

Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

To: California State University, Fullerton
2022-2023 General Catalog, Semester

From: Santa Rosa Junior College
2022-2023 General Catalog, Semester

Computer Science, B.S.

COMPUTER SCIENCE

The degree program for the Bachelor of Science in Computer Science assumes that students have already obtained a working knowledge of personal computing fundamentals and applications, including word processing, spreadsheets, database systems, e-mail systems and presentation graphics.

The curriculum begins with a three-course sequence covering concepts of programming and data structures. If students have knowledge of these topics, but do not have the courses to transfer, nor AP scores to submit, they may take the Computer Science Placement Examination to waive one or more of these courses. The test may be taken only once, and scores are valid for two consecutive semesters.

General Education

All students at Cal State Fullerton are expected to complete prescribed units of General Education that are made up of courses outside of their chosen disciplines. Students seeking a degree in Engineering have been provided exceptions from some of the General Education requirements. For this reason, it is important that students take the approved G.E. courses for Engineering majors that are found in their Titan Degree Audit (TDA). Additionally, they should confirm the G.E. courses that are required within their specific programs with their respective advisers.

LOWER DIVISION CORE

Select 15 Semester Unit(s) from the following

| | | |
|--|---|---|
| CPSC 120 - Introduction to Programming (3.00) | ← | CS 10A - Introduction to Programming Concepts and Methodologies (4.00) |
| CPSC 121 - Object-Oriented Programming (3.00) | ← | CS 10B - Programming Concepts and Methodologies 1 (4.00) |
| CPSC 131 - Data Structures (3.00) | ← | CS 10C - Programming Concepts and Methodologies 2 (4.00) |
| CPSC 240 - Computer Organization & Assembly Language (3.00) | ← | CS 12 - Assembly Language Programming/Computer Architecture (4.00) |
| CPSC 253 - Cybersecurity Foundations and Principles (3.00) | ← | No Course Articulated |

--- And ---

Select 1 Course(s) from the following

| | | |
|---|---|---|
| CPSC 223C - C Programming (3.00) | ← | No Course Articulated |
| CPSC 223J - Java Programming (3.00) | ← | CS 17.11 - Java Programming (3.00) |
| CPSC 223N - Visual C# Programming (3.00) | ← | No Course Articulated |
| CPSC 223P - Python Programming (3.00) | ← | No Course Articulated |

MATHEMATICS REQUIREMENTS

Select 18 Semester Unit(s) from the following

| | | |
|---------------------------------------|---|--|
| MATH 150A - Calculus I (4.00) | ← | MATH 1A - Calculus, First Course (5.00) |
| MATH 150B - Calculus II (4.00) | ← | No Course Articulated |

| | | |
|---|---|---|
| MATH 170A - Mathematical Structures I (3.00) | ← | MATH 4 - Discrete Mathematics (4.00) |
| MATH 170B - Mathematical Structure II (3.00) | ← | No Course Articulated |
| MATH 338 - Stat Appl to Natural Sci (4.00) | ← | No Course Articulated |

MATH AND SCIENCE (WITH CORRESPONDING LAB) ELECTIVES- SEE ADDITIONAL INFORMATION UNDER
ARTICULATION DETAILS

Select 12 Semester Unit(s) from the following

| | | |
|--|---|--|
| BIOL 101 - Elements of Biology (3.00) | ← | No Course Articulated |
| BIOL 101L - Elements of Biology Laboratory (1.00) | ← | No Course Articulated |
| BIOL 151 - Cellular & Molecular Biology (4.00) | ← | BIO 2.1 - Fundamentals of Biology (Cell and Molecular) (5.00) |
| BIOL 152 - Evolution & Organismal Biology (4.00) | ← | No Course Articulated |

| | | |
|--|---|---|
| CHEM 120A - General Chemistry (5.00) | ← | CHEM 1A - General Chemistry (5.00) |
| CHEM 120B - General Chemistry (5.00) | ← | No Course Articulated |
| CHEM 123 - Chemistry for Engineers (3.00) | ← | No Course Articulated |
| CHEM 125 - Gen Chemistry B Lecture (3.00) | ← | No Course Articulated |

| | | |
|--|---|--|
| GEOL 101 - Introduction to Geology (3.00) | ← | GEOL 1 - The Earth (3.00) |
| GEOL 101L - Introduction to Geology Laboratory (1.00) | ← | GEOL 1L - Geology Laboratory (1.00) |
| GEOL 201 - Earth History (3.00) | ← | No Course Articulated |
| GEOL 201L - Earth History Supplemental Lab (1.00) | ← | No Course Articulated |

