

# Electrical Engineering Electrical Engr. Alternative Course Plan *Pre-Professional School* 2004-2005

## Semester 1

12 SCH, 36 hours/week

**MATH 2144**  
Calculus I  
**4/0, Note 8**

MATH2153  
ENSC2113

**PHYS 2014**  
General Physics I  
**3/2, Note 8**

PHYS2114  
ENSC2113

**ENGR 1111**  
Intro to Engr  
**1/0**

**POLS 1113**  
American Gov't  
**3/0**

## Semester 2

13 SCH, 39 hours/week

**MATH 2153**  
Calculus II  
**3/0**

MATH2233  
MATH2163  
MATH3013  
ENSC2613  
IEM3503

MATH2144

**PHYS 2114**  
General Physics II  
**3/2**

PHYS3313  
ENSC2613  
ECEN2011

PHYS2014

**ENGL 1113**  
Freshman Comp I  
**3/0, Note 2**

ENGL3323

**CS 1113**  
Comp. Science I  
**3/0**

CS2133

## Semester 3

15 SCH, 45 hours/week

**MATH 2163**  
Calculus III  
**3/0**

ECEN3613

**CHEM 1414**  
General Chemistry  
**3/2, Note 1**

**ENGR 1342**  
Engr Design/CAD  
**1/2**

**ECEN 3233**  
Digital Logic Des  
**2/2**

ECEN4013

**CS 2133**  
Comp. Science II  
**3/0, Note 4**

CS1113

## Semester 4

13 SCH, 39 hours/week

**MATH 2233**  
Diff Equations  
**3/0**

ECEN3713  
ECEN3613

MATH2153

**PHYS 3313**  
Modern Physics  
**3/0**

ECEN3913

PHYS2114

**ENSC 2613**  
Electrical Science  
**3/0, Note 8**

ECEN3713  
ECEN3021

PHYS2114  
MATH2153

**ECEN 2011**  
Exp Methods I  
**0/2, Note 8**

ECEN3021  
ECEN3313

PHYS2114

**ENSC 2113**  
Statics  
**3/0**

ENSC2123

PHYS2014  
MATH2144

## Semester 5

13 SCH, 39 hours/week

**MATH 3013**  
Linear Algebra  
**3/0, Note 8**

ECEN3723

MATH2153

**ECEN 3713**  
Network Analysis  
**3/0, Note 8**

ECEN3031  
ECEN3313  
ECEN3613  
ECEN3723

ENSC2613  
MATH2233

**ECEN 3021**  
Exp Methods II  
**0/2, Note 8**

ECEN3031  
ECEN3113

ENSC2613  
ECEN2011

**ENSC 2123**  
Dynamics  
**3/0**

ECEN3723

ENSC2113

**HIST 1103**  
American History  
**3/0**

Course Number  
Course Name  
Must pass to take  
these courses

Prerequisites\*  
Lecture/Lab,  
See Note #

\*Only the last prerequisite in a sequence is listed. All earlier prerequisites must also be satisfied before taking the course.

OSU Requirement

CEAT Requirement

ECEN Requirement

Elective

### Alternative Suggested Course Plan

The anticipation at OSU and most institutions of higher education is that for one student credit hour (SCH) the student spends one hour per week in lecture (two for lab courses) and two hours studying outside of class (one for lab courses). A three credit hour class requires, on average, nine hours per week. This study plan is recommended for students who plan to work more than ten hours per week while enrolled, wish to participate in time-intensive extracurricular activities, who have a college GPA below 3.0, or who have other obligations which take more than ten hours per week.

### NOTES:

- 1) Chemistry 1515 may be substituted for CHEM 1414 and should be taken by all students considering medical school.
- 2) Students with less than a "B" in ENGL 1113 or 1313 must take ENGL 1213 or 1413 prior to ENGL 3323.
- 3) A total of at least 6 hours designated "H" and 6 hours designated "S" are required. Of these, 3 hrs must meet the International Dimension "I". Consult the College approved list for courses that qualify.
- 4) CS 2432 and 2351 may be taken instead of CS 2133.
- 5) Must follow Area of Specialization requirements.
- 6) Must be approved by ECEN advisor.
- 7) Must be at least 3 SCH.
- 8) Line indicates this course has a co-requisite and must be taken with other courses.

