

The University of Toledo
Department of Electrical Engineering and Computer Science
B.S.E.E. Elective Plan of Study
 (For students entering before fall 2009)

Student Name: _____ **R#:** _____
 (Please print)

Specialization Area: _____

The courses taken as technical electives provide an opportunity for specialization in one of several areas. Before taking any technical 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 technical 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 EE 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 12 hours.			

Signatures:

_____ **Student**

_____ **Date**

_____ **Faculty Mentor**

_____ **Date**

_____ **EE Undergraduate Director**

_____ **Date**

Typical EE Undergraduate Technical Elective Courses

This is a non-exhaustive list of suggested EE 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 TE plan-of-study. Special topics (4980) and independent study (4990) courses may be used if approved by the faculty mentor.

<p style="text-align: center;"><u>Power Electronics and Energy Systems</u></p> <p style="text-align: center;"><u>Faculty Mentors</u></p> <p style="text-align: center;">Dr. Roger King Dr. Krishna Shenai Dr. Thomas Stuart Dr. Lingfeng Wang</p> <p style="text-align: center;"><u>Suggested Courses</u></p> <p>EECS 4170 Real-Time Embedded Systems Design . 3 EECS 4240 Power Systems Operation..... 3 EECS 4460 Power Systems Analysis..... 3 EECS 4400 Solid State Electronics..... 3 EECS 4470 Electronic Design..... 3 EECS 4490 Electronic Energy Proc II 3</p>	<p style="text-align: center;"><u>Computer Hardware</u></p> <p style="text-align: center;"><u>Faculty Mentors</u></p> <p style="text-align: center;">Dr. Mansoor Alam Dr. Mohsin Jamali Dr. Anthony Johnson Dr. Devinder Kaur Dr. Mohammed Niamat Dr. Gursel Serpen</p> <p style="text-align: center;"><u>Suggested Courses</u></p> <p>EECS 4140 Fault-Tolerant Digital Systems3 EECS 4150 Automotive Electronics.....3 EECS 4170 Real-Time Embedded Systems Design ..3 EECS 4180 Computer Networks3 EECS 4220 PLC.....3 EECS 4610 Digital VLSI Des I3 EECS 4620 Digital VLSI Des II3 EECS 4630 Physical Design of VLSI Circuits3</p>
<p style="text-align: center;"><u>Solid State and RF Devices and Systems</u></p> <p style="text-align: center;"><u>Faculty Mentors</u></p> <p style="text-align: center;">Dr. Vijay Devabhaktuni Dr. Daniel Georgiev Dr. Rashmi Jha Dr. Krishna Shenai</p> <p style="text-align: center;"><u>Suggested Courses</u></p> <p>EECS 4400 Solid State Electronics..... 3 EECS 4410 Electro Optics 3 EECS 4420 Microwave Electronics 3 EECS 4440 Antenna Theory and Design 3 EECS 4710 Advanced Electromagnetics 3 EECS 4810 Introduction to Nanotechnology 3 EECS 4820 Nanotechnology and Microfabrication .. 3 EECS 4980 Intro. to Microfabrication/MEMS Devs 3</p>	<p style="text-align: center;"><u>Communication, Control and Signal Processing</u></p> <p style="text-align: center;"><u>Faculty Mentors</u></p> <p style="text-align: center;">Dr. Vijay Devabhaktuni Dr. Daniel Georgiev Dr. Junghwan Kim Dr. Richard Molyet Dr. Ezzatollah Salari</p> <p style="text-align: center;"><u>Suggested Courses</u></p> <p>EECS 4220 Programmable Logic Controllers3 EECS 4250 Robotics.....3 EECS 4260 Control System Design.....3 EECS 4320 Industrial Imaging Systems3 EECS 4330 Image Analysis and Computer Vision....3 EECS 4340 Imaging Architecture and Hardware3 EECS 4370 Information Theory and Coding.....3 EECS 4380 Digital Signal Processing3 EECS 4390 Wireless and Mobile Networks3 EECS 4410 Electro Optics3 EECS 4440 Antenna Theory and Design.....3 EECS 4710 Advanced Electromagnetics3</p>