PHYSICAL SCIENCE: ENGINEERING TECHNOLOGY, ASSOCIATE IN SCIENCE

Ventura College offers a two-year lower-division engineering program that prepares students for transfer to colleges and universities in California and across the nation. The first two years of the engineering curriculum, at most colleges and universities, are similar with specialization commencing in the junior year. Completion of the lower division core courses listed is essential in facilitating progress as an upper division engineering transfer student. It is important that engineering students meet with an engineering transfer counselor and/or the Engineering Department for specific requirements for transfer.

Course ID	Title	Units/ Hours
Required Courses		
CHEM V01A	General Chemistry I	3
CHEM V01AL	General Chemistry I Laboratory	2
Required Additional Courses		
Select two of the following:		5-6
ARCH V23/ DRFT V05A	Introduction to AutoCAD	
DRFT V03	Drafting Fundamentals	
ENGR V02	Engineering Graphics and Design	
Select one of the following:		3-4
ARCH/CT V60	Simplified Engineering for Building Construction	
ENGR V12	Engineering Statics	
ENGR V16	Electronic Circuit Analysis	
ENGR V16L	Electronic Circuits Laboratory	
ENGR V18 & V18L	Engineering Materials and Engineering Materials Laboratory	
MATH V04	College Algebra	4-5
or MATH V20	Precalculus Mathematics	
MATH V05	Plane Trigonometry	3-5
or MATH V21A	Calculus with Analytic Geometry I	
Select one of the following groups:		5-10
Group A:		
PHYS V02A	General Physics I: Algebra/Trigonometry-Based	
PHYS V02AL	General Physics I Laboratory: Algebra/ Trigonometry-Based	
PHYS V02B	General Physics II: Algebra/Trigonometry-Based	
PHYS V02BL	General Physics II Laboratory: Algebra/ Trigonometry-Based	
Group B:		
PHYS V03A	General Physics I: Calculus-Based	
PHYS V03AL	General Physics I Laboratory: Calculus-Based	
PHYS V03B	General Physics II: Calculus-Based	
PHYS V03BL	General Physics II Laboratory: Calculus-Based	
Group C:		
PHYS V04	Mechanics for Scientists and Engineers	
PHYS V04L	Mechanics Laboratory for Scientists and Engineers	
Total Units		**25-35**

Recommended Courses

In addition to the required courses listed above, it is recommended that students who seek to obtain additional insight into the field of study consider taking one or more of the following courses: ENGL V01A English Composition (Units: 4); MATH V21A Calculus with Analytic Geometry I (Units: 5); PHYS V05 Electricity and Magnetism for Scientists and Engineers (Units: 4)-PHYS V05L Electricity and Magnetism Laboratory for Scientists and Engineers (Units: 1). Although these supplemental courses may be of value to the student, please note that they do NOT satisfy the requirements for this degree.

Upon successful completion of this program, students will be able to:

- Analyze and interpret data to make engineering problem decisions.
- Identify, formulate, and solve basic engineering problems