

BIOLOGICAL SYSTEMS ENGINEERING: ECOLOGICAL AND ENVIRONMENTAL ENGINEERING

REQUIREMENTS

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Code	Title	Credits
Major Requirements		
Common Requirements		53
Specialization & Technical Electives		43
Capstone		5
Total Credits		101

COMMON REQUIREMENTS

See Major Requirements (<https://guide.wisc.edu/undergraduate/agricultural-life-sciences/biological-systems-engineering/biological-systems-engineering-bs/#requirementstext>).

NATURAL RESOURCES AND ENVIRONMENT SPECIALIZATION

This is a named option that will appear on the student's transcript upon completion.

Code	Title	Credits
BSE/CIV ENGR/ SOIL SCI 372	On-Site Waste Water Treatment and Dispersal	2
BSE 472	Sediment and Bio-Nutrient Engineering and Management	3
BSE 473	Water Management Systems	3
BSE 571	Small Watershed Engineering	3
M E 361	Thermodynamics	3
CIV ENGR 310 or M E 363	Fluid Mechanics Fluid Dynamics	3
BSE 301	Land Information Management	3
E M A 303	Mechanics of Materials	3
ENVIR ST/GEOG/ SOIL SCI 230 or SOIL SCI 301	Soil: Ecosystem and Resource General Soil Science	3
Complete one of the following BSE breadth courses:		3
BSE 364	Engineering Properties of Food and Biological Materials	
BSE/ ENVIR ST 367	Renewable Energy Systems	
BSE 405	Artificial Intelligence in Agriculture	

BSE 460	Biorefining: Energy and Products from Renewable Resources
BSE 461	Food and Bioprocessing Operations
BSE 464	Heat and Mass Transfer in Biological Systems
BSE/M E 475	Engineering Principles of Agricultural Machinery
BSE/M E 476	Engineering Principles of Off-Road Vehicles
BSE 305	Introduction to Precision Agriculture
BSE/M E 474	Fluid Power
AN SCI/BSE 344	Digital Technologies for Animal Monitoring

Total Credits **29**

TECHNICAL ELECTIVES

See Major Requirements (<https://guide.wisc.edu/undergraduate/agricultural-life-sciences/biological-systems-engineering/biological-systems-engineering-bs/#requirementstext>).

CAPSTONE

See Major Requirements (<https://guide.wisc.edu/undergraduate/agricultural-life-sciences/biological-systems-engineering/biological-systems-engineering-bs/#requirementstext>).