL BASIC	3	Major	C
ACCT 2113	ACCOUNTING I/FINANCIAL	3	Support	
MATH 2123	CALCULUS II FOR BUSINESS, LIFE SCIENCES AND SOCIAL SCIENCES	OR	Support	
ECON 2023	STATISTICS FOR BUSINESS AND ECONOMICS	3	Support	
PSY 1113	INTRODUCTION TO PSYCHOLOGY	OR	Gen Ed	
SOC 1113	INTRODUCTION TO SOCIOLOGY	3	Gen Ed	
ECON 2123	PRINCIPLES OF MICROECONOMICS	3	Support	
Suggested Sophomore 2nd Semester				
ACCT 2123	ACCOUNTING II/MANAGERIAL	3	Support	
ECON 2143	PRINCIPLES OF MACROECONOMICS	3	Support	
HUM	HUMANITIES ELECTIVE	6	Gen Ed	
PHYS SC	ANY PHYSICAL SCIENCE CHOSEN FROM ASTR, PHYS, CHEM, OR GEOL SUBJECT AREAS	3-4	Gen Ed	

Course Grouping

Major Courses: (9 credit hours)

Computer Science: CS 2113, CS 1143, *CS 2163 or *CS 2453

*Transfer to University of Oklahoma requires either CS 2163 or CS 2453

*Transfer to Oklahoma State University requires CS 2163

*Transfer to University of Central Oklahoma requires CS 2453

General Education Courses: (37 credit hours)

Biological Science: **Any biological science except BIO 1013

**The University of Central Oklahoma requires a four credit hour Biological Science with a lab

Computer Science: CS 1103

English: ENGL 1113, ENGL 1213

History: HIST 1483 or HIST 1493

Humanities: 6 credit hours of Advisor approved Humanities electives

Mathematics: ***MATH 1513, MATH 1743

***The University of Oklahoma requires MATH 1513

Political Science: POLSC 1113

Social Sciences: PSY 1113 or SOC 1113

Any Physical Science chosen from ASTR; PHYS; CHEM; or GEOL prefixes, one of the science courses must include a lab component.

Life Skills Courses: (1 credit hour) Life Skills: SCL 1001

Support Courses: (15 credit hours)

Accounting: ACCT 2113; ACCT 2123

Economics: ECON 2123; ECON 2143

Mathematics: ****MATH 2123 or BUS 2023

**** The University of Oklahoma requires MATH 2123

Program Notes

Notes: This program is designed for students planning to continue their education at a four-year college or university. See the front general section for information and requirements about University Parallel/Transfer Programs.

Must have a grade of "C" or higher in all Computer Science courses.

Degree Program Course Descriptions

ACCT 2113 - ACCOUNTING I/ FINANCIAL

Prerequisites: MATH 0403 or adequate math placement test score and ENGL 0203 or adequate placement score, or by meeting determined placement measures.

3 Credits Students will demonstrate an understanding of basic accounting concepts, theories, and procedures and their effects on the financial reporting and analysis of a business.

ACCT 2123 - ACCOUNTING II/ MANAGERIAL

Prerequisites: Completion of ACCT 2113 with a grade of "C" or better.

3 Credits A continuation of ACCT 2113. Students will demonstrate an understanding of managerial accounting concepts by properly classifying basic cost elements, allocating these costs to the manufacturing processes of a product, performing cost-volume-profit analysis, preparing operating and capital budgets, analyzing the decision-making process, and making business decisions.

BIO - BIOLOGICAL SCIENCE

Prerequisites:

3 Credits Biological Science

CS 1103 - INTRODUCTION TO COMPUTERS AND APPLICATIONS

Prerequisites: Math 0103 or adequate math placement test score; ENGL 0203, adequate placement score, or by meeting determined placement measures

3 Credits This hands-on course affords students a basic understanding of computers and their application. Upon completion of this course, the student will be able to demonstrate the ability to use a computer operating system, an office suite, productivity tools, as well as the Internet at an introductory level. Advanced Standing is available.

