PURDUE UNIVERSITY | Elmore Family School of Electrical and Computer Engineering

Engineering Faculty Document No. EFD 93-24
February 29, 2024

Memorandum

To: The College of Engineering Faculty

From: The Elmore Family School of Electrical and Computer Engineering

Re: revision to the Electrical and Computer Engineering Minor

The faculty of the Elmore Family School of Electrical and Computer Engineering has approved the following revisions of the Electrical and Computer Engineering Minor from the College of Engineering. This action is now submitted to the Engineering Faculty with a recommendation for approval.

FROM:

Minor Requirements (18 credits)

Required Course (15 credits)

ECE 20001 EE Fundamentals I
ECE 20007 EE Fundamentals I Lab
ECE 20002 EE Fundamentals II
ECE 20008 EE Fundamentals II Lab
ECE 26400 Advanced C Programming
ECE 27000 Digital Logic Design

Elective Courses – Choose One (3-4 credits)

ECE 30100 Signals and Systems (3 credits)
ECE 30862 Object-Oriented Programming in C++ and Java (3 credits)
ECE 30500: Semiconductor Devices [3 credits] **OR**
- ECE 50631: Fundamentals of Current Flow [1 credit] **AND**
- ECE 50632: Introduction to Quantum Transport [1 credit] **AND**
- ECE 50633: Boltzmann Law: Physics to Computing [1 credit]

ECE 30411 Electromagnetics I (3 credits)
ECE 32100 Electromechanical Motion Devices (3 credits)
ECE 36200 Microprocessor Systems and Interfacing (4 credits)
ECE 36800 Data Structures (3 credits)

ELMORE FAMILY SCHOOL OF ELECTRICAL AND COMPUTER ENGINEERING
Materials Sciences and Electrical Engineering Building, Room 140
501 Northwestern Avenue, West Lafayette, IN 47907
Office: 765-494-3390

TO:

Minor Requirements (18 credits)

Required Course (15 credits)

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ECE 32100 Electromechanical Motion Devices (3 credits)
ECE 36200 Microprocessor Systems and Interfacing (4 credits)
ECE 36800 Data Structures (3 credits)

Reason: The only change is the removal of the application process and students may now have their advisor add the minor directly.

T-S. Mithuna

Mithuna Thottethodi
Associate Head of Teaching and Learning
Professor of Electrical and Computer Engineering

Purdue University 2023-2024 University Catalog

Electrical and Computer Engineering Minor

Requirements for the Minor (18 credits)

There is an application process to be in this minor. Information is listed below.

Applying for the Minor

- Before applying for an ECE minor, students must have completed MA 16500, MA 16600, and PHYS 17200 (or their equivalents) with a 'C-' grade or better in each.
- Students must apply for the ECE minor in person in MSEE 140. Call 765-494-3390 for an appointment.
- All requisites for these courses must be met in order to enroll in these courses (non-engineering students may apply for a prerequisite override for ENGR 13100 in ECE 20001). Click the link for each course to see the required requisites. These requisites may include CS 15900, MA 16100/16500, MA 16200/16600, MA 26100, MA 26500, MA 26200/26600, PHYS 17200, and/or PHYS 24100/27200, as necessary.
- Transfer credit may be accepted for up to two of the "Required Courses" (this includes IUPUI, the regional campuses, and study abroad credit).
- A minimum overall GPA of 2.000 is required in ECE courses to qualify for the minor. Approval of the ECE minor may be revoked if the ECE GPA falls below 2.000.
- Enrollment in all ECE courses is subject to space availability. Students requesting space in restricted ECE courses must submit an application and may need to wait until 'Open Enrollment' to register. Electrical Engineering and Computer Engineering majors are given priority.

Required Courses (15 credits)

- ECE 20001 - Electrical Engineering Fundamentals I
- ECE 20007 - Electrical Engineering Fundamentals I Lab
- ECE 20002 - Electrical Engineering Fundamentals II
- ECE 20008 - Electrical Engineering Fundamentals II Lab
- ECE 26400 - Advanced C Programming
- ECE 27000 - Introduction To Digital System Design

Selective Course - Choose One (3-4 credits)

- ECE 30100 - Signals And Systems
- ECE 30500 - Semiconductor Devices
- ECE 30411 - Electromagnetics I
- ECE 32100 - Electromechanical Motion Devices
- ECE 36200 - Microprocessor Systems And Interfacing
- ECE 36800 - Data Structures

Disclaimer

The student is ultimately responsible for knowing and completing all degree requirements.

Consultation with an advisor may result in an altered plan customized for an individual student.

The myPurduePlan powered by DegreeWorks is the knowledge source for specific requirements and completion.

MINOR IN ELECTRICAL AND COMPUTER ENGINEERING

General Requirements:

- Prior to adding the ECE minor, the student must have a grade of C- or better in each of the following courses: MA 16500, MA 16600, PHYS 17200 and CS 15900 (or their equivalents)
- All pre-requisites for the below listed courses must be followed. Transfer and AP credit will be accepted
- A minimum overall GPA of 2.00 is required in ECE courses to qualify for the minor. Approval of the AIML minor may be revoked if the ECE GPA falls below 2.00.
- Enrollment in all ECE courses is subject to space availability.

Required Courses (15 credits):

- ECE 20001 EE Fundamentals I (3 credits)
- ECE 20007 EE Fundamentals I Lab (1 credit)
- ECE 20002 EE Fundamentals II (3 credits)
- ECE 20008 EE Fundamentals II Lab (1 credit)
- ECE 26400 Advanced C Programming (3 credits)
- ECE 27000 Digital Logic Design (4 credits)

Elective Course (one course):

- ECE 30100 Signals and Systems (3 credits)
- ECE 30862 Object-Oriented Programming in C++ and Java (3 credits)
- ECE 30500: Semiconductor Devices [3 credits] **OR**
  - ECE 50631: Fundamentals of Current Flow [1 credit] **AND**
  - ECE 50632: Introduction to Quantum Transport [1 credit] **AND**
  - ECE 50633: Boltzmann Law: Physics to Computing [1 credit]
- ECE 30411 Electromagnetics I (3 credits)
- ECE 32100 Electromechanical Motion Devices (3 credits)
- ECE 36200 Microprocessor Systems and Interfacing (4 credits)
- ECE 36800 Data Structures (3 credits)

No Changes - just removal of application process