| | | |
|---|---|---|
| MATH 250A - Calculus III (4.00) | ← | No Course Articulated |
| MATH 250B - Intro to Linear Algebra and Diff. Equations (4.00) | ← | <div> MATH 2 - Calculus, Fourth Course - Differential Equations (3.00) --- And --- MATH 5 - Introduction to Linear Algebra (4.00) </div> |

| | | |
|--|---|-----------------------|
| PHYS 225 - Fundamental Phys; Mechanics (3.00) | ← | No Course Articulated |
| PHYS 225L - Fundamental Physics Lab (1.00) | ← | No Course Articulated |
| PHYS 226 - Fund Phys.Elect + Magnetism (3.00) | ← | No Course Articulated |
| PHYS 226L - Fundamental Physics Lab (1.00) | ← | No Course Articulated |
| PHYS 227 - Fund Phys: Waves, Optics, & Mod Phys (1.00 - 3.00) | ← | No Course Articulated |
| PHYS 227L - Fundamental Physics Lab (1.00) | ← | No Course Articulated |

COMPUTER SCIENCE ELECTIVES

| | | |
|--|---|-----------------------|
| CPSC 254 - Software Development with Open Source Systems (3.00) | ← | No Course Articulated |
|--|---|-----------------------|

REQUIRED FOR GRADUATION

| | | |
|--|---|---|
| POSC 100 - American Government (3.00) | ← | POLS 1 - Introduction to United States Government (3.00) |
|--|---|---|

ARTICULATION DETAILS

| | | |
|---|---|--|
| <div> BIOL 101 - Elements of Biology (3.00) --- And --- BIOL 101L - Elements of Biology Laboratory (1.00) </div> | ← | BIO 10 - Introduction to Principles of Biology (4.00) |
| <div> BIOL 151 - Cellular & Molecular Biology (4.00) --- And --- BIOL 152 - Evolution & Organismal Biology (4.00) </div> | ← | No Course Articulated |

CHEM 120A - General Chemistry (5.00)

--- And ---

CHEM 120B - General Chemistry (5.00)



CHEM 1A - General Chemistry (5.00)

--- And ---

CHEM 3B - General Chemistry Part 2 (5.00)

CHEM 4A - General Chemistry with Quantitative Analysis (5.00)

--- And ---

CHEM 4B - General Chemistry with Quantitative Analysis (5.00)

CHEM 120A - General Chemistry (5.00)

--- And ---

CHEM 125 - Gen Chemistry B Lecture (3.00)



No Course Articulated

CPSC 120 - Introduction to Programming (3.00)

--- And ---

CPSC 121 - Object-Oriented Programming (3.00)

--- And ---

CPSC 131 - Data Structures (3.00)



CS 10A - Introduction to Programming Concepts and Methodologies (4.00)

--- And ---

CS 10B - Programming Concepts and Methodologies 1 (4.00)

--- And ---

CS 10C - Programming Concepts and Methodologies 2 (4.00)

CPSC 253U - Workshop In Unix (1.00)

--- And ---

CPSC 254 - Software Development with Open Source Systems (3.00)



No Course Articulated

GEOL 101 - Introduction to Geology (3.00)

--- And ---

GEOL 101L - Introduction to Geology Laboratory (1.00)



GEOL 1 - The Earth (3.00)

--- And ---

GEOL 1L - Geology Laboratory (1.00)

GEOL 201 - Earth History (3.00)

--- And ---

GEOL 201L - Earth History Supplemental Lab (1.00)



No Course Articulated

MATH 150A - Calculus I (4.00)

--- And ---

MATH 150B - Calculus II (4.00)



MATH 1A - Calculus, First Course (5.00)

--- And ---

MATH 1B - Calculus, Second Course (5.00)

MATH 150A - Calculus I (4.00)

--- And ---

MATH 150B - Calculus II (4.00)

--- And ---

MATH 250A - Calculus III (4.00)



No Course Articulated

PHYS 225 - Fundamental Phys; Mechanics (3.00)

--- And ---

PHYS 225L - Fundamental Physics Lab (1.00)



PHYS 40 - Classical Mechanics for Scientists and Engineers (5.00)

PHYS 226 - Fund Phys.Elect + Magnetism (3.00)

--- And ---

PHYS 226L - Fundamental Physics Lab (1.00)



PHYS 42 - Electricity and Magnetism for Scientists and Engineers (4.00)

PHYS 227 - Fund Phys: Waves, Optics, & Mod Phys (1.00 - 3.00)

--- **And** ---

PHYS 227L - Fundamental Physics Lab (1.00)



No Course Articulated

END OF AGREEMENT