

Bradley Department of Electrical and Computer Engineering  
Virginia Polytechnic Institute and State University

Engineering and Science Elective List

For Electrical Engineering and Computer Engineering majors  
Graduating in 2009

EE and CPE majors are required to take one non-major engineering or science course from the following list. There are no hidden prerequisites for these courses for EE and CPE majors: prerequisite courses, if any, are also required courses within the EE and CPE curriculums.

Enrollment into courses will be based on sufficient resources, including faculty availability and student demand.

Within the College of Engineering:

BSE	3154	Thermodynamics of Biological Systems
ChE	2114	Mass and Energy Balances
ECE	3105	Electromagnetic Fields (CpE majors only)
ESM	2104	Statics
ESM	4084	Engineering Design and Optimization
ESM	4124	Multi-Body Mechanics and Visualization
ISE	2404	Deterministic Operations Research
ISE	3414	Probabilistic Operations Research
ME	3114	Engineering Thermodynamics
MSE	2034	Elements of Materials Engineering
MSE	3204	Fundamentals of Electronic Materials

Outside of the College of Engineering:

BIOL	1005	General Biology
BIOL	1006	General Biology
BMVS	4064	Introduction to Medical Physiology
PHYS	3355	Intermediate Mechanics
PHYS	3405	Intermediate Electromagnetics (CpE majors only)
PHYS	3455	Foundations of Quantum and Solid State Physics
PHYS	3655	Introduction to Astrophysics
PHYS	3656	Introduction to Astrophysics
PHYS	3704	Thermal Physics
PHYS	4404	Magnetics
PHYS	4574	Nanotechnology
PHYS	4614	Optics
PHYS	4714	Introduction to Biophysics