Electrical Engineering and Computer Science
CSE Professional Elective Plan of Study

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.

<table>
<thead>
<tr>
<th>Course Number</th>
<th>Course Name</th>
<th>Semester Planned</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

TOTAL: Must be at least 9 hours.

Signatures:

__________________________  __________________________
Student                        Date

______________________________  __________________________
Faculty Mentor                  Date

______________________________  __________________________
Undergraduate Director          Date
# CSE Program Professional Electives for Specializations

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

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

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

Revision Date: April 2017