Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

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.

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LOWER DIVISION CORE

Select 15 Semester Unit(s) from the following

CSUF		Reedley College
CPSC 120 - Introduction to Programming (3.00)	←	**CSCI 40** - Programming Concepts and Methodology I (4.00)
CPSC 121 - Object-Oriented Programming (3.00)	←	**CSCI 40** - Programming Concepts and Methodology I (4.00)
CPSC 131 - Data Structures (3.00)	←	**CSCI 41** - Programming Concepts and Methodology II (4.00)
CPSC 240 - Computer Organization & Assembly Language (3.00)	←	**CSCI 45** - Computer Organization and Assembly Language Programming (4.00)
CPSC 253 - Cybersecurity Foundations and Principles (3.00)	←	No Course Articulated

--- And ---

Select 1 Course(s) from the following

CSUF		Reedley College
CPSC 223C - C Programming (3.00)	←	No Course Articulated
CPSC 223J - Java Programming (3.00)	←	**CSCI 5** - Java Programming (3.00)
CPSC 223N - Visual C# Programming (3.00)	←	No Course Articulated
CPSC 223P - Python Programming (3.00)	←	**CSCI 58** - Programming Essentials in Python (3.00)

MATHEMATICS REQUIREMENTS

Select 18 Semester Unit(s) from the following

CSUF		Reedley College
MATH 150A - Calculus I (4.00)	←	**MATH 5A** - Calculus I (5.00)
MATH 150B - Calculus II (4.00)	←	**MATH 5B** - Calculus II (4.00)

CSUF		Reedley College
MATH 170A - Mathematical Structures I (3.00)	←	**CSCI 26** - Discrete Mathematics for Computer Science (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)	←	**BIOL 11A** - Biology for Science Majors I (5.00)
BIOL 152 - Evolution & Organismal Biology (4.00)	←	**BIOL 11B** - Biology for Science Majors II (5.00)

CHEM 120A - General Chemistry (5.00)	←	**CHEM 1A** - General Chemistry (5.00)
CHEM 120B - General Chemistry (5.00)	←	**CHEM 1B** - General Chemistry and Qualitative Analysis (5.00)
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)	←	No Course Articulated
GEOL 101L - Introduction to Geology Laboratory (1.00)	←	No Course Articulated
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)	←	**MATH 6** - Calculus III (5.00)
MATH 250B - Intro to Linear Algebra and Diff. Equations (4.00)	←	**MATH 17** - Differential Equations and Linear Algebra (5.00)

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)	←	**POLSCI 2** - American Government (3.00) **POLSCI 2H** - Honors American Government (3.00)

ARTICULATION DETAILS

BIOL 101 - Elements of Biology (3.00) --- And --- **BIOL 101L** - Elements of Biology Laboratory (1.00)	←	No Course Articulated
BIOL 151 - Cellular & Molecular Biology (4.00) --- And --- **BIOL 152** - Evolution & Organismal Biology (4.00)	←	**BIOL 11A** - Biology for Science Majors I (5.00) --- And --- **BIOL 11B** - Biology for Science Majors II (5.00)
CHEM 120A - General Chemistry (5.00) --- And --- **CHEM 120B** - General Chemistry (5.00)	←	**CHEM 1A** - General Chemistry (5.00) --- And --- **CHEM 1B** - General Chemistry and Qualitative 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)

← **CSCI 40** - Programming Concepts and Methodology I (4.00)
--- And ---
CSCI 41 - Programming Concepts and Methodology II (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** - Physical Geology (4.00)

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 5A** - Calculus I (5.00)
--- And ---
MATH 5B - Calculus II (4.00)

MATH 150A - Calculus I (4.00)
--- And ---
MATH 150B - Calculus II (4.00)
--- And ---
MATH 250A - Calculus III (4.00)

← **MATH 5A** - Calculus I (5.00)
--- And ---
MATH 5B - Calculus II (4.00)
--- And ---
MATH 6 - Calculus III (5.00)

PHYS 225 - Fundamental Phys; Mechanics (3.00)
--- And ---
PHYS 225L - Fundamental Physics Lab (1.00)

← **PHYS 4A** - Physics for Scientists and Engineers (4.00)

PHYS 226 - Fund Phys.Elect + Magnetism (3.00)
--- And ---
PHYS 226L - Fundamental Physics Lab (1.00)

← **PHYS 4B** - Physics 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)

← **PHYS 4C** - Physics for Scientists and Engineers (4.00)

END OF AGREEMENT