

Engineering Physics Sample Schedule

	Total Credit Hours	Term:							
		1	2	3	4	5	6	7	8
Subjects required by all programs (55 hours)									
Mathematics 115, 116, 215, and 216	16	4	4	4	4	-	-	-	-
Engr 100, Intro to Engr	4	4	-	-	-	-	-	-	-
Engr 101, Intro to Computers ¹	4	-	4	-	-	-	-	-	-
Chemistry 125/126 and 130 or Chemistry 210 and 211 ²	5	5	-	-	-	-	-	-	-
Physics 140 with Lab 141; Physics 240 with Lab 241 ³	10	-	5	5	-	-	-	-	-
Intellectual Breadth	16	4	4	4	4	-	-	-	-
Advanced Mathematics (3 hours)									
Mathematics Electives (3 hours) ⁴	3	-	-	-	-	-	-	3	-
Related Technical Subjects (8 hours)									
MATSCIE 250, Princ of Eng Materials or MATSCIE 220, Intr	4	-	-	4	-	-	-	-	-
EECS 314, Elect Cir, Sys, and Appl or EECS 215, Intro to Cir	4	-	-	-	4	-	-	-	-
Physics Technical Subjects (23 hours)									
Physics 340, Waves, Heat and Light	3	-	-	-	3	-	-	-	-
Physics 351, Methods of Theoretical Physics I ⁵	3	-	-	-	-	3	-	-	-
Physics 390, Intro to Modern Physics or NERS 311, Ele of N	3	-	-	-	-	3	-	-	-
Physics 401, Int Mech ⁶	3	-	-	-	-	-	3	-	-
Physics 405, Int Elect and Mag	3	-	-	-	-	-	-	3	-
Physics 406, Stat/thermal Physics	3	-	-	-	-	-	-	-	3
Physics Lab Elective or Directed Study with Research Lab	2	-	-	-	-	2	-	-	-
Physics Elective (300-level or higher)	3						3		
Engineering Concentration (20 hours) ⁷									
Engineering Electives	16	-	-	-	-	4	4	4	4
Engineering Laboratory Elective (400-level or higher)	4	-	-	-	-	-	-	-	4
Technical Electives (7 hours) ⁸									
Mathematics, Physics or Engr Courses (300-level or higher)	7	-	-	-	-	-	4	3	-
General Electives (12 hours)	12	-	-	-	-	3	3	3	3
Total	128	17	17	17	15	15	17	16	14

Revised 2-2024

Candidates for the Bachelor of Science in Engineering in Engineering Physics - B.S.E. in Eng Physics - must complete the program listed above. This sample Notes:

- EECS 180 credit (Exam/Transfer Introductory Computer Programming) will not meet the programming requirement on its own. Students must also select from Engr 190-002, Engr 101, Engr 151, or EECS 280.
- If you have a satisfactory score or grade in Chemistry AP, A-Level, IB Exams or transfer credit from another institution for Chemistry 130/125/126 you will have met the Chemistry Core Requirement for CoE.
- If you have a satisfactory score or grade in Physics AP, A-Level, IB Exams or transfer credit from another institution for Physics 140/141 and 240/241 you will have met the Physics Core Requirement for CoE.
- Math Electives must be 300-level or higher.
- NERS 320 can be used as a substitute, as well as possibly other similar courses, subject to Undergraduate Chair approval.
- For students pursuing ME in Engr Technical Elecives, CEE 211 or ME 240 will be advised as a substitute for Physics 401. MECHENG 440 or MECHENG 540 can be substituted with faculty program advisor approval.
- Engineering Electives are to be chosen in consultation with the Undergraduate Chair to form a coherent sequence that clearly defines professional goals for the student. Sample elective sequences for a number of different subject areas are available from the academic or faculty advisors.
- Students contemplating graduate studies in Physics should elect Physics 453, Quantum Mech and Physics 463, Solid State for a complete background.