Bioinformatics

http://www.pacificu.edu/as/bioinformatics

The major in Bioinformatics is designed for students interested in molecular biology and genetics as well as information technologies and computer science. Students often begin with a stronger interest in biology or with a stronger interest in computer science. Depending upon initial interest, two possible scenarios for the first two years are shown:

**Scenario I: start with biology**

**FIRST-YEAR SCHEDULE**

**Fall**
- MATH 122: College Algebra OR MATH 125: Precalculus 4
- CHEM 220: General Chemistry I 4
- HUM 100: First-Year Seminar 4
- Core elective 4
**Total** 16

**Winter**
- Elective 2

**Spring**
- MATH 125: Precalculus OR MATH 207: Statistics 4
- CHEM 230: General Chemistry II 4
- BIOL 200 or BIOL 201: Introductory Biology 4
- Core elective 4
**Total** 16

**SECOND-YEAR SCHEDULE**

**Fall**
- BIOL 200 or BIOL 201: Introductory Biology 4
- CS 150: Intro to Computer Science I 4
- CHEM 300: Fundamentals of Organic Chemistry 4
- Electives 4
**Total** 16

**Winter III**
- Elective 2

**Spring**
- CS 250: Intro to Computer Science II 4
- Biol312 or Biol313 4
- Electives 8
**Total** 16
Scenario II: start with computer science

FIRST-YEAR SCHEDULE

Fall
MATH 125: Precalculus 4
CS 150: Intro to Computer Science I 4
HUM 100: First-Year Seminar 4
1 core elective 4
Total 16

Winter
Elective 2

Spring
MATH 207: Statistics 4
CS 250: Intro to Computer Science II 4
Core electives 8
Total 16

SECOND-YEAR SCHEDULE

Fall
CHEM 220: General Chemistry I 4
CS 300: Data Structures 4
MATH 240: Discrete Math* 4
Elective 4
Total 16

Winter
Elective 2

Spring
CHEM 230: General Chemistry II 4
BIOL 200 or BIOL 201: Introductory Biology 4
CS 380: Algorithm Design and Analysis** 4
Elective 4
Total 16


** CS 380: Algorithms is an elective requirement. Students must take either CS 380 or CS 445: Databases.

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