CS 1143 - BEGINNING PROGRAMMING

Prerequisites: ENGL 0203, adequate placement score, or by meeting determined placement measures; Math 0303 or adequate math placement test score or by evaluation. § Criteria for evaluation is in division office.

3 Credits Designed for Computer Science majors, this course affords students a basic understanding of computer programming. Students will utilize accepted programming concepts and perform number system conversions and arithmetic. In addition, they will design and code structured modular programs using design tools such as hierarchy charts, flowcharts, and pseudocode.

CS 2113 - COMPUTER BASED INFORMATION SYSTEMS

Prerequisites: ENGL 0203, adequate placement score, or by meeting determined placement measures; Math 0203 or adequate math placement test score.

3 Credits Covers theory and practice for the design and use of computer-based information systems in organizations, with a focus on the relational database. Student projects will include designing and implementing relational database applications and designing a web page.

CS 2163 - JAVA

Prerequisites: Math 0303 or adequate math placement test score, CS 1143 or by evaluation. § Criteria for evaluation is in division office.

3 Credits Student will develop object-oriented Java applications and applets, which demonstrate comprehension of fundamental programming structures, object-oriented programming, graphics, event handling, interface components, programming for the Internet, data structures, and exception handling.

CS 2453 - VISUAL BASIC

Prerequisites: Math 0303 or adequate math placement test score, CS 1143 or by evaluation. § Criteria for evaluation is in division office.

3 Credits The students will use Visual Basic to create object-oriented, event-driven programs. This course teaches the students to handle the visual interface and also learn programming concepts that include objects, decisions, loops, dialog boxes, arrays, menus, subs, functions, files, simple data access and various other programming topics as they apply to Visual Basic.

ECON 2023 - STATISTICS FOR BUSINESS AND ECONOMICS

Prerequisites: MATH 1743 and ENGL 0203 or adequate placement score, or by meeting determined placement measures.

3 Credits Basic statistics course for undergraduate business majors. Introductory statistical methods are presented employing statistical computer software and applications to typical business and economic problems. Topics include descriptive statistics, probability concepts, probability distribution, estimation, hypothesis testing, and introduction to economic regression analysis, and correlation.

ECON 2123 - PRINCIPLES OF MICROECONOMICS

Prerequisites: MATH 0303 or adequate math placement test score and ENGL 0203 or

adequate placement score, or by meeting determined placement measures.

3 Credits The student will apply microeconomic theories in analyzing concepts by which business maximizes profit, consumers maximize satisfaction, government allocates goods and services, and international trade affects the domestic economy.

ECON 2143 - PRINCIPLES OF MACROECONOMICS

Prerequisites: ECON 2123 or by evaluation

3 Credits This course is a continuation of the Principles of Economics involving the production, consumption and distribution of wealth in a market economy, with major emphasis macroeconomics theory, particularly the general price level, output and income, and interrelations among sectors of the economy, determinants of aggregate demand and aggregate supply, as well as monetary and fiscal policy tools that can be used to achieve particular policy objectives. The basics of international finance will be reviewed.

ENGL 1113 - ENGLISH COMPOSITION I

Prerequisites: ENGL 0203, adequate placement score, or by meeting determined placement measures

3 Credits The student will write well-developed compositions which demonstrate the principles of unity, coherence, and organization and which contain specific details and vivid language. The students will locate library material and incorporate researched materials into compositions.

ENGL 1213 - ENGLISH COMPOSITION II

Prerequisites: ENGL 1103 or ENGL 1113 taken within the last year, with strong encouragement for immediate continuation.

3 Credits In this advanced writing course, students will create essays that explore and evaluate a variety of issues and perspectives suggested by fiction, poetry, drama, essays, and other types of cultural texts. Students will refine and augment the writing techniques they learned in ENGL 1113 or ENGL 1103 to develop well-reasoned, well-structured arguments in a clear, fluid, and engaging prose style.

