Articulation Agreement by Major

Effective during the 2022-2023 Academic Year

To: University of California, Riverside 2022-2023 General Catalog, Quarter	From: De Anza College 2022-2023 General Catalog, Quarter

Bioengineering, 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.

Effective Fall 2024 transfer students must complete all Chemistry lab courses in-person to receive articulation to UCR's equivalent Chemistry lab courses. Completing Chemistry lab courses online will not impact your ability to transfer. Transfer students who complete Chemistry lab courses online will be required to retake the lab courses at UCR.

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

AP Exam - Satisfy Course Requirement Section
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

BIOL 5A - Intro to Cell and Molecular Biology (4.00) **--- And ---** **BIOL 5LA** - Intro to Cell and Molecular Biology Lab (1.00)	←	**BIOL 6B** - Cell and Molecular Biology (6.00)
CHEM 1A - General Chemistry (4.00) **--- And ---** **CHEM 1B** - General Chemistry (4.00) **--- And ---** **CHEM 1C** - General Chemistry (4.00) **--- And ---** **CHEM 1LA** - General Chemistry Lab (1.00) **--- And ---** **CHEM 1LB** - General Chemistry Lab (1.00) **--- And ---** **CHEM 1LC** - General Chemistry Lab (1.00)	←	**CHEM 1A** - General Chemistry (5.00) **--- And ---** **CHEM 1B** - General Chemistry (5.00) **--- And ---** **CHEM 1C** - General Chemistry and Qualitative Analysis (5.00)
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 1A** - Calculus (5.00) **--- And ---** **MATH 1B** - Calculus (5.00) **--- And ---** **MATH 1C** - Calculus (5.00)

Select 2 Course(s) from the following		
Required for admission		
BIOL 5B - Intro to Organismal Biology (4.00)	←	**BIOL 6A** - Form and Function in the Biological World (6.00)
PHYS 40A - General Physics (5.00)	←	**PHYS 4A** - Physics for Scientists and Engineers: Mechanics (6.00)
PHYS 40B - General Physics (5.00)	←	**PHYS 4C** - Physics for Scientists and Engineers: Fluids, Waves, Optics and Thermodynamics (6.00)
PHYS 40C - General Physics (5.00)	←	**PHYS 4B** - Physics for Scientists and Engineers: Electricity and Magnetism (6.00)

STRONGLY RECOMMENDED COURSES

Recommended		
CHEM 8A - ORGANIC CHEMISTRY (3.00) **--- And ---** **CHEM 8B** - ORGANIC CHEMISTRY (3.00) **--- And ---** **CHEM 8C** - ORGANIC CHEMISTRY (3.00) **--- And ---** **CHEM 8LA** - ORGANIC CHEMISTRY LABORATORY (1.00) **--- And ---** **CHEM 8LB** - ORGANIC CHEMISTRY LABORATORY (1.00) **--- And ---** **CHEM 8LC** - ORGANIC CHEMISTRY LABORATORY (1.00)	←	**CHEM 12A** - Organic Chemistry (5.00) **--- And ---** **CHEM 12B** - Organic Chemistry (5.00) **--- And ---** **CHEM 12C** - Organic Chemistry (5.00)
CS 9A - Introduction to Python Programming with Applications (4.00)	←	**CIS 41A** - Python Programming (4.50)
EE 5 - Circuits and Electronics (4.00)	←	No Course Articulated
MATH 10A - Calculus of Several Variables (4.00) **--- And ---** **MATH 10B** - Calculus of Several Variables (4.00)	←	**MATH 1C** - Calculus (5.00) **--- And ---** **MATH 1D** - Calculus (5.00)
MATH 46 - Intro to Ordinary Differential Equations (4.00)	←	**MATH 2A** - Differential Equations (5.00)

END OF AGREEMENT