Approved Electives - Electrical Engineering degree

12 credits are required with the Senior Design option. (EE4901, EE4910 or MEEM4901, MEEM4911)
10 credits are required with the Enterprise Design option. (ENT3950, ENT3960, ENT4950, ENT4960)

Courses graded pass/fail or taken under ‘audit’ option do not qualify as ‘Approved Electives’. Courses must be graded A-D.

1. Choose a minimum of 5 credits of approved Math or Science from the following: (CH1150/1151/1153 recommended)
   - Any MA course at least 3000 level except MA3720 or MA4945.
   - Any BL course except BL3990.
   - Any CH course number CH1100 and higher, except CH1130.
   - Any PH course numbered PH1600 and higher, except PH2230.
   - MAA not accepted.

2. Choose remaining approved electives from the above or the following:
   - Any Math or Science elective listed above.
   - Any CS course
   - Any EE course except EE3010 (maximum of 4 credits)
   - ENG2000-ENG4999 except ENG2990, 3530, 3993, 4160, 4900, 4905, 4910, and ENG4990
   - Any BE, CE, CM except CM3410, GE, MEEM, MY course
   - Any ENT course except ENT1950
   - UN4000 Remote Sensing Seminar
   - UN3002 or UN3003 Co-op (6 credits maximum).

Look up semester offerings and pre-requisites online.

Recommended Approved Electives for EE majors:
- **CS 1122** (Intro. to CS II), CS1141 C for Java programmers C is Recommended for EE majors.
- **MEEM 2700** Dynamics
- **MEEM2110** Statics*
- **ENG 2120** Statics and Strength of Materials*
- **MEEM 2200** Thermodynamics *
- **MEEM 3210** Fluid Mechanics *(has pre-requisites)
- **MEEM 3230** Heat Transfer *(p-req = MEEM3210)
- **MY 2100** Intro to Material Science & Engineering
- **MY 3292** Light and Photonic Materials

* If you plan to take the Fundamentals of Engineering (FE) Exam during your senior year, these courses would be beneficial.

Recommended HASS electives:
- **EC 3400** Economic Decision Analysis

MEEM course flow: (look up all pre-reqs, co-reqs, restrictions and semester offerings online)
- CH1150 & CH1151 - MEEM2200 Thermodynamics - MEEM3210 Fluid Mechanics – MEEM3230 Heat Transfer
- MA2160 – MEEM2110 Statics – MEEM2700 Dynamics
- MEEM2150 Mechanics of Materials

(MEEM courses are typically restricted to ME majors during the initial 2-week registration period, then opened up after that.)

Photonics Electives: 6 credits minimum as part of Photonics Concentration requirements
- **EE4252** Digital Signal Processing Fall
- **EE4253** Real Time Signal Processing Spring
- EE4256 Fourier Optics Fall
- EE4257 Digital Image Processing Spring
- EE4290 Optical Communication Spring
- MY3292 Light and Photonic Materials Spring
- PH3210 Optics Fall
- PH4510 Introduction to Solid State Physics Fall

*Photonics Concentration: Fall 2006 – Spring 2009 students: Select 3 credits from: EE4256, EE4257, or EE4290 to meet application of probability or statistics requirement (unless you took EE3180 in place of MA3710/20).