

ELECTRICAL ENGINEERING
Curriculum Notes
2009-2010

1. Electrical Engineering (EE) students must complete 18 credit hours in social sciences/humanities/Non-Technical electives using any one of the following options:
 - Option 1:** Students may use their electives to complete a non-technical minor. Students pursuing this option must plan early in their degree program.
 - Option 2:** Complete the divisional perspective requirements of humanities division and take the remaining electives from the social sciences division.
 - Option 3:** Complete the divisional perspective requirements of social sciences division and take the remaining electives from the humanities division.

2. In EE program, tracks of specialization (described in the *2009-2010 Syracuse University Bulletin: Undergraduate Course Catalog*) and minors are used to regulate technical electives. A student must complete four technical elective courses in Electrical Engineering or Computer Engineering. At a minimum, two of these courses must complete one EE track. Students with an LCS technical minor needs to complete only one EE track (two EE elective courses). If a student chooses to complete two tracks, there are 12 credits of technical electives. If a student chooses to complete one EE track and a technical ECS minor, the technical electives are increased to 21 credits. Courses that are not required for students who complete a technical minor are ELE 346, 325 and 312.

3. First year courses in Physics, Mathematics and computer programming may not be used as unspecified electives.

Footnotes to the Curriculum Table:

- + CIS 321 can be substituted if a student does not want a mathematics minor.

- * Students who choose to complete a technical ECS minor may replace these courses with technical electives.

Electrical Engineering Track Sheet 2009-2010

Tracks (Technical Electives)

Tracks are intended to provide a cohesive set of technical electives for electrical engineering students. A track usually consists of a group of four courses (12 credits). In the Department of Electrical Engineering and Computer Science there are three tracks in electrical engineering.

VLSI Track:

ELE 331	Digital Circuits & System	3
ELE 346	Semiconductor Devices *	3
ELE/CSE 464	Introduction to VLSI Design	3
ELE 541	Integrated Circuits	3

Electromagnetics Track:

ELE 324	Electromagnetics I	3
ELE 325	Electromagnetics II *	3
ELE 424	Fundamentals of RF & Microwaves	3

and choose one of the following:

ELE 425	Microwave Engineering	3
ELE 524	Introduction to Applied Optics	3
ELE 525	Electromagnetic Compatibility	3

Communications Track:

ELE 351	System and Signal Analysis	3
ELE 352	Digital Signal Processing	3

and choose two of the following:

ELE 551	Communication Systems	3
ELE 558	Data Networks: Basic Principles	3
ELE 591	Special Topics in Communications	3

* Students who choose to complete a technical ECS minor may replace these courses with technical electives.