ENGINEERING PHYSICS (BS)

Program Requirements

Code	Title	Hours
Requirements (65 hours)		
ENGR-1500	Technical Drawing	2
ENGR-1200	Introduction to Engineering	2
ENGR-2300	Statics	3
ENGR-2310	Dynamics	3
or PHYS-4100	Mechanics I	
ENGR-3170	Engineering Economy & Society	3
ENGR-2320	Mechanics of Materials	3
ENGR-3300	Fluid Mechanics	3
ENGR-3410	Thermofluids Laboratory	2
Select one of the following:		3-5
ENGR-3500	Materials Science (3)	
or PHYS-4700 (3) and ENGR-3400 (2)		
ENGR-3600	Heat & Mass Transfer	3
PHYS-2100 & PHYS-2101	Classical Physics I and Classical Physics I Lab	4
PHYS-2110 & PHYS-2111	Classical Physics II and Classical Physics II Lab	4
PHYS-3200	Relativity & Atomic Physics	3
PHYS-3201	Modern Physics Lab	1
Select one of the following:		3
PHYS-3210 & PHYS-3211	Nuclear & Elementary Particle Physics and Modern Physics Lab II	
or Technical Elective		
Select one of the following:		4
EENG-2060 & EENG-3060	Linear Circuit Analysis I and Circuits Laboratory I	
or PHYS-3500		
PHYS-4400	Thermodynamics	3
or ENGR-3250	Thermodynamics	
PHYS-4600	Electricity & Magnetism I	3
PHYS-COMP	Senior Comprehensive Exam	0
PHYS-4900 & PHYS-4901 & PHYS-4902 & PHYS-4903	Physics Colloquium and Physics Colloquium and Physics Colloquium and Physics Colloquium	0
PHYS-4910	Physics & Astronomy Research	1
Required Supporting Courses (25 hours)		
MATH-1300	Calculus I	4
MATH-1350	Calculus II	4
MATH-2300	Calculus III	4
MATH-3100	Differential Equations	3
CHEM-1200	General Chemistry I Lecture	3
CHEM-1201	General Chemistry I Laboratory	1
Select one of the following:		4
CHEM-1210 & CHEM-1211	General Chemistry II Lecture and General Chemistry II Lab	
or Technical Elective		
Select one of the following:		2-3
ENGR-2000	Computer Applications in Engineering	
or CSCI-230(	Programming for Scientists & Engineers	
Technical Electives (9 credits, chosen from the following):		**9**
PHYS-4300	Optics (3)	
PHYS-4301	Optics Laboratory (1)	
PHYS-4610	Electricity & Magnetism II (3)	
PHYS-4110	Mechanics II (3)	
MENG-4240	System Dynamics & Control (3)	
MENG-3180	Manufacturing Proccess Lab I (1)	
MENG-3220	Design of Machinery (3)	
MENG-4700	Senior Seminar (1)	
MENG-4730	Mechanical Measurements & Control Lab (2)	
ENGR-3150	Statistical Analysis of Data (3)	
MATH-2500	Linear Algebra (3)	
MATH-3300	Numerical Computation (3)	
Design Elective (one course chosen from the following):		**2-3**
MENG-3240	Junior Design (2)	
MENG-4600	Engineering Design I (3)	
MENG-4610	Mechanical Engineering Design II (3)	
CIVL-4600	Civil Engineering Design (3)	
Instrumentation Elective:		**2**
MENG-4730	Mechanical Measurements & Control Lab (2)	
Total Hours		**91-95**