Academic Year 2024-2025

# Electrical and Computer Engineering, BS

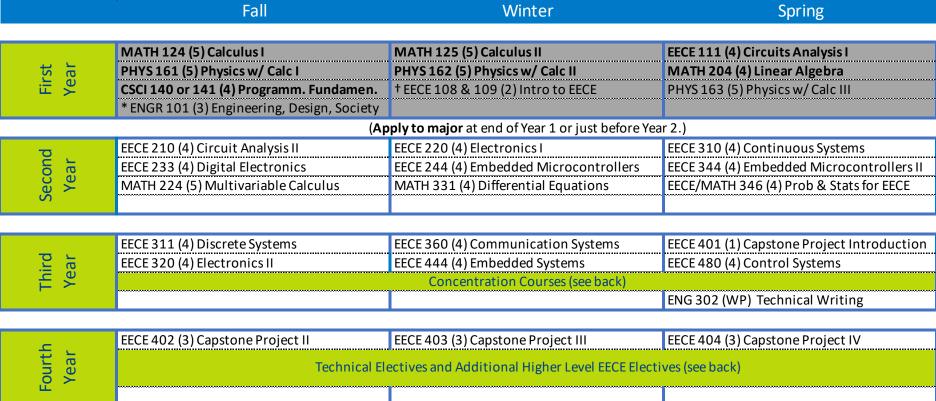


**ABET** accredited Admissions info - https://engineeringdesign.wwu.edu/ Course offerings subject to change Academic advising available - see contact information below

Major credits: 146 (not including GURs) Pre-major coursework in grey area

Link to Course Catalog

Courses in **BOLD** required to apply to full major Winter



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**Pre-major Advisor:** 

**Lisa Ochs** lisa.ochs@wwu.edu

#### **NOTES & EXCEPTIONS**

Students not enrolled in MATH 124 and PHYS 161 fall guarter may not finish in four years. EECE/MATH 346 may be used toward the math minor.

Students must complete General University Requirements in addition to major courses.

- \* ENGR 101 is optional but highly recommended.
- † EECE 108 must be taken at first opportunity on-campus; transfer students are exempt from corequisite course EECE 109.

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

**Note:** The scheduling of concentration courses changes from year to year, so some courses may be offered in different quarters than shown here.

## 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 (15 credits)

Students must also complete 15 credits of tech electives, and 3 of the 15 credits must be from a mathematics or basic science course. 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. Link to complete list of approved technical electives.

**Note:** Students admitted to EECE prior to 2024 need only complete 10 technical elective credits plus CHEM 161 (5 credits) and do not need to take an additional math or basic science course.

#### **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 <a href="https://advising.wwu.edu/">https://advising.wwu.edu/</a>

Faculty Contact Information				
Associate Professor Xichen Jiang, jiangx2@wwu.edu	Professor Todd Morton, toddm@wwu.edu			
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