

## Curriculum for Bachelor of Science in Environmental Resources Engineering

Department of Environmental Resources Engineering, SUNY ESF (v 05/07/15)

Fall Semester			Spring Semester			
Freshman Year						
APM 205	Calculus I	4		APM 206	Calculus II	4
FCH 150	Gen Chem I	3		FCH 152	Gen Chem II	3
FCH 151	Gen Chem I Lab	1		FCH 153	Gen Chem II Lab	1
EFB 101	Gen Bio I	3		PHY 211	Gen Physics I	3
EFB 102	Gen Bio I Lab	1		PHY 221	Gen Physics I Lab	1
EWP 190	Writing & Environment	3		ERE 133	Intro to Eng Design	3
ERE 132	Intro to ERE	1		Gen Ed	Elective	3
<b>Semester Total</b>		<b>16</b>		<b>Semester Total</b>		<b>18</b>
<b>Curricular Total</b>		<b>16</b>		<b>Curricular Total</b>		<b>34</b>
Sophomore Year						
APM 307	Multivariate Calculus	4		APM 485	Differential Eqns	3
PHY 212	Gen Physics II	3		ERE 275	Ecological Eng	3
PHY 222	Gen Physics II Lab	1		GNE 273	Mech of Materials	3
GNE 271	Statics	3		EWP 290	Resrch Writ & Hum	3
Ecology Elective	Elective	3		Gen Ed	Elective	3
Earth Sci Elective	Elective	3		Gen Ed	Elective	3
<b>Semester Total</b>		<b>17</b>		<b>Semester Total</b>		<b>18</b>
<b>Curricular Total</b>		<b>51</b>		<b>Curricular Total</b>		<b>69</b>
Junior Year						
ERE 339	Fluid Mechanics	4		ERE 340	Eng Hydro & Hydra	4
ERE 371	Surveying for Engineers	3		ERE 430	Eng Dec Analysis	3
CIE 337	Geotech Engineering	4		ERE 365	Princ Remote Sensg	4
ERE 335	Num & Comp Methods	3		ERE 440	Water/WsteWtr Trtm	3
Tech Elective	Elective	3		ERE 380	Engy Systm Eng	3
<b>Semester Total</b>		<b>17</b>		<b>Semester Total</b>		<b>17</b>
<b>Curricular Total</b>		<b>86</b>		<b>Curricular Total</b>		<b>103</b>
Senior Year						
ERE 488	Eng Proj Mngt	1		ERE 489	ERE Plan & Dsgn	3
ERE 468	Solid / Haz Wst Eng	3		Tech Elective	Elective	3
ERE 480	Contam Fate & Trans	3		Eng Elective	Elective	3
APM 395	Eng Prob & Statistics	3		Eng Elective	Elective	3
Eng Elective	Elective	3				
<b>Semester Total</b>		<b>13</b>		<b>Semester Total</b>		<b>12</b>
<b>Curricular Total</b>		<b>116</b>		<b>Curricular Total</b>		<b>128</b>

**Engineering Elective:** An engineering course applying scientific principles and quantitative skills to monitor, assess, or design in the environmental resources engineering profession.

See College Catalog for list of pre-approved courses.

**Technical Elective:** A course applying techniques, theory, and skills to advance competence in professional practice. These courses build on the curriculum.