Computing Technology

Inspiring future innovators through technology and real-world experience

Technology is advancing daily, and our cutting-edge computing technology programs evolve alongside it. With bachelor’s degrees in Computer Information Systems and Computer Science & Entrepreneurship and a master’s degree in Information Technology, you’ll get the skills and hands-on experience to meet the rapidly growing demand for tech-savvy graduates.

Ready to take the next step? Schedule a tour or apply today.

manchester.unh.edu/explore
unhm.admissions@unh.edu • 603-641-4150

“There is such a great need for computing professionals. The competitiveness of our country depends on our ability to invent computing technologies. Our programs have the unique advantage of placing students in internship positions with high-tech companies right here in Manchester.”

– Mihaela Sabin
Graduate Program Coordinator and Associate Professor of Computer Science

manchester.unh.edu/degrees
AREAS OF STUDY
- Business
- Communication Arts
- Database Systems
- Networking
- Software Development
- System Administration

Bachelor of Science
Computer Information Systems
Computing drives innovation in all economic sectors, from business to science to entertainment. Our Computer Information Systems program is designed to develop your technical skills through real-world projects in programming, networking, information security and more. Guided by faculty experts in a hands-on environment, you’ll be armed for success in the dynamic, highly-rewarding field of information technology.

Bachelor of Science
Computer Science & Entrepreneurship
Given the growing demand for graduates who are both business- and tech-savvy, our Computer Science & Entrepreneurship program gives you the computing and entrepreneurial skills to succeed in today’s start-up and high-tech environments. You’ll work closely with peers, faculty and our network of local businesses to get the real-world experience that puts you ahead.

Master of Science
Information Technology
Combining in-class and experiential learning, our Master of Information Technology program emphasizes computing practices, authentic project experiences and collaboration with peers and IT professionals. Evening classes allow you to specialize your craft without sacrificing flexibility, and our accelerated option* lets you earn your bachelor’s and master’s in just five years. Sharpen your expertise and develop the senior-level skills to advance your career in networking, information security, databases, software development and more.

* Qualified students can earn both a B.S. and M.S. in five years by taking up to 12 graduate-level courses during junior and senior years
Your Degree, Your Future

Our computing programs offer the flexibility for learning that fits your life, and the personalization to tailor your degree to the future you want. With rapid growth projected in tech-related professions\(^1\), the practical experience and individual attention you’ll get at UNH Manchester will help you land your dream job.

### Career Possibilities

<table>
<thead>
<tr>
<th>Job Title</th>
<th>Job Growth(^1)</th>
<th>Entry Level Salary(^2)</th>
<th>Experienced Salary(^2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer and Information Systems Manager</td>
<td>15%</td>
<td>$81,786</td>
<td>$141,731</td>
</tr>
<tr>
<td>Computer Network Architect</td>
<td>15%</td>
<td>$56,992</td>
<td>$119,933</td>
</tr>
<tr>
<td>Computer Programmer</td>
<td>8%</td>
<td>$43,160</td>
<td>$85,446</td>
</tr>
<tr>
<td>Information Security Analyst</td>
<td>37%</td>
<td>$64,813</td>
<td>$114,338</td>
</tr>
<tr>
<td>Software Developer</td>
<td>20%</td>
<td>$79,061</td>
<td>$132,995</td>
</tr>
</tbody>
</table>

2. New Hampshire Occupational Employment & Wages, June 2014
**Bachelor of Science:** To get your Bachelor of Science degree, you'll complete 128 credits between courses for the University Discovery Program and your major. Below are examples of what your course sequence might look like. Courses are subject to change.

