The Electrical and Computer Engineering Department offers minor programs in both Electrical Engineering and in Computer Engineering. If you complete a minor program, the designation Minor in Electrical Engineering or Minor in Computer Engineering will be placed on your transcript, in addition to any academic honors based upon your Missouri S&T GPA. Minor elective courses may be in one or more of the available emphasis areas.

**Minor in Electrical Engineering**

A minor in Electrical Engineering will require the following:
- Pass the El Eng Advancement Exam I (El Eng 2100 Final) with a C or better*
- Pass El Eng 2120 and El Eng Advancement Exam II with a C or better
- Pass 12 additional hours of El Eng coursework excluding El Eng 28XX, 38XX, 4096, 4097, and 4099. At least 3 lecture hours at the 4XXX-level or above are required. A C or better is required for the all 12 hours. No transfer courses and no more than 3 hours of El Eng 3000, El Eng 4000, or El Eng 5000 may be used to meet the requirements. The course choice for the 12 additional hours are subject to the approval of the minor advisor.

*One opportunity will be given to pass the El Eng Advancement Exam I if a student has prior circuits coursework or experience. Otherwise, the student must pass El Eng 2100.

**Minor in Computer Engineering**

A minor in Computer Engineering will require the following:
- Pass the El Eng Advancement Exam I (El Eng 2100 Final) with a C or better*
- Pass the Cp Eng Advancement Exam (Cp Eng 2210) with a C or better**
- Pass Cp Eng 3150 with a C or better
- Pass El Eng 2200 or Cp Eng 3110 with a C or better
- Pass Cp Eng 5410 or Cmp Sc 5600 with a C or better
- Pass 3 hours of 4XXX-level or above Cp Eng or El Eng or Cmp Sc coursework with a C or better, excluding special problems and undergraduate research. Transfer courses cannot be used to satisfy this requirement. The course choice for this requirement is subject to the approval of the minor advisor.

*One opportunity will be given to pass the El Eng Advancement Exam I if a student has prior course or experience in circuits. Otherwise, the student must pass El Eng 2100.

**One opportunity will be given to pass the Cp Eng Advancement Exam if a student has prior course or experience in digital circuits. Otherwise, the student must pass Cp Eng 2210.

An Admission Form is needed to start the program and the Registrar’s Undergraduate Minor Form is required upon completion. The Admission form should be submitted to the EE or CpE Minor Advisor. See http://ece.mst.edu/undergraduateprograms/electricalengineering/ or http://ece.mst.edu/undergraduateprograms/computerengineering/

**EE Minor Advisor**

Dr. Steve E. Watkins, 121 EECH, 341-6321, watkins@mst.edu

**CpE Minor Advisor**

Dr. R. Joe Stanley, 127 EECH, 341-6896, stanleyj@mst.edu
ECE Minor Programs Continued

Procedure for obtaining a Minor in Electrical or Computer Engineering

- Meet with the EE or CpE Minor Advisor for course selection and approval signature
- Complete and submit a signed Application for Admission to the EE or CpE Minor Program* to the ECE Undergraduate Secretary
- Complete the courses for the minor (If alternate courses are desired, meet again with the minor advisor to seek approval for the minor program changes.)
- Upon completion of an approved minor program, complete and submit a signed Registrar’s Undergraduate Minor Form.*

*The student is responsible for completing and submitting the required forms.

A minor will take multiple semesters to complete. Make plans to meet the introductory requirements in each minor as soon as possible, e.g. the El Eng Advancement Exam I or El Eng 2100 and the Cp Eng Advancement Exam or Cp Eng 2210 are basic prerequisite for courses in El Eng and Cp Eng, respectively. The use of minor courses to meet in-major course requirements is subject to the major department’s approval. Note that the C or better requirement for all courses is a requirement that cannot be waived.

Example Minor Programs

Minor programs may include electives in several emphasis areas or may target a particular emphasis area. The following are a few examples of possible minor programs.

EE Minor Emphasizing Electronics

Circuits I  Circuits II  EE 2120

Intro. Elect Devices
EE 2200
Electronics I
EE 3100
Electronics II
EE 3120
Electronics Elective
EE 51XX

EE Minor Emphasizing Fiber Optics or Antennas

Circuits I  Circuits II  EE 2120

Intro. Elect Devices
EE 2200
Electronic & Photonic Devices
EE 3250
Electromagnetics
EE 3600
Fiber Optics
EE 5220 or Antennas
EE 3640

CpE Minor Emphasizing Integrated Circuits and Logic Design

Circuits I  Intro. to Cp Eng. CpE 2210

Intro. Elect Devices
EE 2200
Digital System Design
CpE 3150
Digital Network Design
CpE 5410
VLSI Design
CpE 5210