



## 2018-2019 PROGRAM REQUIREMENTS Minor: Computer Science

### **About This Minor. . .**

Computer science is the study of algorithms and the issues involved in implementing them. A Minor in Computer Science is an excellent enhancement to degrees in the many fields which make extensive use of computer software, such as engineering, physics, and mathematics, but also for non-science fields such as graphic arts, education, or sociology. The degree prepares students to understand computer science foundations in software development and in hardware, as well as common application software development such as database software, graphical user interfaces, or in video game design.

### **Advising Process and DegreeWorks**

This document is intended for informational purposes to help determine what courses and associated requirements are needed to earn a minor. Meeting with an academic advisor is essential in planning courses and developing a suggested course sequencing. It is ultimately the student's responsibility to understand and fulfil the requirements for her/his intended minor.

DegreeWorks is an online degree audit tool available in MAVzone. It is the official record used by the Registrar's Office to evaluate progress towards a minor. Students are responsible for reviewing their DegreeWorks audit on a regular basis and should discuss questions or concerns with their advisor or academic department head for the minor. Discrepancies in requirements should be reported to the Registrar's Office.

### **Graduation Process**

A minor cannot be awarded by itself. It must be combined with a baccalaureate degree outside the major field of study. Students should follow the graduation process outlined for the baccalaureate degree and list their majors and minors on the "Intent to Graduate" form.

If a student's petition for graduation is denied, it will be her/his responsibility to consult the Registrar's Office regarding next steps.

### **INSTITUTIONAL MINOR REQUIREMENTS**

The following institutional requirements apply to all CMU minors. Specific programs may have different requirements that must be met in addition to institutional requirements.

- A minor consists of 15-24 semester hours. There may be prerequisites required for the minor which will increase the total number of credit hours for a student who has not already taken those prerequisites.
- Courses taken to satisfy Essential Learning, major requirements, or electives **can** be counted toward the minor if applicable.
- At least 33 percent of the credit hours required for the minor must be in courses numbered 300 or above.
- At least 25 percent of the classes must be taken at CMU.
- 2.00 cumulative GPA or higher for the courses used for the minor.
- A minor is not a degree by itself and must be earned at the same time as a baccalaureate degree.
- A minor must be outside the major field of study.
- A student may earn up to five minors with any baccalaureate degree at CMU.
- The Catalog Year determines which program sheet and degree requirements a student must fulfill in order to graduate. Visit with your advisor or academic department to determine which catalog year and program requirements sheet you should follow.
- See "Requirements for Undergraduate Degrees and Certificates" in the catalog for a complete list of graduation requirements.

### **PROGRAM-SPECIFIC MINOR REQUIREMENTS**

- 23-24 semester hours total for the Minor in Computer Science.

### **REQUIRED COURSES FOR THE COMPUTER SCIENCE MINOR** (23-24 semester hours)

- CSCI 111 - CSI: Foundations of Computer Science (4)
- CSCI 112 - CS2: Data Structures (4)
- CSCI 250 - CS3: Introduction to Algorithms (3)

Choose one of the following courses:

CSCI 241 - Computer Architecture and Assembly Language (4)

CSCI 206 - Web Page Design II (3)

CSCI 130 - Introduction to Engineering Computer Science (3)

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Choose three of the following courses:

CSCI 306 - Web Page Design III (3)

CSCI 310\* - Advanced Programming (3)

CSCI 322 - Embedded Systems (3)

CSCI 333 - UNIX Operating Systems (3)

CSCI 337 - User Interface Design (3)

CSCI 375 - Object Oriented Programming (3)

CSCI 460 - Database Design (3)

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\*CSCI 310 is offered for different languages for 1-3 credit hours. A student may meet the required in any combination number of languages/courses/hours, to reach a total minimum of 3 hours taken. No language may be counted for credit more than once.