

Program: **Computer Science**  
 Major: **Computer Science - Information Science**  
 Degree: **Bachelor of Science (B.S.)**

Dept: **Computer Science**  
 College: **Mathematics and Science**  
 Major Code: **6102**

**University Core (Total Listed 42-44)**

For a full list of courses see [University Core](#).

• Courses from the major may apply to the areas marked in the University Core.

**Written and Oral Communication ..... 9**

**Quantitative Reasoning/Scientific Method ..... 10-11**

- Math..... 3
- Life Science ..... 4
- Physical Science..... 3-4

**Critical Inquiry and Aesthetic Analysis ..... 6**

- Aesthetic Analysis ..... 3
- Critical Inquiry..... 3

**American Historical and Political Analysis ..... 6**

- American National Government ..... 3
- American History ..... 3

**Cultural and Language Analysis ..... 3-4**

- Second Language ..... 4
- OR
- Cultural Analysis..... 3

**Social and Behavioral Analysis ..... 3**

**Life Skills ..... 5**

- Required Health Course..... 2
- Elective Life Skills ..... 3

**Minimum  
Required Hours**

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Required Hours**

**Support Courses**

**Major Support Courses ..... 0-12**

Students majoring in Computer Science-Information Science are encouraged to complete the following courses in high school.

A high school computer technology course using a word processor, spreadsheet, e-mail, browser, and search engines **OR**

CMSC 1053 Professional Computer Applications and Problem Solving

Advanced Placement High School Programming Course **OR**

CMSC 1513 Beginning Programming

\*MATH 1533 Precalculus-Algebra **OR**

MATH 1513 College Algebra **OR** Placement Score **AND**

\*MATH 1593 Plane Trigonometry **OR** Placement Score

\*A grade of 'C' or better is required for either MATH 1513 or MATH 1533 and MATH 1593 to take MATH 2313.

Upon completion of the above courses, corresponding university core requirements will be satisfied. (These courses are required for this major regardless of previous degrees conferred.)

**Major Requirements**

**Computer Science - Information Science..... 79**

**Required..... 67**

- ^ CMSC 1613 Programming in C++
- ^ CMSC 1621 Laboratory for Programming in C++
- ^ CMSC 2123 Discrete Structures
- ^ CMSC 2413 Visual Programming
- ^ CMSC 2613 Fundamental Data Structures
- ^ CMSC 2621 Laboratory for Fundamental Data Structure
- ^ CMSC 2833 Computer Organization and Architecture I
- ^ SE 3103 Object-Oriented Design and Patterns
- ^ CMSC 3303 Systems Analysis and Design **OR**
- SE 4283 Software Engineering I
- ^ CMSC 3413 Enterprise Programming
- ^ CMSC 3613 Algorithms and Advanced Data Structures
- ^ CMSC 3621 Lab for Algorithms and Advanced Data Structures

- ^ CMSC 4003 Applications of Database Management Systems
- ^ CMSC 4063 Computer Networks
- ^ CMSC 4083 Cybersecurity
- ^ CMSC 4153 Operating Systems
- ^ CMSC 4401 Ethics in Computing
- ^\* CMSC 4513 Software Design and Development
- ^ MATH 2313 Calculus 1
- ^ MATH 2323 Calculus 2
- ^ STAT 2113 Statistical Methods **OR**
- ^ STAT 2103 Introduction to Statistics for Sciences **OR**
- ^ STAT 4113 Mathematical Statistics I
- ACCT 2113 Accounting I
- ACCT 2133 Accounting II
- MGMT 3103 Principles of Management
- ISOM 3263 Management Information Systems

^ A grade of 'C' or better must be earned in all required CMSC, SE, MATH, and STAT courses.

\* CMSC 4513 is recommended to be taken in the last semester prior to graduation.

**Elective CMSC or SE courses ..... 6**

Any 3/4000 level CMSC or SE courses except SE 4513

No more than three (3) hours of Internship and Individual Study combined may be used to satisfy the CMSC or SE elective requirement.

Credit cannot be received for both CMSC 3303 and SE 4283.

**Other areas of application ..... 6**

Selected from the following:

- ACCT 3113 Managerial Accounting
- FIN 3563 Fundamentals of Business Finance
- ISOM 3323 Business Analytics
- ISOM 4063 Computer Simulation
- ISOM 4283 Developing Decision Support Systems
- ISOM 4363 Information Systems Management
- ISOM 4513 Emerging Topics in Information Systems

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**Minimum  
Required Hours**

- CONTINUED FROM PREVIOUS PAGE -

**Electives to bring total to..... 124**

**Minimum Grade Requirements**

Average in (a) all college course work, (b) course work at UCO,  
 and (c) major courses..... **2.00**

**Accelerated BS/PSM**

UCO's P.S.M. (Professional Science Master's) in Computational Science has partnered with the B.S. in Computer Science - Information Science major so that approved students may take up to nine credit hours of 5000-level CMSC courses during their senior year of the B.S. program. These courses will count toward both the B.S. and P.S.M. degrees. A formal application to the P.S.M. Computational Science program and an approval from the Department of Computer Science are required. Requirements for the P.S.M. program are located in the UCO Graduate Catalog under Computational Science - Computer Science, P.S.M.

Up to nine credit hours of the following courses can be used to satisfy both the B.S. Computer Science - Information Science and the P.S.M. Computational Science - Computer Science:

- CMSC 5043 Applications Database Systems
- CMSC 5283 Software Engineering I
- CMSC 5323 Computer and Network Security