

Biosystem Engineering — Forest Engineering Option (FOEN)

Freshman

Fall	Hours	Spring	Hours
COMP 1220 Introduction to Computing with Python or 1230 Introduction to Computing with MATLAB	2	MATH 1620 Calculus II	4
MATH 1610 Calculus I	4	ENGL 1120 English Composition II	3
ENGL 1100 English Composition I	3	PHYS 1600 Engineering Physics I	4
ENGR 1100 Engineering Orientation	0	HIST 1220 Technology And Civilization II or 1020 World History II	3
CHEM 1030 Fundamentals Chemistry I	3	ENGR 1110 Introduction to Engineering	2
CHEM 1031 Fundamental Chemistry I Laboratory	1		
HIST 1210 Technology and Civilization I or 1010 World History I ¹	3		
	16		16

Sophomore

Fall	Hours	Spring	Hours	Summer	Hours
ENGR 2010 Thermodynamics	3	MATH 2650 Linear Differential Equations	3	FORY 3020 Forest Biology	3
ENGR 2050 Statics	3	ENGR 2350 Dynamics	3	FOEN 3040 Forest Surveying	2
MATH 2630 Calculus III	4	STAT 3010 Statistics for Engineers and Scientists	3	FORY 3050 Field Mensuration	4
BSEN 2210 Engineering Methods for Biological Systems	2	ENGR 2070 Mechanics of Materials	3	FORY 3060 Introduction to Forest Management Strategies	1
BIOL 1020 Principles of Biology	3	CHEM 1040 Fundamental Chemistry II	3		
BIOL 1021 Principles of Biology Laboratory	1	CHEM 1041 Fundamental Chemistry II Laboratory	1		
	16		16		10

Junior

Fall	Hours	Spring	Hours
BSEN 3210 Mechanical Power for Biosystems	3	BSEN 3230 Natural Resource Conservation Engineering	3
FORY 3180 Forest Resource Sampling	3	CIVL 3310 Geotechnical Engineering I or 3230 Environmental Engineering	4
FORY 3100 Dendrology	3	Fine Arts Core	3

BSEN 3310 Hydraulic Transport in Biological Systems	4	Social Science Core²	3
	13		13
Senior			
Fall	Hours	Spring	Hours
BSEN 5220 Geospatial Technologies in Biosystems	3	BSEN 4310 Engineering Design for Biosystems	3
BSEN 5560 Site Design for Biosystems	3	Forest Engineering Elective	3
FOEN 5710 Systems Analysis for Forestry and Biological Operations	3	PHIL 1040 Business Ethics <i>or</i> 1020 Introduction to Ethics	3
FORV 5230 Silviculture	4	Literature Core	3
BSEN 4300 Professional Practice in Biosystems Engineering	2	UNIV 4AA0 Achieve the Creed	0
	15		12

Total Hours: 127

¹ The AU Bulletin lists the University Core Curriculum requirements for students in the College of Engineering. Students must complete a sequence in either Literature or History. Biosystems Engineering should complete the World History or Technology and Civilization Course sequence to ensure that all SLOs are met by students by the time of graduation.

² ECON 2020 preferred.

Forest Engineering Elective: see adviser for approved course listing.