## The University of Puget Sound

2019-2020 CURRICULUM GUIDE
COMPUTER SCIENCE
DEGREE: BS
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A suggested four-year program for the standard major:
Fall Semester Classes
Spring Semester Classes

| Freshman Units |  |  | Units |
| :---: | :---: | :---: | :---: |
| SSI 1 | 1 | SSI 2 | 1 |
| CSCI 161 (MA core) | 1 | CSCI 261 | 1 |
| Approaches core | 1 | Approaches core | 1 |
| FL (if needed) or elective | 1 | FL (if needed) or elective | 1 |
| Sophomore | Units |  | Units |
| CSCI 240 | 1 | CSCI 291 | 1 |
| CSCI 281 | 1 | MATH 210*, ** | 1 |
| Approaches core | 1 | Approaches core | 1 |
| Elective ${ }^{\text {\# }}$ | 1 | Elective | 1 |
| Junior | Units |  | Units |
| CSCI 361** | 1 | CSCI 300-400 level | 1 |
| CSCI 300-400 level | 1 | CSCI 475 or Elective | 1 |
| Elective | 1 | Elective | 1 |
| Elective | 1 | Elective | 1 |
| Senior | Units |  | Units |
| Elective | 1 | CSCI 440 | 1 |
| CN Core ${ }^{\text {\# }}$ | 1 | CSCI 475 or Elective | 1 |
| Elective | 1 | Elective | 1 |
| Elective | 1 | Elective | 1 |

## NOTES:

Puget Sound requires a total of $\mathbf{3 2}$ units to graduate
There are TWO options for the Computer Science major: the contract option and the standard option. This guide represents a suggested four-year program for the standard major in Computer Science.
Standard option requires completion of: (1) CSCI 161, 261, 240, 281, 291, 361 and 475; (2) MATH 210; (3) At least two upperdivision (300-400 level) units in computer science; and (4) the Capstone CSCI 440.
Contract option requires completion of: (1) Between eight and 16 units with no more than 10 units in computer science; (2) CSCI 161, 261, 361; (3) MATH 210 and (4) At least five-upper-division (300-400 level) units in computer science. One of these units may be from a field other than computer science provided the course has sufficient computer science content. Two of the upper-division courses are to include at least two proof-based or writing courses in computer science. Contract must be finalized in consultation with the advisor and a departmental committee before the end of the semester in which the first contract upper-division course on the contract is completed.
*Students majoring in Computer Science are encouraged to take MATH 210 in the first two years. In place of MATH 210, the department will also allow the following two-course substitution with a grade of C or better in each: MATH 290 and one 300+ mathematics course from List B: MATH 300, 310, 335, 338, 340, 345, 390, 420 (some topics as noted in topic course descriptions), 471, 490, 491.
**MATH 210 and CSCI 361 can be taken earlier in the sequence if students desire.
\#Students are encouraged to take additional mathematics courses beyond MATH 210, e.g., AI (CSCI 431) requires MATH 180.
\#\#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.

# The University of Puget Sound <br> COURSE CHECKLIST <br> COMPUTER SCIENCE 

CORE CURRICULUM

| UNIVERSITY CORE | CRS | TERM | GRADE |
| :--- | :--- | :--- | :--- |
| SSI 1 |  |  |  |
| SSI 2 |  |  |  |
| AR |  |  |  |
| HM |  |  |  |
| MA (CSCI 161, 261) |  |  |  |
| NS |  |  |  |
| SL |  |  |  |
| CN |  |  |  |

## KEY

SSI1 $=$ Seminar in Scholarly Inquiry1 MA= Mathematical Approaches SSI2= Seminar in Scholarly Inquiry2 NS= Natural Scientific Approaches
AR=Artistic Approaches
HM= Humanistic Approaches SL= Social Scientific Approaches
CN= Connections
FL= Foreign Language

STANDARD MAJOR REQUIREMENTS ${ }^{1}$

| COURSE | UNITS | TERM | GRADE |
| :--- | :--- | :--- | :--- |
| MATH 210* |  |  |  |
| CSCI 161 |  |  |  |
| CSCI 261 |  |  |  |
| CSCI 240 |  |  |  |
| CSCI 281 |  |  |  |
| CSCI 291 |  |  |  |
| CSCI 361 |  |  |  |
| CSCI 475 |  |  |  |

Two upper-division units of CSCI 300-400 level:

| 1. |  |  |  |
| :--- | :--- | :--- | :--- |
| 2. |  |  |  |
| CSCI 440 (Capstone) |  |  |  |

Foreign Language Requirement (circle one)

1) Two semesters at $101 / 102$ level or One semester at 200+ level
2) Proficiency exam (3rd year high school level or 1st year college level)
3) AP foreign language score of 4 or 5
4) IB higher level foreign language score of 5, 6, or 7

## Upper Division Level Requirement

Three units at the upper division level outside the first major.

## KNOWledge, Identity, and Power Requirement

One course. See Bulletin for details. Courses may also fulfill other program or graduation requirements.

## NOTES

Majors must maintain a minimum 2.0 GPA in all contract courses and in all upper-division major courses.
At least three units of upper-division contract courses must be completed at Puget Sound. One of these three units may be taken as part of a study-abroad program. For contract majors, this is subject to prior approval by the student's contract committee.
A grade of C- or better is required in all prerequisite courses in Math and Computer Science.
*Students majoring in computer science are encouraged to take MATH 210 in the first two years. In lieu of MATH 210, students may also take the following two-course substitution with a grade of C or better in each: MATH 290 and one course from List B of the upperdivision mathematics courses: MATH 300, 310, 335, 338, 340, 345, 390, 420 (some topics as noted in topic course descriptions), 471, 490, 491.

1) This guide represents the suggested four-year plan to meet the requirements of the standard major in computer science. See the Bulletin for details on the courses required for the contract option for the Bachelor of Science in Computer Science.
