

REQUIREMENTS FOR THE BS IN ENGINEERING PHYSICS

General education requirements

[See B.S.E.Ph. under Majors and Degrees at <http://catalog.arizona.edu/2006-07/dept/PHYS.html>]

English Composition [placement by English Department]

General Education study areas other than science (science & math automatically satisfied)

Tier 1: two courses in TRAD, two courses in INDV

Tier2: one course in INDV and one in either Arts or Humanities

Physics requirements

One of the introductory sequences (depends on math readiness):

I. Physics 151, 152, 251, 252

II. Physics 161H, 162H, 261H, 262H

PHYS 204	(Math methods)
PHYS 305	(Computational physics)
PHYS 320	(Optics)
PHYS 321	(Mechanics I)
PHYS 426	(Thermal physics)
PHYS 331 & 332	(Electricity and magnetism I & II)
PHYS 371 & 472	(Quantum mechanics I & II)
PHYS 381 & 382	(Advanced lab I & II)
PHYS 483	(Senior project lab)

Chemistry

One of the two introductory sequences:

Either CHEM103A & 104A and CHEM103B & 104B (MSE 110 may replace 103B & 104B) or

Either CHEM105A & 106A and CHEM105B & 106B (Honors)

Mathematics

MATH 124 or 125	(Calculus I) [placement by the Department of Mathematics]
MATH 129	(Calculus II)
MATH 223	(Vector calculus)
MATH 254	(Intro to ordinary differential equations)

Engineering core

ENGR 102	(Intro to engineering)
C E 215	(Mechanics of solids)
ECE 207	(Elements of electrical engineering)
MSE 222	(Intro to material science)
AME 331	(Intro to fluid mechanics)

Technical electives are a set of 18 units of upper division technical courses

of interest to the student, selected in conference with an advisor, to form a coherent supplemental program. The Senior Project (PHYS 483) is the concrete result of these electives.