The Ohio State University
College of Engineering

Signal Processing Minor (SIGPR-MN)

Department of Electrical and Computer Engineering
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https://ece.osu.edu/new-ece-courses

Overview

The minor in Signal Processing consists of a minimum of 15 credit hours of required and elective course work as listed below. Upon completion of the Minor in Signal Processing, learners will be better prepared to:

1) Be competent with linear systems as approximate models of physical systems

2) Master Fourier series, Fourier transform, and discrete-time Fourier transform

3) Master the fundamentals of sampling and reconstruction

Courses in this minor have pre-requisites that include:

1. *CSE 1222, 2221, Engr 1222, 1281.01H, or 1281.02H*
2. *Math 1152, 1161.01, 1161.02, 1172, or 1181H*
3. *Math 2174 or 2568*
4. *Math 4530 or Stats 3470 (ECE 5200 ONLY)*
5. *Physics 1250, 1250H, or 1260, or Chem 1210 or 1250.*

Please consult the course bulletin for course-specific pre-requisites before enrolling.

Required courses (12 credit hours)
ECE 2020: Introduction to Analog Circuits and Systems (3)
ECE 2060: Introduction to Digital Logic (3)
ECE 2050: Introduction to Discrete Time Signals and Systems (3)
ECE3050: Signals and Systems (3)

Elective course work (min 3 credit hours)
Select one course (3 CH) from:
ECE 5200: Introduction to Digital Signal Processing (3)
ECE 5206: Medical Imaging and Processing (3)
ECE 5460: Image Processing (3)

Signal Processing Minor Program Guidelines:

Credit Hours Required
A minimum of 15 credit hours. 1000-level courses shall not be counted in the minor. At least 6 credit hours must be upper-level courses as defined by the College of Engineering (3000-level or above).

Transfer and EM Credit Hours Allowed
A student is permitted to count up to 6 total hours of transfer credit and/or credit by examination toward the minor.

Overlap with the Major and Additional Minor(s)
- The minor must be in a different subject than the major.
- The minor must contain a minimum of 12 hours distinct from the major and/or additional minors.
- The minor is not open to students majoring in Electrical and Computer Engineering.

Grades Required
- Minimum C- for a course to be listed on the minor.
- Minimum 2.00 cumulative GPA for all minor course work.
- Course work graded Pass/Non-Pass cannot count on the minor.
- No more than 3 credit hours of course work graded Satisfactory/Unsatisfactory may count towards the minor.

X193 Credits No more than 3 credit hours

Declaring the minor:
Students must have a minimum 1.7 GPA to apply to the minor. To apply to/declare the minor, students should contact an ECE advisor.

Variation from Program
Any variation from the program described above needs the approval of the Department of Electrical and Computer Engineering. Students should petition through an ECE advisor.