MONMOUTH UNIVERSITY

Computer Science or Software Engineering?

Nearly three out of four new science or engineering jobs in the United States will be in computing, according to the Bureau of Labor Statistics. *But what kind of computing job is right for you?* If you are interested in majoring in either computer science or software engineering but do not know which to choose, use this chart to explore the differences and similarities between these two exciting and lucrative fields.

	COMPUTER SCIENCE	SOFTWARE ENGINEERING
Main goal	Provide the basic science and practical techniques of computing hardware and software	Build effective and efficient software systems using a rigorous engineering approach
Primary focus	Study of the theoretical foundations of computation and their implementation and application in information systems	Application of a systematic, disciplined, and quantifiable approach to the development, operation, and maintenance of software
Common curricular components	Programming fundamentals Basic computer science theory	
Distinguishing curricular components	Networking Database management Artificial intelligence Computing theory Network security	Software requirements Software design and architecture Verification and validation Software engineering processes User experience engineering
Typical jobs	Software development manager Program analyst	Requirements engineer Software project manager
	Software developer/engineer Software tester Software architect Web developer	

Median Salary (national study)	$94,000 www.indeed.com/salary/Software-Engineer.html

- **Why computing at Monmouth University?**
    - -Second and third fastest growing jobs in America are computing
    - -Five-year BS/MS program
    - -Abundant internship opportunities

- **CSSE Internship partners:**
    - Commvault
    - FAA/Aviation Research Tech Park
    - Alcatel-Lucent
    - Veterans Affairs (VA)
    - DefinedLogic
    - Mitre
    - Nihaki Systems

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