**Computer Information Systems, B.S.**

**First Year**
- **Fall Semester**
  - UMST 401 – First Year Seminar
  - English 401 – First Year Writing
  - COMP 405 – Introduction to Web Authoring
  - COMP 425 – Introduction to Programming
  - MATH 420 – Finite Mathematics, MATH 425 – Calculus I or COMP 500 – Discrete Structures

**Spring Semester**
- COMP 510 – Fundamentals of Computer Information Systems
- COMP 542 – Operating Systems Applications
- Discovery Course

**Second Year**
- **Fall Semester**
  - COMP 520 – Database Design & Development
  - COMP 550 – Networking Concepts
  - Discovery Course

**Spring Semester**
- COMP 525 – Data Structures Fundamentals
- COMP Concentration
- COMP Elective
- Discovery Course

**Third Year**
- **Fall Semester**
  - COMP 560 – Computer Law and Ethics
  - COMP 685 – Prof. Development Seminar
  - COMP Concentration
  - Discovery Course

**Spring Semester**
- COMP 730 – Object-Oriented Software Dev.
- COMP 690 – Internship Experience
- COMP Concentration
- Discovery Course

**Fourth Year**
- **Fall Semester**
  - COMP 715 – Information Security
  - COMP Concentration
  - COMP Elective

**Spring Semester**
- COMP 790 – Capstone Project
  - COMP Elective

**Self-Designed Concentration**

Design a concentration of four courses from other subjects to meet your academic and professional goals.

**Computer Science & Entrepreneurship, B.S.**

**First Year**
- **Fall Semester**
  - UMST 401 – First Year Seminar
  - COMP 415 – Mobile Computing First & Foremost
  - MATH 425 – Calculus
  - BUS 401 – Introduction to Entrepreneurship
  - ENGL 401 – Freshman English

**Spring Semester**
- COMP 425 – Programming Fundamentals
- COMP 430 – Systems Fundamentals
- COMP 490 – Statistics in Computing & Engineering
- PHYS 407 – General Physics I

**Second Year**
- **Fall Semester**
  - COMP 500 – Discrete Structures
  - COMP 525 – Data Structures Fundamentals
  - Discovery Course

**Spring Semester**
- COMP 530 – Machine & Network Architecture
- COMP 560 – Social Issues & Professional Practice
- COMP 590 – Internship: Entrepreneurship Project
- COMP 625 – Data Structures and Algorithms

**Third Year**
- **Fall Semester**
  - COMP 630 – Systems Software
  - COMP 685 – Professional Development Seminar
  - COMP Topic Course
  - BUS 453 – Leadership for Management

**Spring Semester**
- COMP 690 – Internship: Engineering Project
  - COMP Topic Course
  - Fine & Performing Arts

**Fourth Year**
- **Fall Semester**
  - COMP Topic Course
  - BUS 565 – Sales & Sales Management

**Spring Semester**
- COMP 790 – Capstone Project
  - BUS 600 – New Ventures Creation

**Five-Year Accelerated Master's**

Qualified students can earn both a bachelor's and master's degree in just five years by taking up to 12 graduate-level courses during junior and senior years.

**Master of Science:** To get your Master of Science degree, you'll complete 33 credits. Courses are subject to change.

**Information Technology, M.S.**
- Five core information technology courses
- Two IT integration courses
- A master's project or master's thesis
- Electives (two for thesis option, three for project option)

**Core IT**
- COMP 805 – Web Application Development
- COMP 815 – Information Security
- COMP 820 – Database Design and Development
- COMP 830 – Object-Oriented Software Development
- COMP 835 – Networking Technologies

**IT Integration**
- COMP 851 – System Integration and Architecture
- COMP 852 – Computing Infrastructures

**Master's Project**
- COMP 898 – Master's Project

Integrative in nature, this course focuses on an authentic project or problem to solve through IT research and faculty advising.

**Master's Thesis**
- COMP 899 – Master's Thesis

The thesis is completed under the supervision of an advisor and a committee of at least three members.

**Electives**
- COMP 880 – Topics
- COMP 890 – Internship
- COMP 895 – Independent Study

*Electives can be also selected from the curriculums of the graduate certificate in Software Systems Engineering and the part-time MBA program.

**Ready to Take the Next Step?**

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Your Road to Success

**Self-Designed Concentration**

Design a concentration of four courses from other subjects to meet your academic and professional goals.

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