

	<b>Bioresource Science and Engineering – UW Seattle</b>  Graduation Requirements and Transfer Student 4-year Plan  <b>BSE Admissions:</b> <a href="https://bit.ly/3xQYjhS">https://bit.ly/3xQYjhS</a>	<b>Admission Requirement Sheet – Key</b> ♦ = Admission Requirements – to be completed prior to application  ♠ = Enrollment or satisfactory progress requirements – to be completed before Fall quarter of Junior year  <b>BSE Major Information:</b> <a href="https://sefs.uw.edu/students/undergraduate/bse-major/">https://sefs.uw.edu/students/undergraduate/bse-major/</a>

Math and Statistics (18-26 Cr)		Engineering Elective Credits (12 cr)	
♦ <b>MATH 124, 125, 126- Calculus with Analytical Geometry I, II, III (15cr) or honors equivalent (MATH 134, 135, 136)</b>	<input type="checkbox"/>	12 Credits from the Engineering Elective list at <a href="https://sefs.uw.edu/students/undergraduate/bse-major/bse-requirements/">https://sefs.uw.edu/students/undergraduate/bse-major/bse-requirements/</a>	<input type="checkbox"/>
♠ MATH 207 (or AMATH 351) - Introduction to Differential Equations (3cr) [pr: MATH 125] (not required if MATH 134-136 completed)	<input type="checkbox"/>	<b>Department Requirements (62 Credits) (Includes remaining W credits required)</b>	
♠ MATH 208 (or AMATH 352)- Matrix Algebra with Applications (3cr) [pr: MATH 126] (not required if MATH 134-136 completed)	<input type="checkbox"/>	BSE 210: Concepts in Bioproduct Sustainability (4 cr)	<input type="checkbox"/>
One Statistics course from the following (3-5 credits): QSCI 381, IND E 315, or STAT 390	<input type="checkbox"/>	BSE 248: Paper Properties (4cr)	<input type="checkbox"/>
<b>Sciences (39-42 cr)</b>		BSE 391 Engineering Principles of Biorefineries (5 cr)	<input type="checkbox"/>
♦ <b>CHEM 142 - General Chemistry (5 cr) or CHEM 143/CHEM 145</b>	<input type="checkbox"/>	BSE 392 Bioresource Transport Phenomena (5 cr)	<input type="checkbox"/>
♦ <b>CHEM 152 - General Chemistry (5 cr) or CHEM 153/155</b>	<input type="checkbox"/>	BSE 406 Natural Products Chemistry (5 cr)	<input type="checkbox"/>
♦ <b>CHEM 162 – General Chemistry (5 cr) or CHEM 165 (162/165 not required if CHEM 153 completed)</b>	<input type="checkbox"/>	BSE 410 Industrial Wastewater Treatment and Reduction (4 cr)	<input type="checkbox"/>
♠ CHEM 237 – Organic Chemistry (4 cr)	<input type="checkbox"/>	BSE 420 Bioresource Engineering 1 (4 cr)	<input type="checkbox"/>
♠ CHEM 238 - Organic Chemistry (4 cr)	<input type="checkbox"/>	BSE 421 Bioresource Engineering 2 (4 cr)	<input type="checkbox"/>
♦ <b>PHYS 121 - Mechanics (5cr) (or PHYS 141 – honors)</b>	<input type="checkbox"/>	BSE 422 Bioresource Engineering 3 (4 cr)	<input type="checkbox"/>
♠ PHYS 122 - Electromagnetism (5 cr) (or PHYS 142 - honors)	<input type="checkbox"/>	BSE 426 Bioresource Laboratory (4 cr)	<input type="checkbox"/>
♠ PHYS 123 - Waves (5 cr) (or PHYS 143 - honors)	<input type="checkbox"/>	BSE 430 Papermaking Processes (5 cr)	<input type="checkbox"/>
♠ <b>AA 260 - Thermodynamics (4 cr) [must be complete before Fall Junior year]</b>	<input type="checkbox"/>	BSE 436 Pulp and Paper Laboratory II (4 cr)	<input type="checkbox"/>
Additional Math/Statistics/Sciences courses: 0-11 NSc credit if needed to reach 68 NSc credits (formerly NW)	<input type="checkbox"/>	BSE 480 Bioresource Design I (4 cr) (first Capstone course)	<input type="checkbox"/>
<b>General Education Requirements 38 credits</b>		BSE 481 Bioresource Design II (5 cr) (second Capstone course)	<input type="checkbox"/>
<b>Basic Skills (13 cr):</b>		BSE 497 Internship (1 cr)	<input type="checkbox"/>
♦ ♡ <b>English Composition – ENGL 131 or similar (5cr)</b>	<input type="checkbox"/>	<b>Free Electives</b>	
ENGR 231 – Introduction to Technical Communication (3cr)	<input type="checkbox"/>	Free Elective Credits to bring the total to 180	
Diversity-DIV (5cr) – choose a course that also meets A&H/SSc for it to count as DIV and A&H/SSc	<input type="checkbox"/>	<b>Total credits required for graduation: 180cr</b>	
<b>Areas of Inquiry (25 cr):</b>		<b>BSE Admission:</b> <a href="https://bit.ly/3xQYjhS">https://bit.ly/3xQYjhS</a>	
Arts & Humanities (A&H) (10cr)	<input type="checkbox"/>		
Social Science (SSc) (10cr) (other than ECON 200)	<input type="checkbox"/>		
ECON 200: Microeconomics	<input type="checkbox"/>		

