COMPUTER SCIENCE MAJOR (B.A.) MANCHESTER

https://manchester.unh.edu/program/ba/computer-science-major

Description

The computer science program combines a solid foundation in computing necessary to succeed in today's start-up and high-tech environments. The program is designed in response to market demand for students proficient in computer science.

Students in the computer science program are required to complete an industry-sponsored project and a research-themed project. The projects focus on real-world experience and give students the opportunity to work with industry experts through internships and sponsored research.

Career opportunities for students with an undergraduate computer science degree are varied, and may include such areas as applications developer, computer and information research scientist, data security specialist, database administrator, database developer, multimedia developer, network architect, product development manager, quality assurance analyst, software systems developer, user experience designer, or web developer.

Program Educational Objectives

Within five years of graduation, a CS student should be able to:

• Demonstrate mastery of the core areas of computer science
• Invent, develop, manage, and evaluate computing systems and services
• Exercise professional responsibility and have appreciation of the social, legal, ethical, and cultural issues inherent in the computing field.

Student Outcomes

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program’s discipline.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program’s discipline.
6. Apply computer science theory and software development fundamentals to produce computing-based solutions.

Requirements

Students majoring in computer science must complete 128 credits to graduate, satisfy the University's Discovery Program, and complete 73 credits in the major with a minimum of C- in each course. Students must maintain an overall cumulative GPA of 2.0 or better.

Transfer students who elect to major in computer science must earn 73 approved credits for completion of the their major, of which at least 24 credits must be completed at UNH Manchester.

Program Requirements

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<td>COMP 415</td>
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<td>COMP 424</td>
<td>Applied Computing 1: Foundations of Programming</td>
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<td>COMP 740</td>
<td>Machine Learning Applications and Tools</td>
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Select one course in computing to broaden and advance student learning of computing innovations

Total Credits

73

1 The program requires four mathematics courses and one physics course.
2 The program prepares students for the workforce and further education in a holistic way by emphasizing communication, collaboration, team work, initiative, appreciation for diversity, and self-direction and responsibility. These competencies are developed through the sequence of courses.
3 Advisor permission required.

For additional information about the computer science program, contact Michael Jonas, (603) 641-4352, michael.jonas@unh.edu, or contact the UNH Manchester Office of Admissions, (603) 641-4150, unhm.admissions@unh.edu.
## Degree Plan

### Sample Course Sequence

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**Total Credits:** 130