

Bachelor of Science in Engineering Sciences Degree Requirements Course (Credits)

General Education (GE) 12 courses + 3 QS (see below)		Major Core 28 courses		Distribution Requirement 2 courses		Free Electives Min. 9 credits
<u>Foundation Requirements</u> 6 courses Freshman English 1 (3) Freshman English 2 (3) Armenian Language/Literature 1 (3) Armenian Language/Literature 2 (3) Armenian History 1 (3) Armenian History 2 (3) <i>All undergraduate students must take these 6 courses</i>		Calculus: Single Variable (4) Calculus: Multi Variable (4) Linear Algebra and Ordinary Differential Equations (4) Probability and Statistics (3) Chemistry (3) Chemistry Lab (1) Mechanics (3) Mechanics Lab (1) Electricity and Magnetism (3) Electricity and Magnetism Lab (1) Discrete Math (3) Introduction to Programming (4) Data Structures and Algorithms (3) Computer Organization (3) Engineering Statics (3) Engineering Dynamics (3) Circuits (3) Circuits Lab (1) Embedded Systems (3) Signals and Systems (3) Numerical Methods (3) Computer Aided Design (3) Control Systems 1 (3) Control Systems 1 Lab (1) Control Systems 2 (3) Control Systems 2 Lab (1) Mechatronics Design (3) Capstone (3)		One from Introduction to Materials Science (3) Introduction to Chemical Engineering (3) Thermodynamics (3) Heat Transfer (3) Data Science with R (3) Introduction to Fluid Mechanics (3) Machine Learning (3)		Any 9 credits
<u>Quantitative Sciences Requirements</u> This requirement is fulfilled through the ES core courses	AND		AND	AND	AND	
<u>Arts & Humanities Requirements</u> 3 courses @ 3 credits each				AND One from Biotechnology (3) Biology (3) Bioinformatics (3) Environmental Engineering (3) Resource Management (3) Project Management (3) Alternative Energy (3)		
<u>Social Sciences Requirements</u> 3 courses @ 3 credits each						
For complete information about AUA's General Education program visit http://aua.am/gen-ed/						