This is a sample four-year plan for UW Prospective Transfer Students who start BSE in Autumn of Third year or Spring of their Second year of study. It is intended to provide a framework for students to reference as they create their own individual academic plan.

UW Course Descriptions are available at <https://www.washington.edu/students/crscat/>. Use these and the UW Equivalency Guide at <https://admit.washington.edu/apply/transfer/equivalency-guide/> to verify the courses you are completing will fulfill the UW course requirements you are trying to complete.

First Year	Autumn Quarter	Cr	Winter Quarter	Cr	Spring Quarter	Cr
	◆ MATH 124 – Calculus with Analytical Geometry I	5	◆MATH 125 – Calculus with Analytical Geometry II	5	◆MATH 126 – Calculus with Analytical Geometry III	5
	◆ CHEM 142 – General Chemistry	5	◆ CHEM 152 – General Chemistry	5	◆ CHEM 162 – General Chemistry	5
	◆ English Composition	5	Any SSc + DIV cr	5		
					◆PHYS 121 - Mechanics	5
	<b>Qtr. Total:</b>	<b>15</b>	<b>Qtr. Total:</b>	<b>15</b>	<b>Qtr. Total:</b>	<b>15</b>
Second Year	Autumn Quarter	Cr	Winter Quarter	Cr	Spring Quarter	Cr
	◆PHYS 122 – Electromagnetism	5	◆PHYS 123 – Waves	5	◆AA 260 – Thermodynamics [Must take before Autumn of Junior year (also in Summer)]	4
	◆CHEM 237 – Organic Chemistry	4	◆CHEM 238 – Organic Chemistry	4	ENGR 231 – Introduction to Technical Communication	3
	◆MATH 207 Differential Eq	3	◆MATH 208 – Linear Algebra	3	ECON 200 - Microeconomics	5
	Any A & H	5	Any SSc Credit	5	[If at UW, take BSE 248 too]	
	<b>Qtr. Total:</b>	<b>17</b>	<b>Qtr. Total:</b>	<b>17</b>	<b>Qtr. Total:</b>	<b>12</b>
Third Year	Autumn Quarter	Cr	Winter Quarter	Cr	Spring Quarter	Cr
	BSE 391 – Engr Principles Biorefineries	5	BSE 392 – Bioresource Transport	5	BSE 421 – Bioresource Sci/Eng 2	4
			BSE 420 – Bioresource Sci/Eng 1	4	BSE 426- Bioresource Lab	4
	BSE 406 – Natural Products Chemistry	5	BSE 410 – Industrial Wastewater Treatment	4	BSE 248 - Paper Properties	4
	BSE 210 – Bioproduct Sustain.	4	Engineering Elective	4		
					Q SCI 381: Statistics	5
	<b>Qtr. Total:</b>	<b>14</b>	<b>Qtr. Total:</b>	<b>17</b>	<b>Qtr. Total:</b>	<b>17</b>
Fourth Year	Autumn Quarter	Cr	Winter Quarter	Cr	Spring Quarter	Cr
	BSE 422 – Bioresource Sci/Eng 3	4	BSE 436 - Papermaking Lab II	4	BSE 481 – Bioresource Design II	5
	BSE 430 – Papermaking Process	5	BSE 480 – Bioresource Design	4	Any SSc Credit	5
	BSE 497 - Internship	1	Engineering Elective	4	Engineering Elective	4
	Any A&H	5	Engineering Elective	4		
	<b>Qtr. Total:</b>	<b>15</b>	<b>Qtr. Total:</b>	<b>16</b>	<b>Qtr. Total:</b>	<b>14</b>

- BSE-Prefixed courses are only available in the quarter indicated. Classes should be taken in the year indicated.
- Complete Free Electives if needed to reach 180 credits for the BSE degree.