Computer Science

with concentrations in Cybersecurity, Data Science, and Software Engineering

Rivier
UNIVERSITY

Shape the future of our high-tech world.

Why Study at Rivier?

With our B.S. in Computer Science, you will acquire a conceptual understanding of computer systems and significant project experience in computing areas such as programming, networking, operating systems, software engineering, databases, and web development.

Concentrations in Cybersecurity, Data Science, and Software Engineering allow students to specialize in their area of interest.

Build Your Knowledge Base

Upon graduation, students will possess not only a solid theoretical knowledge, but also professional practices that allow them to strengthen their skills as the field evolves. Seniors participate in a robust internship program, gaining job experience, skills, and professional references that often lead to permanent positions after graduation.

Gain Real-World Experience

In today's data-driven society, employers value professionals with strong quantitative and analytical skills. Coursework, internships, and extracurricular activities enable you to better prepare for your career interests and goals. Rivier's campus is ideally located in Nashua, New Hampshire, which allows students to explore diverse job opportunities at high-tech companies from Manchester, New Hampshire, to Boston, Massachusetts.

Begin Your Career

Computer Science graduates can pursue careers as:

- Artificial intelligence developers
- Database administrators
- Information security analysts
- Network architects
- Data scientists
- Machine learning engineers
- Cybersecurity specialists

Advanced Degrees

Rivier offers a 4+1 program in Computer Science, providing students who receive their bachelor's degree in Computer Science the ability to pursue a master's degree in Computer Science from Rivier in just one year through the University's 4+1 B.S./M.S. program.

12,175 sq. ft.
high-tech Cybersecurity Lab and Tech Hub opened in 2022

90+ years
of educational excellence

100%
of students receive financial aid

100%
of students complete internships, field experiences, or service learning programs

Journeys of Transformation

Rivier University's core curriculum, titled *Journeys of Transformation*, aligns with the American Association of College & Universities essential learning outcomes. Coursework focuses on developing strong intellectual and practical skills for workforce success, and offers opportunities for service learning, servant leadership, and civic engagement to enhance leadership abilities.

Course of Study

COMPUTER SCIENCE CORE COURSES

COMP 101	Coding Adventures I
COMP 103	Coding Adventures II
COMP 245	Introduction to Computer Architecture
COMP 301	Computer Science Fundamentals
COMP 308	Computer Networks
COMP 315	Introduction to Algorithms
COMP 335	Database Management Systems
COMP 385	Object-Oriented Programming using Java
COMP 405	Introduction to Software Engineering
COMP 431	Operating Systems
COMP 450	Capstone Project
COMP 495	Internship I
CYBR 250	Cyber Law & Ethics

COMPUTER SCIENCE MAJOR ELECTIVE COURSES

COMP 425	Directed Study
COMP 455	Topics in Computer Science
COMP 496	Internship II
COMP 497	Internship III

ORGANIZED BY CONCENTRATION

Cybersecurity

COMP 442	Information Technology
COMP 448	Computer Security
COMP 478	Advanced Networking
CYBR 310	Ethical Hacking & Systems Defense

Data Science

COMP 444	Knowledge-Based Systems
COMP 446	Data Mining
COMP 447	Artificial Intelligence and Machine Learning
COMP 449	Robotics
COMP 452	Intelligent Systems
COMP 460	Deep Learning
COMP 461	Natural Language Processing

Game Programming

COMP 290	Computer Graphics
COMP 370	Game Programming I
COMP 371	Game Programming II
COMP 437	Game Engine Design

Software Development

COMP 360	Web Development

The University reserves the right to make changes when appropriate and necessary as needed without notification. (1025)

Employment Promise Program

Rivier's *Employment Promise Program* enhances the career preparation and employability of students in all academic disciplines. The program includes mentorship through Rivier's Career Development Center and features a tailored four-year academic and professional development plan, integrating experiences that have been shown to enhance overall employability and improve job search success.

Confidence in the quality of a Rivier education enables the University to ensure invested students will secure employment within nine months of graduation. If not, the University will provide the student additional financial or educational support. Get more information at *rivier.edu/EPP*.

RIVIER UNIVERSITY'S EMPLOYMENT PROMISE PROGRAM

You're Invited

Attend an on-campus event, or schedule an individual campus tour for you and your family. You can access a complete listing of events and register online at *events.rivier.edu* or call us at (603) 897-8507.

Academic Accreditation

Rivier University is accredited by the New England Commission of Higher Education (NECHE).

NECHE New England Commission of Higher Education

Quick Links

✉ Ask a Question
admissions@rivier.edu

👤 Talk to an Admissions Counselor
rivier.edu/team

📅 Schedule a Visit
events.rivier.edu

💲 Tuition & Fees
rivier.edu/tuition

Apply today!

Easily apply on **common app** or online at **apply.rivier.edu**