

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 Seminar 1 (3) Freshman Seminar 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 1 (3) Calculus 2 (3) Calculus 3 (3) Capstone (6) Chemistry (3) Chemistry Lab (1) Circuits (3) Circuits Lab (1) Control Systems 1 (3) Control Systems Lab (1) Computer Aided Design (3) Computer Organization (3) Electricity and Magnetism (3) Electricity and Magnetism Lab (1) Embedded Systems (3) Embedded Systems Lab (1) Engineering Dynamics (3) Engineering Statics (3) Introduction to Programming (3) Linear Algebra (3) Mechanics (3) Mechanics Lab (1) Numerical Methods (3) Ordinary Differential Equations (3) Probability and Statistics (3) Signals and Systems Lab (1) Signals and Systems (3) Systems Engineering (3)		One from Cybersecurity (3) 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) Quantum Computing (3)		Any 9 credits
<u>Quantitative Sciences Requirements</u> This requirement is fulfilled through the ES core courses	<u>AND</u>		<u>AND</u>	<u>AND</u> One from Biotechnology (3) Biology (3) Bioinformatics (3) Environmental Engineering (3) Resource Management (3) Project Management (3) Alternative Energy (3) Systems Engineering (3)	<u>AND</u>	
<u>Arts & Humanities Requirements</u> 3 courses @ 3 credits each						
<u>Social Sciences Requirements</u> 3 courses @ 3 credits each						
<u>Physical Education, First Aid, and Civil Defense Requirements</u> FND 110 Physical Education – Four (4) semesters in the first two years FND 152 First Aid – One course. First semester. FND 153 Civil Defense One course. First semester.						

For complete information about
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