Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

To: University of California, Riverside 2022-2023 General Catalog, Quarter	From: Mount San Antonio College 2022-2023 General Catalog, Semester

Computer Science, B.S.

GENERAL REQUIREMENTS

All majors in the Bourns College of Engineering are selective, based on academic preparation and GPA in all transferable coursework, with a minimum GPA of 2.80. This is a baseline GPA for consideration and not a guarantee of admission.

Prior to transfer, <u>a minimum GPA of at least 2.50 in the calculus sequence and at least one additional sequence</u>.

Note: Proficiency in C++ is a required prerequisite to UCR's CS141 "Intermediate Data Structures and Algorithms", as well as most other upper division CS courses. Transfer students who complete the equivalent of UCR's CS 10 and 12 but still lack proficiency in C++ may be required to complete a C++ course at UCR or elsewhere, prior to enrolling in upper division courses at UCR.

AP Exam - Satisfy Course Requirement Section
Computer Science: A Exam
Minimum score of 4 satisfies CS 10A
Mathematics: AB Exam or AB Subscore from BC Exam
Minimum score of 3 satisfies MATH 9A **or** MATH 7A
Mathematics: BC Exam
Minimum score of 3 satisfies MATH 9A and MATH 9B **or** MATH 7A and MATH 7B
Minimum score of 4 satisfies MATH 9A, MATH 9B, MATH 9C **or** MATH 7A, MATH 7B, MATH 9C

If the sending institution offers ***honors courses***, the articulation for the same course number will be used.

For more information regarding this major and UCR's transfer selection process, please visit Bourns College of Engineering General Requirements.
For information about the UC Transfer Admission Guarantee (TAG) program, please visit Transfer Admission Guarantee.

IGETC and General Education/Breadth Information
The Bourns College of Engineering (BCOE) accepts completion of IGETC as satisfying the college's lower division general education/breadth requirements for transfer students. Additional upper division breadth requirements may be required after enrollment in BCOE. Please visit "***GE Areas - Transfer Institution***" for the complete list of required GE/Breadth Articulation Agreement. For more information on BCOE breadth requirements, go to Bourns College of Engineering Breadth Requirements. Prospective applicants are strongly encouraged to focus instead on preparatory course work for the major, such as the mathematics, science and other technical preparatory course work listed below, rather than IGETC. Strong technical preparation is essential for success in the admissions process, and subsequently, in all coursework at BCOE.

LOWER DIVISION MAJOR REQUIREMENTS

Required for admission
All courses in this section are required

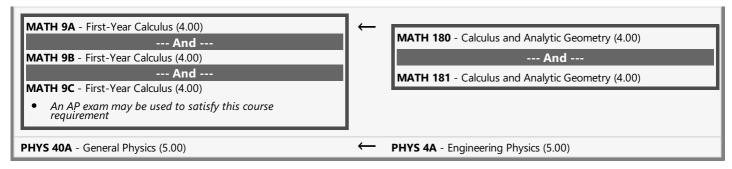|	
CS 10A - Intro to Computer Science for Science, Mathematics, and Engineering I (4.00) • *An AP exam may be used to satisfy this course requirement*	← **CSCI 110** - Fundamentals of Computer Science (3.50) **--- Or ---** **CSCI 140** - C++ Language and Object Development (4.00) **--- Or ---** **CSCI 145** - JAVA Language and Object Oriented Programming (4.00) **--- Or ---** **CISP 31** - Programming in C++ (3.00) **--- And ---** **CISP 31L** - Programming in C++ Laboratory (0.50) **--- Or ---** **CISP 34** - Advanced C++ Programming (3.00) **--- And ---** **CISP 34L** - Advanced C++ Programming Laboratory (0.50)
CS 10B - Intro to Computer Science for Science, Mathematics, and Engineering II (4.00)	← **CISP 21** - Programming in Java (3.00) **--- Or ---** **CSCI 140** - C++ Language and Object Development (4.00)

MATH 9A - First-Year Calculus (4.00) --- And --- **MATH 9B** - First-Year Calculus (4.00) --- And --- **MATH 9C** - First-Year Calculus (4.00) • *An AP exam may be used to satisfy this course requirement*	←	**MATH 180** - Calculus and Analytic Geometry (4.00) --- And --- **MATH 181** - Calculus and Analytic Geometry (4.00)
PHYS 40A - General Physics (5.00)	←	**PHYS 4A** - Engineering Physics (5.00)

CS 11 - Intro to Discrete Structures (4.00) Same-As: MATH 11	←	**CSCI 190** - Discrete Mathematics Applied to Computer Science (4.00)
CS 10C - Intro to Data Structures and Algorithms (4.00)	←	**CSCI 220** - Data Structures I (3.50) --- Or --- **CSCI 230** - Data Structures II (3.50)
CS 61 - Machine Organization and Assembly Language Programming (4.00)	←	**CSCI 150** - Assembly Language/Machine Architecture (3.50)
MATH 10A - Calculus of Several Variables (4.00)	←	**MATH 280** - Calculus and Analytic Geometry (5.00)
PHYS 40B - General Physics (5.00)	←	**PHYS 4A** - Engineering Physics (5.00) --- And --- **PHYS 4B** - Engineering Physics (5.00) --- And --- **PHYS 4C** - Engineering Physics (5.00)
PHYS 40C - General Physics (5.00)	←	**PHYS 4B** - Engineering Physics (5.00)

STRONGLY RECOMMENDED COURSES

Select 1 Course(s) from the following
Recommended

EE 20B - Linear Methods for Engineering Analysis and Design Using MATLAB (4.00)	←	No Course Articulated
MATH 31 - Applied Linear Algebra (5.00)	←	**MATH 285** - Linear Algebra and Differential Equations (5.00) --- Or --- **MATH 260** - Linear Algebra (3.00)

END OF AGREEMENT