

Computer Engineering M.S. 2016-2017

Computer Engineering Core Requirements (15 hours)

The following courses or their approved substitutions are required for both the thesis and the extended course work options.

[CENG 5131](#) Engineering Applications

[CENG 5133](#) Computer Architecture Design

[CENG 6332](#) High Performance Computer Architecture

Students will select two more core courses from the following four:

[CENG 5334](#) Fault Tolerant Computing

[CENG 5434](#) Microcomputer Systems Design

[CENG 5531](#) Machine Learning and Applications

[CENG 5534](#) Advanced Digital System Design

Computer Engineering Elective Requirements (12 hours thesis option, 15 hours non-thesis)

The following courses or their approved substitutions are required for both the thesis and the extended course work options.

6 hours of CENG courses 5100-6000 level

3 hours of CENG/CSCI/SWEN courses 5100-6000 level

CENG/CSCI/SWEN 4000-6000 level: 3 hours thesis option, 6 hours non-thesis

Computer Engineering Thesis Option (6 hours)

[CENG 6939](#) Master's Thesis Research

Extended Course Work Option (6 hours)

[CENG 6838](#) Research Project and Seminar

[CENG 6838](#) Research Project and Seminar

Or

CENG elective 5000-6000 level

[CENG 6838](#): To be taken after completion of core courses and during last 12 hours.

Computer Engineering Specializations

Digital Signal Processing (DSP) Specialization

Students interested in a Digital Signal Processing Specialization should take the following as electives:

[CENG 5431](#) Digital Signal Processing

[CENG 5433](#) Principles of Digital Communications Systems

[CENG 6431](#) DSP Implementations

Telecommunications Specialization

Students interested in a Telecommunications Specialization should take the following as electives:

[CENG 5333](#) Network Performance Analysis

[CENG 5431](#) Digital Signal Processing

[CENG 5433](#) Principles of Digital Communications Systems