# Electrical Engineering Electrical Engr. Alternative Course Plan *Professional School\** 2004-2005

## Semester 6

## Semester 7

## Semester 8

## Semester 9

## Semester 10

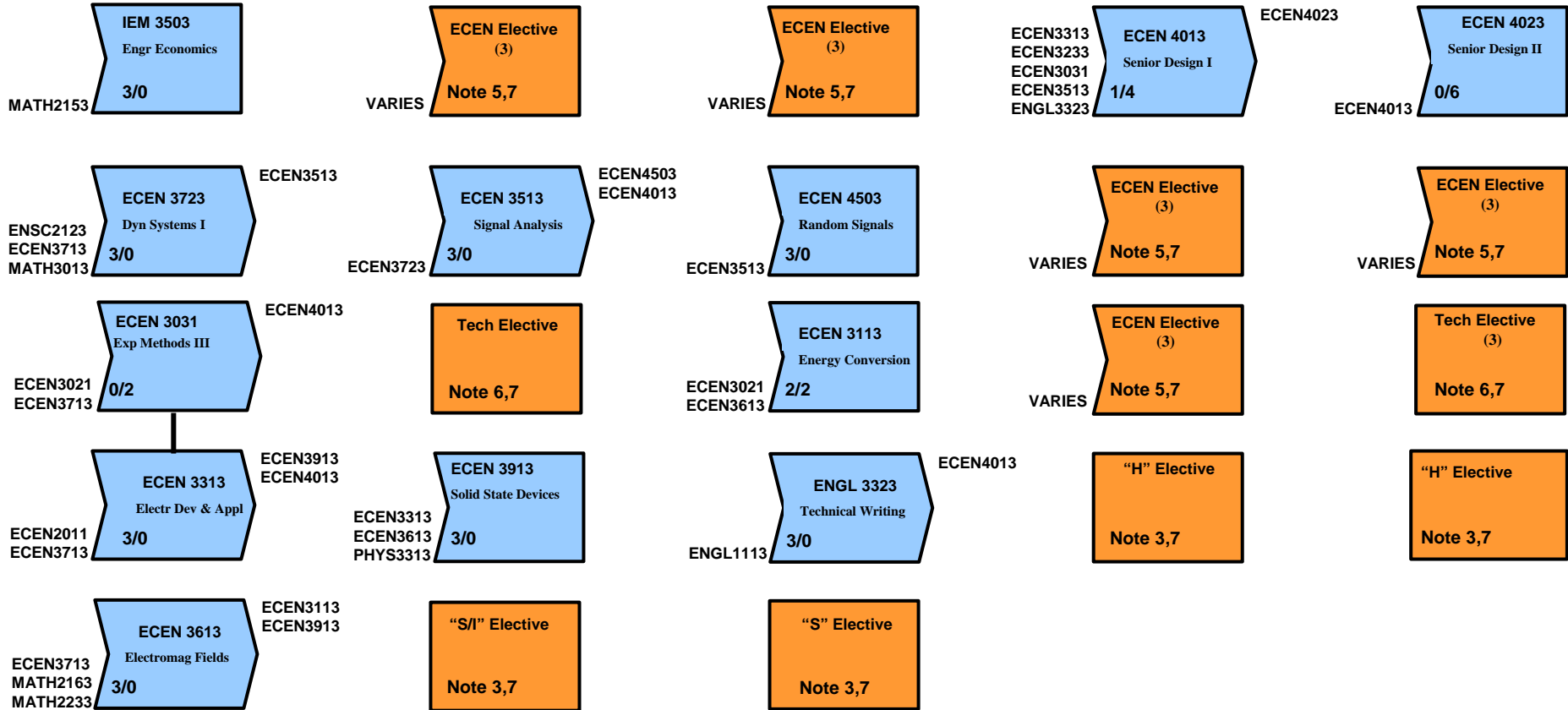
13 SCH, 39 hours/week

15 SCH, 45 hours/week

15 SCH, 45 hours/week


12 SCH, 36 hours/week

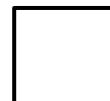
12 SCH, 36 hours/week

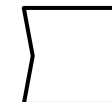



### \* Professional School Entry Requirements:

- Completion of at least 60 college level semester credit hours (SCH).
- Completion of at least 12 SCH from OSU.
- Completion of MATH 2144, 2153, 2163, 2233, 3013; PHYS 2014 and 2114; CHEM 1414; ENGR 1111, 1322; ENSC 2113, 2123, 2613, ECEN 3713, 3021; ENGL 1113 or 1313.
- An overall GPA of 2.6 or better at OSU.
- A GPA of 2.7, or better, in all of the college-level math, science and engineering courses required for the B.S. in Electrical Engineering.

 No prerequisites, not prerequisite for another class

 No prerequisites, is prerequisite for another class

 Has prerequisites, is prerequisite for another class

 Has prerequisites, not prerequisite for another class