



## Electrical Engineering and Computer Science CSE Professional Elective Plan of Study

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**Student Name:** \_\_\_\_\_ **R#:** \_\_\_\_\_  
(Please print)

**Specialization Area:** \_\_\_\_\_

The courses taken as professional electives provide an opportunity for specialization in one of several areas. Before taking any professional elective courses, students must work with a faculty mentor to develop an elective plan of study and place it on file with the EECS department.

1. Fill out the following chart with the consultation of a Faculty Mentor.
2. Both you and your Faculty Mentor must sign.
3. Turn in to the EECS Undergraduate Director.

| Course Number                           | Course Name | Semester Planned | Credit Hours |
|---|-------------|------------------|--------------|
|   |             |                  |              |
|   |             |                  |              |
|   |             |                  |              |
|   |             |                  |              |
|   |             |                  |              |
|   |             |                  |              |
| <b>TOTAL: Must be at least 9 hours.</b> |             |                  |              |

**Signatures:**

\_\_\_\_\_

**Student**

**Date**

\_\_\_\_\_

**Faculty Mentor**

**Date**

\_\_\_\_\_

**Undergraduate Director**

**Date**

# CSE Program Professional Electives for Specializations

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| Specialization Area         | Faculty Advisors (CSE Program Faculty) | Professional Elective Courses  |
|-----------------------------|--|--|
| Artificial Intelligence     | Kaur, Serpen and Xu                    | EECS 4120 Intro to Fuzzy Systems and Applications<br>EECS 4740 Artificial Intelligence<br>EECS 4750 Machine Learning<br>EECS 4980 Biologically-Inspired Computing  |
| Computer Security           | Javaid and Thomas                      | EECS 4760 Computer Security<br>EECS 4980 Fundamentals of Cyber Security<br>EECS 4980 Inside Cryptography   |
| Controls                    | Serpen                                 | EECS 4200 Feedback Controls *<br>EECS 4220 Programmable Logic Controllers<br>EECS 4260 Control System Design **  |
| Signal and Image Processing | Alam                                   | EECS 4370 Information Theory and Coding<br>EECS 4380 Digital Signal Processing<br>EECS 4330 Image Analysis & Computer Vision   |
| Software                    | Carvalho, Heuring, Ledgard and Thomas  | EECS 4500 Programming Language Paradigms<br>EECS 4520 Advanced Systems Programming<br>EECS 4530 Computer Graphics I<br>EECS 4560 Database Systems I<br>EECS 4580 Human Computer Interface Design<br>EECS 4980 Open Source Software Development<br>EECS 4980 Algorithms |

\*Note: EECS 3220 is a prerequisite to this course.

\*\*Note: EECS 4200 is a prerequisite to this course.

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