

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)**

Specific courses within the University Core are listed on pages 96-97.

• 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**

**Minimum  
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 Algebra for STEM **OR** Placement Score **AND**

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

\* A grade of 'C' or better is required for both MATH 1533 and 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 ..... 64**

- ^ CMSC 1613 Programming I
- ^ CMSC 1621 Programming I Laboratory
- ^ CMSC 2123 Discrete Structures
- ^ CMSC 2413 Visual Programming
- ^ CMSC 2613 Programming II
- ^ CMSC 2833 Computer Organization I
- ^ SE 3103 Object Oriented Software Design and Construction
- ^ CMSC 3303 Systems Analysis and Design
- ^ CMSC 3413 Enterprise Programming
- ^ CMSC 3613 Data Structures and Algorithms
- ^ CMSC 4003 Applications of Database Management Systems
- ^ CMSC 4063 Networks
- ^ CMSC 4153 Operating Systems

- ^ CMSC 4323 Computer and Network Security
- ^\* 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 ..... 9**

- Any 3/4000 level CMSC or SE courses except SE 4513
- Any programming labs (CMSC 2621 and 3621)

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 Virtualization

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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**

**For other regulations pertaining to graduation, see  
 pages 67-68 of the 2017-2018 catalog.**