B.S. Food, Agricultural and Biological Engineering   2023-2024 Academic Year
Ecological Engineering Specialization

Name: _____   OSU Email: _____

Suggested Curriculum

This should be used as a **guide** only. Offerings subject to change. Degree Audit will be updated with any changes. (**BOLD courses offered <u>only</u> in indicated semesters.**)

Year	Autumn		Spring	
1	___ **ENGR 1100.15** or equiv *(Survey)*	1 hr	___ CHEM 1250[2] *(Chemistry for Engineers)*	4 hr
	___ ENGR 1181 *(Fundamentals of Engineering 1)*	2 hr	___ ENGR 1182 *(Fundamentals of Engineering 2)*	2 hr
	___ MATH 1151 *(Calculus 1)*	5 hr	___ MATH 1172 *(Engineering Math A)*	5 hr
	___ PHYSICS 1250 *(Mechanics, Thermal, Waves)*	5 hr	___ General Education	3 hr
	___ General Education	3 hr	___ General Education	3 hr
	___ GENED 1201[1] *(GE Launch Seminar)*	1 hr		
2	___ **FABE 2100** *(Energy in Biological Systems)*	1 hr	___ **FABE 2110** *(Fluid Mechanics in FABE)*	3 hr
	___ **FABE 2710** *(Surveying)*	2 hr	___ **FABE 2720** *(Principles of Soil/Water Engr)*	2 hr
	___ ENGR 1221[3] *(Comp Programming-MATLAB)*	2 hr	___ PHYSICS 1251 *(E&M, Optics, Modern Physics)*	5 hr
	___ MATH 2177 *(Math Topics for Engineers)*	4 hr	___ EEOB 3410 *(Ecology)*	4 hr
	___ BIOLOGY 1114.01 *(Biological Sciences)*	4 hr	___ General Education	3 hr
	___ General Education	4 hr		
3	___ **FABE 3120** *(Thermodynamics in FABE)*	4 hr	___ **FABE 3130** *(Heat & Mass Transfer in FABE)*	4 hr
	___ FABE 3171 *(Computer Graphics - AutoCAD)*	2 hr	___ **FABE 3140** *(Professional Development in FABE)*	1 hr
	___ MECHENG 2040 *(Statics & Mechanics)*	4 hr	___ **FABE 3150** *(Sys Dynamics & Electricity)*	4 hr
	___ Chemistry 2310 *(Intro Organic Chemistry)*	4 hr	___ **FABE 5310** *(Ecological Engineering & Science)*	4 hr
	___ Technical Elective*	3 hr	___ ISE 2040.02 *(Engineering Economics)*	2 hr
4	___ **FABE 4900** *(Capstone Design 1)*	3 hr	*Required* Senior Exit Survey via email for FABE	
	___ **FABE 5160** *(Electr, Msmt & Instrumentation)*	4 hr	___ **FABE 4910** *(Capstone Design 2)*	3 hr
	___ **FABE 5750** *(Stream Geomrph & Watrshed Hyd)*	3 hr	___ **FABE 5550** *(Sustainable Waste Management)*	3 hr
	___ Technical Elective*	3 hr	___ Ecology Elective*	3 hr
	___ Ecology Elective*	3 hr	___ General Education	3 hr
			___ General Education	4 hr

Total Hours to complete the degree program = 132

1- GE Launch seminar must be taken within first 3 semesters at OSU.

2- CHEM 1210 (5 cr hrs) or CHEM 1206+1208 (7 hrs total) are accepted alternatives to Chem 1250 if needed. Ecological Engineering students who take one of these paths instead of 1250 must also take Chemistry 1220 to fulfill a prerequisite for Chemistry 2310. Talk with your advisor if these substitutions apply to you.

3- CSE 1222 (3 cr hrs- Programming in C++) or CSE 1224 (3 cr hrs- Python) are accepted alternatives.

*A list of approved Technical Electives and Ecology Electives can be found at go.osu.edu/fabetech

Prerequisites for all courses can be found at courses.osu.edu