

Electrical Technology A.A.S. Advisement Tip Sheet

2010-2011

CONTACT INFORMATION

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PURPOSE OF PROGRAM

The program provides a solid background in analog and digital electronics and in microprocessor and computer programming. The A.A.S. degree prepares students for technician-level positions in research and development, product design, and manufacturing. It also provides a solid academic base for transfer to a four-year institution's bachelor of technology program.

PRIORITY COURSES

Priority courses for first semester if student is part-time or only able to take 12-13 credits:

MATH122 or MATH132
ELEC126
ELEC121
ENGL100

COURSE SEQUENCING DETAILS

To enroll in the first semester ELEC126 course, students must be concurrently enrolled in MATH122 or MATH132. The prerequisite for the MATH122 and MATH132 courses is MATH100. (Depending on the results of the admissions placement test, some students may need to complete MATH090, then MATH095 before attempting MATH100.) If students must begin at a math level below MATH122/132, there are a few other non-ELEC courses on the program sheet that they could take. However, students who need to take developmental courses are often unable to begin their studies in the Electrical Technology program.

The first and third semester ELEC courses are Fall only and the second and fourth are Spring only. Freshmen students who want to start the program in the spring can only take the non-ELEC courses because they will have missed the prerequisite ELEC courses that were taught in the fall.

There is very little room for departure from the standard sequence. All higher ELEC courses require lower ELEC courses (and some MATH and CSCI courses, too) as prerequisites.

GUIDELINES FOR CHOOSING COURSES

N/A

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JOB OPPORTUNITIES

The demand for electronics technicians far exceeds the number of graduates. Typical starting salaries are in the mid \$30Ks locally and over \$45K in the larger cities and out of state. Many graduates work in industrial or electronics manufacturing facilities doing repair, set-up, calibration, quality control or field service of analog and digital systems like those found in computers, robots, card reader machines and automated manufacturing equipment.

TRANSFER INFORMATION

It is very common to immediately transfer to an upper-division program for a BSET degree or continue studies part time. The ET program has been designed to allow the flexibility to either go out as a qualified technician or to transfer smoothly into full junior status at a number of colleges.

FREQUENTLY ASKED QUESTIONS

Q. What should I ask for on my birthday that will help me the most in the ET program?

A. A PC. Many of the ELEC courses are very PC-dependent. There is always plenty of lab time set aside to complete the PC circuit design and simulation exercises, but personal computers allow students to perform that task at home. This provides the opportunity to spend more lab time working with the sophisticated lab instruments that are needed to become proficient in before going out into the workforce.

Q. What software should I purchase for my PC?

A. Instructors will recommend a few common packages that are used for circuit design, simulation and technical report generation. MultiSIM, SolidWorks, Visual Basic and Excel are very popular.

Q. Is it reasonable to expect that it will take 3 years for some students to complete the degree?

A. Yes, depending on their background, many students take 3 years. There are several advantages to this; 1) Semester credit load can drop from an average of 17 to an average of 12; 2) Most students with a lighter load will achieve a higher GPA; 3) Having a third year will allow students to take several other optional computer-related courses that don't otherwise fit in the curriculum. (Like extra CAPS and CSCI courses.)

Q. Is there any course that you would recommend that I take during the summer between my first and second year?

A. YES, PHSC104. This will lighten an extremely heavy third semester, which would otherwise have four lab courses in it.