

# Articulation Agreement by Major

Effective during the 2020-2021 Academic Year

To: University of California, Riverside  
2020-2021 General Catalog, Quarter

From: Long Beach City College  
2020-2021 General Catalog, Semester

## Mechanical Engineering, 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).

As shown below, certain major course preparation is required prior to transfer, with a GPA of at least 2.50 in the calculus sequence, and in 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

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. For more information on BCOE breadth requirements, go to: <http://student.engr.ucr.edu/policies/requirements/breadth.html>.

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

**CHEM 1A** - GENERAL CHEMISTRY (4.00)

--- And ---

**CHEM 1B** - GENERAL CHEMISTRY (4.00)

--- And ---

**CHEM 1LA** - General Chemistry Lab (1.00)

--- And ---

**CHEM 1LB** - General Chemistry Lab (1.00)

**CHEM 1A** - General Chemistry (5.50)

--- And ---

**CHEM 1B** - General Chemistry (5.50)

**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 60** - First Calculus Course (5.00)

--- And ---

**MATH 70** - Second Calculus Course (5.00)

**PHYS 40A** - GENERAL PHYSICS (5.00)

**PHYS 3A** - Physics for Sci & Eng. - Mechanics (5.50)

#### Select 3 Course(s) from the following

Required for admission

**BIOL 5A** - Intro to Cell and Molecular Biology (4.00)

--- And ---

**BIOL 5LA** - Intro to Cell and Molecular Biology Lab (1.00)

**BIO 1A** - Biology for Science Majors (5.00)

<div> <b>EE 1A</b> - Engineering Circuit Analysis I (3.00)  <div>--- And ---</div> <b>EE 1LA</b> - Engineering Circuit Analysis I Laboratory (1.00) </div>	←	<div> <b>ENGR 17</b> - Electrical Engineering Circuits (3.00)  <div>--- And ---</div> <b>ENGR 17L</b> - Electrical Engineering Circuits Laboratory (1.00) </div>
<b>ME 2</b> - Intro to Mechanical Engineering (4.00)	←	No Course Articulated
<b>ME 9</b> - Engineering Graphics and Design (4.00)	←	<div> <b>ENGR 3A</b> - Engineering Graphics (3.00)  <div>--- And ---</div> <b>ENGR 3B</b> - Engineering Graphics (3.00) </div>
<b>ME 10</b> - STATICS (4.00)	←	<b>ENGR 35</b> - Statics (3.00)
<b>PHYS 40B</b> - GENERAL PHYSICS (5.00)	←	<div> <b>PHYS 3A</b> - Physics for Sci &amp; Eng. - Mechanics (5.50)  <div>--- And ---</div> <b>PHYS 3C</b> - Physics for Sci. and Eng.- Modern Physics (4.50) </div>
<b>PHYS 40C</b> - GENERAL PHYSICS (5.00)	←	<b>PHYS 3B</b> - Physics for Sci. &Eng. -E & M (4.50)
<div> <b>ME 18A</b> - Introduction to Engineering Computation (2.00)  <div>--- And ---</div> <b>ME 18B</b> - Introduction to Computational Modeling in Mechanical Engineering (4.00) </div>	←	No Course Articulated
	←	No Course Articulated

## STRONGLY RECOMMENDED COURSES

<div> <b>MATH 10A</b> - Calculus of Several Variables (4.00)  <div>--- And ---</div> <b>MATH 10B</b> - Calculus of Several Variables (4.00) </div>	←	<b>MATH 80</b> - Third Calculus Course (5.00)
<b>MATH 46</b> - Intro to Ordinary Differential Equations (4.00)	←	<b>MATH 84</b> - Intro to Differential Equations and Linear Algebra (5.00)

END OF AGREEMENT