ANDERSON UNIVERSITY

Academic Advising

Engineering Physics Major, Bachelor of Science (85 credit hours) 2018-2019

20 credit hours from the Common Engineering Core:

- CPSC 2320: C++ Programming, 1 credit hour[1]
- ENGR 2001: Introduction to Engineering, 1 credit hour
- ENGR 2002: Introduction to Mechanical Laboratory, 1 credit hour
- ENGR 2003: Introduction to Electrical and Computer Laboratory, 1 credit hour
- ENGR 2010: Statics, 2 credit hours
- ENGR 2030: Circuit Analysis, 3 credit hours
- ENGR 2090: Systems Engineering, 2 credit hours
- ENGR 2110: Dynamics, 2 credit hours
- ENGR 2310: Computational Problem Solving, 3 credit hours
- ENGR 4950: Senior Design I, 2 credit hours[2]
- ENGR 4960: Senior Design II, 2 credit hours[3]

31 credit hours of Mathematics and Basic Sciences:

- CHEM 2110: General Chemistry I, 4 credit hours[4]
- MATH 2010: Calculus I, 4 credit hours[5]
- MATH 2020: Calculus II, 4 credit hours
- MATH 3010: Linear Algebra with Differential Equations, 4 credit hours
- MATH 3020: Calculus III, 4 credit hours
- MATH 3100: Differential Equations, 3 credit hours
- PHYS 2240: General Physics I, 4 credit hours
- PHYS 2250: General Physics, II, 4 credit hours

34 credit hours of major specific requirements:

- PHYS 3130 Modern Physics, 2 credit hours
- ENGR 2070 Thermodynamics, 3 credit hours
- ENGR 3030: Signals and Controls, 3 credit hours
- ENGR 3240/PHYS 4210 Electromagnetic Fields, 3 credit hours
- PHYS 4220 Computational Mechanics, 3 credit hours
- PHYS 4130 Quantum Theory, 4 credit hours
- PHYS 4410 Statistical Mechanics, 3 credit hours
- A minimum of 13 hours of any CPSC, ENGR, or PHYS courses at the 3000 level or above.

[1] May also be fulfilled with CPSC 2500.

[2] This is a Writing Intensive course in the Liberal Arts Program.

[3] This is both a Writing and Speaking Intensive course in the Liberal Arts Program.

[4] This course fulfills the Scientific Ways of Knowing requirement in the Liberal Arts Program.

[5] This course fulfills the Quantitative Ways of Knowing requirement in the Liberal Arts Program.

Questions? Please contact either the Department of Biology or the Department of Physical Sciences & Engineering.

ANDERSON UNIVERSITY

Academic Advising

Common Engineering Core Suggested Course Sequence 2018-2019

SEMESTER 1		SEMESTER 2	
MATH 2010	4 Hours	MATH 2020	4 Hours
CHEM 2110	4 Hours	PHYS 2240	4 Hours
ENGR 2001, 2002, 2003	3 Hours	ENGR 2310	3 Hours
ENGL 1100/ENGL 1110	3-4 Hours	ENGL 1120	3 Hours
LART 1050	1 Hour	LART 1100	2 Hours

SEMESTER 3		SEMESTER 4	
MATH 3010	4 Hours	MATH 3020	4 Hours
PHYS 2250	4 Hours	MATH 3100	3 Hours
ENGR 2010	2 Hours	ENGR 2030	3 Hours
ENGR 2090	2 Hours	ENGR 2110	2 Hours
CPSC 2320	1 Hour	ENGR Skills Lab	0-1 Hour
ENGR Skills Lab	0-1 Hour	Foreign Language	4 Hours
COMM 1000	3 Hours		

Engineering Physics Major Suggested Course Sequence

SEMESTER 5		SEMESTER 6	
ENGR 3240	3 Hours	PHYS 3130	2 Hours
ENGR 2070	3 Hours	ENGR Electives	3 - 6 Hours
ENGR 3030	3 Hours	ENGR Skills Lab	0-1 Hour
ENGR Elective	2 - 3 Hours	PHIL 3250[6]	3 Hours
ENGR Skills Lab	0-1 Hour	COMM 2550[7]	3 Hours
BIBL 2000	3 Hours		

SEMESTER 7		SEMESTER 8	
PHYS 4220	3 Hours	PHYS 4130	4 Hours
ENGR Elective	3 - 6 Hours	PHYS 4410	3 Hours
ENGR 4950	2 Hours	ENGR 4960	2 Hours
ENGR Skills Lab	0-1 Hour	ENGR Skills Lab	0-1 Hour
POSC 2100[8]	3 Hours	Personal Wellness	2 Hours
ECON 2010[9]	3 Hours	ENGR 2080[10]	3 Hours

[6] This course fulfills the Christian Ways of Knowing requirement in the Liberal Arts Program.

[7] This course fulfills the Aesthetic Ways of Knowing requirement in the Liberal Arts Program.

[8] This course fulfills the Civic Ways of Knowing requirement in the Liberal Arts Program.

[9] This course fulfills the Social/Behavioral Ways of Knowing requirement in the Liberal Arts Program.

[10] This course fulfills the Global/Intercultural Ways of Knowing requirement in the Liberal Arts Program.

Questions? Please contact either the Department of Biology or the Department of Physical Sciences & Engineering.

ANDERSON UNIVERSITY

Academic Advising

Students studying Engineering Physics can usually fall into two categories, those wishing to pursue a graduate degree in physics or engineering, or those with a passion for physics and research and want a strong background in hardware and design.
These students will often go on to graduate school, but are also exceptionally well prepared for careers in industry and national laboratories.

Questions? Please contact either the Department of Biology or the Department of Physical Sciences & Engineering.