Computer Engineering

Catalog Year 2024-2025

Note: This is a recommended sequence and shifts are likely to occur due to prerequisite completion and course availability.

Semester One	Semester Two
CSE 1010: Intro to Computing for Engineers (3 credits)	CSE 2050: Data Structures & O. O. Design (3 credits)
MATH 1131Q: Calculus I (4 credits)	MATH 1132Q: Calculus II (4 credits)
CHEM 1127Q: General Chemistry I (4 credits)	PHYS 1501Q: Physics for Engineers I (4 credits)
ENGL 1007: Writing and Composition (4 credits)	Gen Ed (3 credits)
UNIV 18XX (1 credit)	Gen Ed (3 credits)
16 credits	17 credits

Semester Three	Semester Four
CSE 2301: Prin. & Prac. Of Digital Logic Des. (4 credits)	CSE 2500: Intro to Discrete Systems (3 credits)
CSE 3100: Systems Programming (3 credits)	ECE 2001: Electrical Circuits (4 credits)
MATH 2110Q: Multivariable Calculus (4 credits)	MATH 2410Q: Elem. Differential Equations (3 credits)
PHYS 1502Q: Physics for Engineers II (4 credits)	PHIL 1104: Philosophy & Social Ethics (CA 1) (3 credits)
	Gen Ed (3 credits)
15 credits	16 credits

Semester Five	Semester Six
CSE 3150: C++ Essen. or CSE 3160: Funct. Prog. Fund.	CSE 4300: Operating Systems (3 credits)
(3 credits)	
CSE 3666: Intro to Computer Architecture (3 credits)	ECE 3401: Digital Systems Design (3 credits)
ECE 3101: Signals & Systems (3 credits)	ECE 3411: Microproc. App. Lab or CSE 4903:
	Microproc. Lab (3 credits)
ECE 3201: Electronic Circuit Des. & Analys. (4 credits)	STAT 3345Q: Probability Models for Engin. (3 credits)
MATH 2210Q: Applied Linear Algebra (3 credits)	Gen Ed (3 credits)
16 credits	15 credits

Semester Seven	Semester Eight
CSE 4302: Adv. Computer Architecture (3 credits)	ECE 3421: VLSI Design & Simulation (4 credits)
ECE 4901: ECE Design I (2 credits)	ECE 4902: ECE Design II (3 credits)
ECE 4900W: Communic. Engineer. Solutions (1 credit)	Professional Requirement (3 credits)
Professional Requirement (3 credits)	Professional Requirement (3 credits)
Design Laboratory (3 credits)	Free Elective* (3 credits)
Gen Ed/Free Elective (3 credits)	
15 credits	16 credits

*as needed to reach total degree credits See reverse for important general education and major specific information.

Total Credits: 126

Computer Engineering (BSE)

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Qualifying MPE Score: *22+ need to register for MA	ATH 1131Q and MATH 1132Q
Competencies:	
$\hfill \Box$ Language (waived; or complete through Elementary II; or	Intermediate I if 2 years of same language
in HS):	
☐ ENGL 1007 or 1010 or 1011	
☐ Writing (W course in major): <u>ECE4900W</u>	
☐ Writing (W course):	
☐ Environmental Literacy (E course):	
*W's and E's may also count at CA1, CA2, CA4 - Not considered	d "double dipping"
Content Area One: Arts and Humanities:	
□ PHIL 1104	Double Dipping
☐ CA1 (not a PHIL course):	 Single course counts as a CA1&CA4 OR CA2&CA4
Content Area Two: Social Sciences:	Only allowed to double dip ONCE
□ CA2:	Double dipping is not requiredIf double dipping, you are responsible for
☐ Second CA2 (different department):	taking an additional 3 credit free elective
Content Area 4: Diversity and Multiculturalism:	Double Dipped course:
☐ CA4 International:	
☐ One additional CA4 course:	
Important Gen Ed/Competency Notes:	
 Appropriate courses may be found at: https://catalog.uconi Can search by general education requirement in College Sci Content Area 3 met by lab sciences required for your major 	neduler found in Student Admin
CSE Major Requirements: ☐ CHEM 1127Q	
☐ Physics Lab Sequence:+	 PHYS 1401Q+1402Q
☐ Probability & Statistics Course: Options: MATH 3160, STAT 3025Q, STAT 3345Q, STAT 3375Q	
☐ 9 credits of professional requirements:	++ SE 3802/ECE 3431, CSE 4400, CSE 4709,
☐ At least one of ECE 4112 or CSE 3504:	
☐ Design Laboratory:	