

**THE UNIVERSITY OF PUGET SOUND**  
2024-2025 CURRICULUM GUIDE

**CHEMISTRY & BIOCHEMISTRY /DUAL DEGREE ENGINEERING**

DEGREE: BA

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*This is provided as a guide for a possible sequence for completing everything in 3 years. Other sequences are possible. Please talk with your advisor and Director of the Dual Degree Engineering program. Those students with advanced standing (transfer credit, AP, IB etc.) will have more flexibility.*

**SUGGESTED** three-year plan of study (other class schedules are possible):

<i>Fall Semester Classes</i>		<i>Spring Semester Classes</i>	
<b>Freshman</b>	<b>Units</b>		<b>Units</b>
CONN 100-level	1	Critical Conversations Seminar (CCS)	1
CHEM 110/lab <sup>1</sup> (NS/MA Division req.)	1	CHEM 120/lab	1
MATH 180 <sup>1</sup>	1	MATH 181	1
Language or Division requirement 2 <sup>#</sup>	1	Language or Division requirement 2 or 3 <sup>#</sup>	1
<b>Sophomore</b>	<b>Units</b>		<b>Units</b>
CHEM 250/lab	1	CHEM 251/lab	1
MATH 280	1	MATH 290	1
PHYS 121/lab <sup>1</sup>	1	PHYS 122/lab	1
CSCI 161 <sup>1</sup> or KNOW	1	Division requirement 3 or KNOW	1
		CHEM 231	0.5
<b>Junior</b>	<b>Units</b>		<b>Units</b>
CHEM 340	1	CHEM 341/lab	1
CHEM elective 300 or higher <sup>2</sup>	0.5-1	CHEM 420/lab	1
MATH 301	1	CONN 200+ 2	1
CONN 200+ 1 or KNOW 300+	1	CSCI 161 <sup>1</sup> or KNOW 300+	1
CHEM 493	0		

**Fulfillment of the Experiential Learning and KNOW\* requirements and min. of 32 units required to graduate**

**Notes: See back page for explanation of any Sound Connections course prefixes.**

**\*Refer to the '24-25 Bulletin for details on how to meet Experiential Learning and KNOW requirements.**

- 1) All chemistry, physics, biology, mathematics, and computer science courses that count toward this major also satisfy the Natural Sciences/Mathematics (NS/MA) requirement, one of three Division requirements.
- 2) Complete requirements for the BA degree in Chemistry (see '24-25 *Bulletin*) with the following additional courses: CSCI 161 and MATH 290, 301.
- 3) By arrangement with the Chemistry Department a student could take a chemical engineering course at an affiliate school which would satisfy this requirement. Columbia University, Washington University (St. Louis), and the University of Southern California have specific requirements which can be met by choosing core classes appropriately. See the Dual Degree Engineering requirements. At least 0.5 units at the 300-400 level required by major.
- 4) A minimum grade of C must be earned in all courses for the major.

#Meet with an advisor to ensure that major requirements as well as university requirements are met.

# THE UNIVERSITY OF PUGET SOUND

## COURSE CHECKLIST

### DEPARTMENT: CHEMISTRY & BIOCHEMISTRY/DUAL DEGREE ENGINEERING

SOUND CONNECTIONS CORE (Passing grade required in all)			MAJOR REQUIREMENTS (min. 15.5 units and C letter grade)		
COURSE	Units	Complete	COURSE	Units	Complete
<b>First Year Experience (2 units):</b>			CHEM 110 <sup>1</sup> , 120 AND 231	2.5	<input type="checkbox"/>
1) Connections 100-level (CONN 1xx)		<input type="checkbox"/>	CHEM 250	1	<input type="checkbox"/>
2) Critical Conversations Seminar (CCS)		<input type="checkbox"/>	CHEM 251	1	<input type="checkbox"/>
<b>Division Requirements:</b> At least 1 course from each of 3 Divs. (3 units)			CHEM 340	1	<input type="checkbox"/>
1) Arts/Humanities (AR/HM)		<input type="checkbox"/>	CHEM 341	1	<input type="checkbox"/>
2) Social Sciences/History (SS/HS)		<input type="checkbox"/>	CHEM 420	1	<input type="checkbox"/>
3) Natural Sciences/Mathematics (NS/MA) <sup>1</sup>		<input type="checkbox"/>	CHEM 300-400 level elective	Min. 0.5	<input type="checkbox"/>
<b>Connections (2 requirements):</b>			CHEM 493 (seminar)	0	<input type="checkbox"/>
1) CONN 200+ 1		<input type="checkbox"/>	MATH 180 <sup>1</sup>	1	<input type="checkbox"/>
2) CONN 200+ 2		<input type="checkbox"/>	MATH 181 <sup>1</sup>	1	<input type="checkbox"/>
<b>Language Requirement-</b> Meet in 1 of following 3 ways (0-2 units):			MATH 280	1	<input type="checkbox"/>
1) <b>Two</b> courses approved for Language requirement (2 units)		<input type="checkbox"/>	PHYS 121	1	<input type="checkbox"/>
2) <b>One</b> approved Language course <b>if either of the following are true (1 unit):</b> A. Scored 4 or 5 on AP foreign language exam OR 5, 6, or 7 on IB higher level language exam, <b>or</b> B. Heritage Learner: non-English language spoken at home; bilingual to some degree.		<input type="checkbox"/>	PHYS 122	1	<input type="checkbox"/>
3) High School diploma is from school where primary language of instruction was not in English (0 units)		<input type="checkbox"/>	<b>Dual Degree Engineering Requirements:</b>		
<b>Experiential Learning Requirement (EL):</b> Meet via 1 of 4 options; Can double count. See Advisor for details. (0-1 unit)			CSCI 161	1	<input type="checkbox"/>
EL Course		<input type="checkbox"/>	MATH 290	1	<input type="checkbox"/>
<b>KNOWledge, Identity &amp; Power Requirements:</b> Two courses. See the '24-25 Bulletin for details. Courses may also fulfill other program/graduation requirements (0-2 units)			MATH 301	1	<input type="checkbox"/>
KNOW course		<input type="checkbox"/>	<b>THIS FORM IS NOT AN OFFICIAL GRADUATION ANALYSIS</b>		
KNOW 300+ level course		<input type="checkbox"/>			

#### NOTES:

**A grade of C or higher is required in all major courses at Puget Sound.**

A higher GPA is necessary for successful admission to the affiliate engineering programs. Students pursuing Dual-Degree Engineering (DDE) should work closely with the Dual Degree Engineering Director early in their Puget Sound careers to ensure that all the requirements are met.

1)CHEM 110, or any chemistry, computer science, physics, or math course required for this degree will also satisfy the Natural Sciences/Mathematics (NS/MA) Division requirement. Students with sufficient background and preparation in high school chemistry and calculus may test out of Chemistry 110 and/or Mathematics 180/181.

Refer to the '24-25 Bulletin for additional courses recommended for Biomechanical, Electrical, Chemical or Mechanical Engineering.