

# Agricultural & Biological Engineering, Biological Engineering Concentration Curriculum Map

Students should use this curriculum map as a guide to have a more informed discussion with the departmental academic advisor when selecting courses.  
Students not taking courses as advised may result in a delayed graduation date.

<i>First Year</i>		<i>Second Year</i>		<i>Third Year</i>		<i>Fourth Year</i>	
15-16 hrs	16-17 hrs	17 hrs	17 hrs	17 hrs	15 hrs	14 hrs	16 hrs
ABE 100 (1)	ABE 141 (2)	ABE 223 (2)	ABE 225 (2)	ABE 340 (4)	ABE 341 (3)	ABE 430 (2)	ABE 469 (4) <sup>5</sup>
MATH 221 (4) <sup>1</sup>	MATH 231 (3)	MATH 241 (4)	MATH 285 (3)	MATH 257 (3)	Bio, NS Elect (3) <sup>7</sup>	Bio, NS Elect (3) <sup>7</sup>	Tech Elect (3) <sup>7</sup>
CHEM 102 (3)	CHEM 104 (3)	ABE 224 (2)	ABE 226 (2)	ABE Tech Elect (3) <sup>6</sup>	ABE Tech Elect (3) <sup>6</sup>	ABE Tech Elect (3) <sup>6</sup>	Tech Elect (3) <sup>7</sup>
CHEM 103 (1)	CHEM 105 (1)	TAM 211 (3)	TAM 212 (3)	MCB 150 (4)	CHEM 232 (3) <sup>8</sup>	Gen Ed Elect (3) <sup>5</sup>	Gen Ed Elect (3) <sup>5</sup>
ENG 100 (1) <sup>2</sup>	PHYS 211 (4)	CS 101 (3)	PHYS 212 (4)	ECE 205 (3)	Free Elect (3) <sup>4</sup>	Free Elect (3) <sup>4</sup>	Free Elect (3) <sup>4</sup>
RHET 105 (4) <sup>3,5</sup>	SE 101 (3) <sup>3</sup>	ECON 102 (3) <sup>5</sup>	Gen Ed Elect (3) <sup>5</sup>				
Free Elect (2) <sup>4</sup>							

<sup>1</sup>MATH 220 may be substituted. MATH 220 is appropriate for students with no background in calculus. 4 of 5 credit hours count towards degree.

<sup>2</sup>External transfer students take ENG 300.

<sup>3</sup>RHET 105 (or an alternative Composition I sequence) is taken either in the first or second semester of the first year, according to the student's UIN (Spring if UIN is Odd). SE 101 is taken the other semester. Composition I guidelines can be found at <http://catalog.illinois.edu/general-information/degree-general-education-requirements/> under Written Communication Requirement.

<sup>4</sup>Additional coursework, subject to the Grainger College of Engineering restrictions to Free Electives, so that there are at least 128 credit hours earned toward the degree ([go.grainger.illinois.edu/FreeElectives](http://go.grainger.illinois.edu/FreeElectives)).

<sup>5</sup>General education: Students must complete the Campus General Education requirements including the campus general education language requirement. One of the SBS courses must be an introductory economics course (ACE 100, ECON 102, or ECON 103). ABE 469 will satisfy the capstone requirement and Campus General Education Advanced Composition requirement.

<sup>6</sup>Agricultural and Biological Engineering Technical Elective. Students must complete 15 hours of Technical Electives, chosen in consultation with an advisor. At least 8 hours must be Agricultural and Biological Engineering Technical Electives. [http://catalog.illinois.edu/undergraduate/eng\\_aces/agricultural-biological-engineering-bs/agricultural-engineering/#degreerequirementstext](http://catalog.illinois.edu/undergraduate/eng_aces/agricultural-biological-engineering-bs/agricultural-engineering/#degreerequirementstext)

<sup>7</sup>Students must complete 6 hours from the approved list of Biological and Natural Sciences Electives. [http://catalog.illinois.edu/undergraduate/eng\\_aces/agricultural-biological-engineering-bs/agricultural-engineering/#degreerequirementstext](http://catalog.illinois.edu/undergraduate/eng_aces/agricultural-biological-engineering-bs/agricultural-engineering/#degreerequirementstext)

<sup>8</sup>CHEM 232 may be taken for 3 or 4 credit hours. If taken as 4, the extra credit hour counts towards free electives.