

# THE UNIVERSITY OF PUGET SOUND

2020-2021 CURRICULUM GUIDE

## MATH/DUAL DEGREE ENGINEERING

DEGREE: BS IN MATHEMATICS: SAMPLE 3-YEAR PROGRAM

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### A suggested three-year program:

*This schedule is a possible sequence that allows completion in three years. Other sequences are possible. Please talk with your advisor and the Dual Degree Engineering program director. Those students with advanced standing (transfer credit, AP, etc.) will have more flexibility.*

#### Fall Semester Classes

#### Spring Semester Classes

Freshman	Units	Units
SSI 1	1	SSI 1
PHYS 121/Lab (NS core)	1	PHYS 122/Lab
MATH 180 (MA core)	1	MATH 181
FL (if needed) or elective	1	FL (if needed) or elective

Sophomore	Units	Units
MATH 280	1	MATH 290
CHEM 110/lab or CHEM 115/lab	1	CHEM 120/lab or CHEM 230/lab
CSCI 161 or equivalent	1	MATH 300+ Elective
Approaches core	1	Approaches core

Junior	Units	Units
MATH 300+ Elective	1	MATH 300+ Elective
MATH 300+ Elective	1	MATH 300+ Elective
MATH 301	1	CN core*
Approaches core	1	Elective

### NOTES

Students majoring in Mathematics must earn a GPA of at least 2.0 in all upper-division mathematics courses (upper division courses are those at the 300-400 level).

There are two options for the Mathematics major: the contract option and the standard option. This guide represents a suggested four-year program for the standard major in Mathematics.

**Contract option:** Each contract will consist of: (1) Between eight and 16 units with no more than nine units in mathematics; (2) CSCI 161 or equivalent and (3) At least five-upper-division (300-400 level) units in mathematics or mathematics substitute courses to include: (a) two units of related upper-division courses to provide depth and (b) one upper-division unit in a proof-based course. Final shape is worked out in consultation with the advisor and a departmental committee before the end of the semester in which the first upper-division course on the contract is completed. The contract will normally include MATH 180/181/280/290.

**Standard option:** (1) Completion of 180/181/280/290; (2) CSCI 161 or equivalent and (3) At least five upper-division (300-400 level) units in mathematics to include: (a) two units of related upper-division courses to provide depth; (b) one upper-division unit in a proof-based course; and (c) at least one upper-division unit from **each** of the following two lists: (List A) MATH 301, 302, 350, 355, 360, 375, 376, 380, 420 (some topics as noted in topic course descriptions), 480, 481 and (List B) MATH 300, 310, 335, 338, 340, 345, 390, 420 (some topics as noted in topic course descriptions), 471, 490, 491.

\*Of the three units of upper division coursework required outside the first major, the Connections course will count for one unless it is used to meet a major requirement.

