2023-2024 Academic Year

Electrical and Computer Engineering, BS

WESTERN WASHINGTON UNIVERSITY

ABET accredited
Course offerings subject to change
Major credits: 146 (not including GURs)

Admissions information - https://engineeringdesign.wwu.edu/
Academic advising available - see contact information below
Pre-major coursework in grey area
Courses in **BOLD** required to apply to full major

	Fall	Winter	Spring
First Year	**MATH 124 (5) Calculus I**	**MATH 125 (5) Calculus II**	**APPLY TO MAJOR**
	PHYS 161 (5) Physics w/ Calc I	**PHYS 162 (5) Physics w/ Calc II**	**EECE 111 (4) Circuits Analysis I**
	CSCI 140 or 141 (4) Programm. Fundamen.	**EECE 108 & 109 (2) Intro to Elect. & Comp**	**MATH 204 (4) Linear Algebra**
	* ENGR 101 (2) Engineering, Design, Society	CHEM 161 (5) General Chemistry I	PHYS 163 (5) Physics w/ Calc III
Second Year	**MAJOR COURSES BEGIN**	EECE 220 (4) Electronics I	EECE 310 (4) Continuous Systems
	EECE 210 (4) Circuit Analysis II	EECE 244 (4) Embedded Microcontrollers	EECE 320 (4) Electronics II
	EECE 233 (4) Digital Electronics	MATH 331 (4) Differential Equations	EECE 346 (4) Probability & Stats for EECE
	MATH 224 (5) Multivariable Calculus		
Third Year	EECE 311 (4) Discrete Systems	EECE 360 (4) Communication Systems	EECE 401 (1) Capstone Project Introduction
	EECE 344 (4) Embedded Microcontrollers II	EECE 444 (4) Embedded Systems	EECE 480 (4) Control Systems
	Concentration Courses (see back)		
			ENG 302 (WP) Technical Writing
Fourth Year	EECE 402 (3) Capstone Project II	EECE 403 (3) Capstone Project III	EECE 404 (3) Capstone Project IV
	Technical Electives and Additional Higher Level EECE Electives (see back)		

Engineering & Design
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http://engineeringdesign.wwu.edu

Pre-major Advisor:
Lisa Ochs lisa.ochs@wwu.edu

NOTES & EXCEPTIONS

Students not enrolled in MATH 124 and PHYS 161 fall quarter may not finish in four years.
MATH 341/345/346 may be substituted for EECE 346. All count toward math minor.
Students must complete General University Requirements in addition to major courses.
* ENGR 101 is optional but recommended.

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Concentration Courses (12 credits)

Students must take three courses within a single concentration, with one course typically taken in each quarter of the third year. These three courses meet 12 of the required 20 credits of Higher Level EECE Electives, leaving 8 remaining credits of Higher Level EECE Electives for students to choose.

Concentration	Fall 3rd Year	Winter 3rd Year	Spring 3rd Year
AI and ML	EECE 384 (4) AI and Reinforcement Learning	EECE 383 (4) Machine Learning for Engineers	EECE 385 (4) Cyber-Physical Systems
Electronics	EECE 333 (4) Digital System Design	EECE 321 (4) Electronic Systems	EECE 361 (4) Signal Propagation
Energy	EECE 372 (4) Elec Power & Electromech. Dev.	EECE 374 (4) Energy Processing	EECE 378 (4) Pwr Sys Analysis & Smart Grid
Wireless & Signals	EECE 362 (4) Wireless Networking	EECE 433 (4) Digital Signal Processing	EECE 460 (4) Digital Communication Sys

Higher Level EECE Electives (8 additional credits, 20 total)

In addition to the 12 concentration-specific higher level EECE electives above, students must complete 8 additional credits of higher level EECE electives for a total of 20 credits. Courses which may be used to fulfill this requirement include EECE 321, 333, 361, 362, 372, 374, 378, 383, 384, 385, 433, 460.

Technical Electives (10 credits)

Students must also complete 10 credits of tech electives. Note that all courses in the Higher Level EECE Elective category are also in the Technical Elective category, however a course cannot be double-counted to meet both requirements. Popular choices of Technical Electives include additional Higher Level EECE Electives, EECE 495 Directed Research, as well as MATH and CSCI courses. Link to complete list of approved technical electives.

GURs

The QSR, LSCI, SCI, and writing proficiency requirements are satisfied by required EECE program courses. Additional courses must be taken with the ACOM, BCOM/CCOM, HUM, SSC, ACGM, and BCGM attributes, which typically requires 10 additional courses and at least 38 additional credits. For GUR-related advising, students should visit the Academic Advising Center in OM380, or at https://advising.wwu.edu/

Faculty Contact Information

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