HIST 1483 - U.S. HISTORY TO THE CIVIL WAR

Prerequisites: ENGL 0203, adequate placement score, or by meeting determined placement measures

3 Credits After analyzing events in American history from 1400 to 1870 in such areas as

revolution, geographic and social mobility, political reform, government precedents and war, the student will be able to identify patterns of present day mobility, describe governmental operations in his society and help resolve conflict in society based on the students search for change, precedents, and conflict in the American past.

HIST 1493 - U.S. HISTORY SINCE THE CIVIL WAR

Prerequisites: ENGL 0203, adequate placement score, or by meeting determined placement measures

3 Credits After analyzing events in American history from 1870 to the present in such areas as political reform, industrialization, urbanization, ethnic acculturation and war, the student will be able to identify meaningful changes in his society, identify equal rights in that society, and help resolve conflict in this society based on the students search for change, equal rights and conflicts in the American past.

HUM - HUMANITIES ELECTIVE

Prerequisites:
3 Credits Humanities elective

MATH 1513 - COLLEGE ALGEBRA FOR BUSINESS, LIFE SCIENCES AND SOCIAL SCIENCES

Prerequisites: MATH 0403 or adequate math placement test score; ENGL 0203, adequate placement score, or by meeting determined placement measures

3 Credits The student will demonstrate an understanding of the general concepts of relation and function and specifically of polynomial, exponential, and logarithmic functions; the ability to solve systems of equations by utilizing matrices and determinants; and the ability to solve practical problems using algebra.

MATH 1743 - CALCULUS I FOR BUSINESS, LIFE SCIENCES, AND SOCIAL SCIENCES

Prerequisites: MATH 1513 or adequate math placement test score.

3 Credits This is the first of a two-semester sequence in elementary calculus in which students use the concepts of differential and integral calculus to solve theoretical and applied problems in business, life sciences, and social sciences.

MATH 2123 - CALCULUS II FOR BUSINESS, LIFE SCIENCES AND SOCIAL SCIENCES

Prerequisites: MATH 1743
3 Credits MATH 2123 is the second of a two-semester sequence in elementary calculus in which students use the concepts of differential and integral calculus to solve theoretical and

applied problems in business, life sciences, and social sciences.

PHYS SC - ANY PHYSICAL SCIENCE CHOSEN FROM ASTR, PHYS, CHEM, OR GEOL SUBJECT AREAS

Prerequisites:
3 Credits Any Physical Science chosen from ASTR, PHYS, CHEM, or GEOL subject areas

POLSC 1113 - AMERICAN FEDERAL GOVERNMENT

Prerequisites: ENGL 0203, adequate placement score, or by meeting determined placement measures
3 Credits A study of the principles, structure, processes and functions of the United States federal government.

PSY 1113 - INTRODUCTION TO PSYCHOLOGY

Prerequisites: ENGL 0203, adequate placement score, or by meeting determined placement measures

3 Credits A survey of the major areas of study in psychology such as motivation, learning, physiology, personality, social psychology, abnormal behavior, perception, memory, cognition/thought, and treatment.

SCL 1001 - SUCCESS IN COLLEGE AND LIFE

Prerequisites: ENGL 0106 or adequate reading/writing assessment scores
1 Credit Students will learn best practices for academic, career, and personal success. Students will discover their individual strengths, interests, and values to create a personalized plan; select and utilize resources that are applicable to their growth and success; and engage as active and responsible members of the academic community. This course should be taken during a student's first semester of college work at Oklahoma City Community College and is a required course in degree plans to satisfy the Life Skills requirement.

SOC 1113 - INTRODUCTION TO SOCIOLOGY

Prerequisites: ENGL 0203, adequate placement score, or by meeting determined placement measures
3 Credits The student will identify the sociological dimensions of human behavior by analyzing the concepts of society, culture, socialization, institutions, social stratification and social change.