Computer Science 4+1



Stronger. Better. Faster. Kick-start your high-tech career.

Why Study at Rivier?

Save time and tuition. With Rivier's 4+1 program, you'll earn an undergraduate and graduate degree in just five years and gain the skill sets and credentials to quickly advance your career.

Build Your Knowledge Base

As an undergraduate, 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 **Data Science, Cybersecurity, Software Development**, and **Game Programming** offer the opportunity to specialize in your area of greatest interest.

This 4+1 program provides a seamless transition from the undergraduate program to the M.S. in Computer Science degree. Additionally, 4+1 students complete their master's degree with 30 graduate credits, rather than the standard 36-credit requirement.

Gain Real-World Experience

Coursework, internships, and extracurricular activities will enable you to best prepare for professional positions. Rivier's campus is ideally located in Nashua, New Hampshire, a high-tech hub with diverse job opportunities at companies from Manchester, New Hampshire, to Boston, Massachusetts.

Begin Your Career

Rivier's 4+1 program graduates can pursue careers as:

- Senior software developers
- Network/software architects
- Master data analysts
- Database administrators
- Data scientists
- Machine learning engineer
- Artificial intelligence developers

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.



12,175 sq. ft.

high-tech Cybersecurity Lab and Tech Hub opened in 2022



100%

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



36,000 sq. ft.

cutting-edge Science & Innovation Center



90+ years

of educational excellence



100%

of students receive financial aid



B.S. Course of Study

COMPUTER SCIENCE CORE COURSES

COMI OTER SCIENCE CORE COORSES				
COMP 101	Coding Adventures I	COMP 385	Object-Oriented	
COMP 103	Coding Adventures II		Programming using Java	
COMP 245	Introduction to Computer Architecture	COMP 405	Introduction to Software Engineering	
COMP 301	Computer Science		8 8	
	Fundamentals	COMP 431	Operating Systems	
COMP 308	Computer Networks	COMP 450	Capstone Project	
COMP 315	Introduction to	COMP 495	Internship I	
COMI 515	Algorithms	CYBR 250	Cyber Law & Ethics	
COMP 335	Database Management			

MAJOR ELECTIVE COURSES ORGANIZED BY CONCENTRATION

Systems

Cybersecur	rity			
COMP 442	Information Technology	COMP 452	Intelligent Systems	
COMP 448	Computer Security	COMP 460	Deep Learning	
CYBR 310	Ethical Hacking &	COMP 461	Natural Language	
	Systems Defense		Processing	
COMP 478	3 Advanced Networking <u>Game Prog</u> r		ramming	
Data Scienc	<u>e</u>	COMP 290	Computer Graphics	
COMP 444	Knowledge-Based	COMP 370	Game Programming I	
	Systems	OMP 371	Game Programming II	
COMP 446	Data Mining			
COMP 447	Artificial Intelligence and	l <u>Software Development</u>		
	Machine Learning	COMP 360	Web Development	
	Maciline Lear Illing	COMP 40E	Introduction to Coftware	

COMP 405 Introduction to Software

Engineering

M.S. Course of Study

REQUIRED COURSES

COMP 449 Robotics

COMP 552	Object-Oriented Design	COMP 557	Algorithms
COMP 553	Networking Technologies	COMP 585	Practical Java Programming
COMP 554	Operating Systems	COMP 699	Professional Seminar
COMP 556	Computer Architecture		

COMPUTER SCIENCE ELECTIVES

Select three of the following:

Beleet till ee	of the following.		
CS 572	Computer Security	CS 680	Software Quality
CS 597	Multimedia and Web		Assurance
	Development	CS 698	Professional
CS 608	Software Engineering		Internship
CS 612	Information Technology	CS 690-696	Topics in Computer Science
CS 616	Data Mining		
CS 664	Knowledge-Based		

The University reserves the right to make changes when appropriate and necessary as needed without notification. (0824)

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.

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).



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



Systems





