



Associate in Science (AS-T/MRP) Transfer Degree

Planning Worksheet 2019-20

Bioengineering and Chemical Engineering

Student:

READ THIS FIRST:

- Start your degree with math and English. No degree plans can be done without math and English placement.
- The final responsibility for understanding and fulfilling all graduation requirements rests with each student.

Preparatory math as necessary: MATH 97 MATH 98 MATH 99 MATH& 141 MATH& 142

Pre-Reqs	Course	Credits	Taken
CORE REQUIREMENTS: MATH			
MATH& 142 with C or better	MATH& 151	Calculus I	5
MATH& 151 with C or better	MATH& 152	Calculus II	5
MATH& 152 with C or better	MATH& 163	Calculus III	5
MATH& 152 with C or better	MATH 207	Taylor Series	1
MATH& 151 with C or better	or MATH 208	Sequences and Series	3
MATH& 152 with C or better	MATH 238	Introduction to Differential Equations	5
		Subtotal	21-23

CORE REQUIREMENTS: SCIENCE AND ENGINEERING			
Prior or concurrent MATH& 141; placement in ENGL& 101	ENGR 101	Introduction to Engineering	5
	Note: ENGR 101 may be waived for students entering the pathway with advanced standing (MATH&152 or higher).		
MATH& 141 with C or better. Recommended: CHEM& 121 or one year high school chemistry	CHEM& 161	General Chemistry with Lab I	5
CHEM& 161 with C or better	CHEM& 162	General Chemistry with Lab II	5
CHEM& 162 with C or better	CHEM& 163	General Chemistry with Lab III	5
CHEM& 163	CHEM& 261	Organic Chemistry with Lab I	5
CHEM& 261	CHEM& 262	Organic Chemistry with Lab II	5
Prior or concurrent CHEM& 161; placement in ENGL& 101	or BIOL& 221	Majors Ecology/Evolution	5
MATH& 151 with C or better; placement in ENGL& 101; previous college physics course or high school physics	PHYS& 221	Engineering Physics I	5
MATH& 152 with C or better; PHYS& 221 with C or better; placement in ENGL& 101	PHYS& 222	Engineering Physics II	5
PHYS& 222 with C or better	PHYS& 223	Engineering Physics III	5
		Subtotal	40-45

PROGRAM-SPECIFIC REQUIREMENTS

Students must complete a minimum of three additional courses selected from the following list, according to intended major and transfer university requirements.

Prior or concurrent CHEM& 161; placement in ENGL& 101	BIOL& 221	Majors Ecology/Evolution	5
CHEM& 161 with C- or better; BIOL& 221 with C- or better; placement in ENGL& 101	BIOL& 222	Majors Cell Biology/Molecular	5
BIOL&222 with C- or better; placement in ENGL& 101	BIOL& 223	Majors Organismal Physiology	5
CHEM& 261	CHEM& 262	Organic Chemistry with Lab II	5
CHEM& 262	CHEM& 263	Organic Chemistry with Lab III	5

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program-specific requirements list continued from previous page			
Pre-Reqs	Course	Credits	Taken
CS 140 MATH& 163 with C or better; MATH 207 with C or better; Recommended: prior / concurrent MATH 204	CS 145 or ENGR 240	Computer Programming Fundamentals II Applied Numerical Methods	5
Note: Credit for both CS 145 and ENGR 240 cannot be applied to this requirement.			
ENGL& 101 with C- or better	ENGL& 230	Technical Writing	3
ENGL& 101 with C- or better	or ENGL& 235	Technical Writing	5
Note: Credit for both ENGL& 230 and ENGL& 235 cannot be applied to this requirement.			
MATH& 152 with C or better or both MATH& 142 and ENGR 101 with grades of C or better; placement in ENGL& 101	ENGR 151	Introductory Design and Computing	5
PHYS& 223 with C or better; prior or concurrent MATH 238; placement in ENGL& 101. Recommended: ENGR 151 and MATH 204	ENGR& 204	Electrical Circuits	6
MATH& 152 with C or better; PHYS& 221 with C or better; placement in ENGL&101	ENGR& 214	Statics	5
CHEM& 162 with C or better; MATH& 152 with C or better; PHYS& 222 with C or better; placement in ENGL&101	ENGR& 224	Thermodynamics	5
Note: See an advisor if taking ENGR& 224 in 2018-19.			
MATH& 151 with C or better	MATH 204	Introduction to Linear Algebra	5
MATH& 163 with C or better	MATH& 264	Calculus IV	5
		Subtotal	13-16
GENERAL EDUCATION REQUIREMENTS			
ENGL 95 or placement in ENGL& 101	ENGL& 101	English Composition I	5
Varies; see catalog	Any course designated as humanities (H)		5
Varies; see catalog	Any course designated as social sciences (SS)		5
Varies; see catalog	Any additional course designated as humanities (H) or social sciences (SS)		5
Note: See an advisor for help choosing appropriate courses in this area. Depending on the major and the transfer institution, certain courses are preferred.			
		Subtotal	20
		Total	94-104
ADDITIONAL GRADUATION REQUIREMENTS			
		Minimum of 15 college-level credits at Whatcom Community College	
		Minimum 2.0 overall GPA in courses applied to this degree	
ADVISOR RECOMMENDATIONS			
<ul style="list-style-type: none"> • Complete each science sequence at a single college. • Specific majors at each university may have different/additional prerequisites/GPA requirements. Check with your intended university for details. • University of Washington requires foreign language for admission: two years of a single language in high school, or two quarters of a single language in college. Some majors also require a third year/quarter for graduation. 			
Fall 2019			Revised 9/4/2019