The University of Toledo
Department of Electrical Engineering and Computer Science
B.S.C.S.E. 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. One course taken as part of the requirements for a business minor may be used as a professional elective as long as the minor is completed.

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 Academic Program Coordinator who will obtain the CSE Undergraduate Director's signature and contact you with any questions or concerns.

Course Number	Course Name	Semester Planned	Credit Hours
	TOTAL: Must be at least 9 hours.		

Signatures:

_____ _____
Student **Date**

_____ _____
Faculty Mentor **Date**

_____ _____
CSE Undergraduate Director **Date**

Typical CSE Undergraduate Professional Elective Courses

This is a non-exhaustive list of suggested CSE elective courses grouped by area. These groupings are solely to associate faculty with their areas of interest. A student may take courses from several areas. Upper-level courses from other engineering programs of study also qualify if approved by the faculty mentor as part of a coherent elective plan-of-study. A student who completes a business minor may use one of the business courses as part of his/her professional elective plan-of-study. Special topics (4980) and independent study (4990) courses may be used if approved by the faculty mentor.

Software Design and Development

Faculty Mentors

Dr. Jackson Carvalho Dr. Gerald Heuring
Dr. Devinder Kaur Dr. Henry Ledgard
Dr. Ezzatollah Salari

Suggested Courses

EECS 4500 Programming Languages and Paradigms	3
EECS 4510 Translation Systems	3
EECS 4520 Advanced Systems Programming	3
EECS 4530 Computer Graphics I	3
EECS 4540 Computer Graphics II	3
EECS 4550 Creating Multimedia Software	3
EECS 4560 Database Systems I	3
EECS 4570 Database Systems II	3
EECS 4580 Survey of Artificial Intelligence	3
EECS 4980 Human Computer Interface Design	3

Digital Systems and Computer Architecture

Faculty Mentors

Dr. Mohsin Jamali Dr. Anthony Johnson
Dr. Devinder Kaur Dr. Mohammed Niamat
Dr. Gursel Serpen Dr. Hilda Standley

Suggested Courses

EECS 4130 Digital design	3
EECS 4140 Fault-Tolerant Digital Systems	3
EECS 4170 Real-Time Embedded Systems Design	3
EECS 4340 Imaging Architecture and Hardware	3
EECS 4610 Digital VLSI Design I	3
EECS 4620 Digital VLSI Design II	3
EECS 4630 Physical Design of VLSI Circuits	3
EECS 4760 Computer Security	3
EECS 4770 Computer Hacking & Forensic Analysis	3
EECS 4780 Quantum Computing	3

Data Communications and Computer Networking

Faculty Mentors

Dr. Mansoor Alam Dr. Weng Kang
Dr. Junghwan Kim Dr. Lawrence Miller

Suggested Courses

EECS 4180 Computer Networking	3
EECS 4250 Robotics	3
EECS 4330 Image Analysis and Computer Vision	3
EECS 4370 Information Theory and Coding	3
EECS 4380 Digital Signal Processing	3
EECS 4390 Wireless and Mobile Networks	3