COMPUTER ENGINEERING, SOFTWARE ENGINEERING

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Computer science remains at the heart of preparation for careers or graduate study in computer engineering (which focuses on hardware design) and software engineering, since computer science provides a conceptual foundation for computing disciplines. The emphasis on "hands-on" learning techniques, professionalism, and computing ethics and on the development of communication and leadership skills in St. Olaf's computer science major program give a further preparatory boost to future engineers. The following courses are particularly recommended.

Recommended for Computer Engineering [1]

CSCI 251 & CSCI 252	Software Design and Implementation and Software Design and Implementation Lab (0.25)	1.25
CSCI 241	Hardware Design	1.00
CSCI 253	Algorithms and Data Structures	1.00
CSCI 263	Ethical Issues in Software Design	1.00
CSCI 273	Operating Systems	1.00
PHYS 246	Electronics	1.00
Statistics (e.g., STAT 212)		

Recommended for Software Engineering [2]

CSCI 251 & CSCI 252	Software Design and Implementation and Software Design and Implementation Lab (0.25)	1.25
or CSCI 125	Computer Science for Scientists and Mathematicians	
CSCI 241	Hardware Design	1.00
CSCI 253	Algorithms and Data Structures	1.00
CSCI 263	Ethical Issues in Software Design	1.00
CSCI 273	Operating Systems	1.00
CSCI 284	Mobile Computing Applications	1.00
CSCI 300	Topics in Computer Science	1.00
Statistics (e.g., STAT 212)		

[1] Also consider CSCI 284 Mobile Computing Applications, CSCI 300 Topics in Computer Science.

[2] Also consider CSCI 276 Programming Languages.