

“Civil Engineering”, Curriculum

| Year; Semester | Course (Department, Number, Title) List all courses in the program by term starting with the first term of the first year and ending with the last term of the final year | Indicate Whether Course is Required, Elective or a Selected Elective by an R, an E or an SE. | Subject Area (Credit Hours) | | | |
|-------------------|---|--|-----------------------------|--|----------------------|-------|
| | | | MATH & Basic Science | Engineering Topics Check if Contains Significant Design (☑) | General Education | Other |
| 1;1 | Calculus I | R | 8 | | | |
| | English I | R | | | 5 | |
| | Introduction to General Chemistry with Laboratory | R | 6 | | | |
| | General Biology | R | 6 | | | |
| | University Electives I | E | | | 6 | |
| | History of Georgia | E | | | | |
| | Introduction to Philosophy | E | | | | |
| | Introduction to Psychology | E | | | | |
| | Oral Communications | E | | | | |
| 1:2 | Calculus II | R | 8 | | | |
| | Principles of Physics with Laboratory I | R | 8 | | | |
| | English II | R | | | 5 | |
| | Computer Graphics | R | | | | 6 |
| | Surveying for Civil Engineering | R | | 6 | | |
| 2;1 | Principles of Physics with Laboratory II | R | 8 | | | |
| | Mechanics (Statics) | R | | 6 | | |
| | English III | R | | | 5 | |
| | Statistical Principles and Practices | R | 6 | | | |

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|-----|---|---|---|-------|---|---|
| | Introduction to Linear Algebra | R | 6 | | | |
| | Environmental Engineering | R | | 6 | | |
| 2;2 | Mechanics (Dynamics) | R | | 6 | | |
| | Introduction to Construction Materials | R | | 6 | | |
| | English IV | R | | | 5 | |
| | University Electives II | E | | | 6 | |
| | History of Technical Design | E | | | | |
| | Introduction to Sociology | E | | | | |
| | Introduction to Culturology | E | | | | |
| | Written Communication | E | | | | |
| 3;1 | Differential Equations | R | 6 | | | |
| | Fluid Mechanics | R | | 6 | | |
| | Structural Analysis I | R | | 6 | | |
| | Construction Ethics, Law, and Contracts | R | | | | 6 |
| | Strength of Materials | R | | 6 | | |
| 3;2 | Reinforced Concrete Design | R | | 6 | | |
| | Transportation Engineering | R | | 6 | | |
| | Soil Mechanics | R | | 6 | | |
| | Apply Hydrology | R | | 6 (√) | | |
| | Apply Hydraulics | R | | 6 (√) | | |
| 4;1 | Introduction to Capstone Design Project | R | | 4 | | |
| | Professional Electives 1 | E | | 6 (√) | | |
| | Water Chemistry | E | | | | |
| | Geotechnical Structures | E | | | | |
| | Traffic Engineering Design | E | | | | |

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|-----|---|---|--|-------|--|--|
| | Professional Elective Laboratory | E | | 4 | | |
| | Professional Electives 2 | E | | 6 (√) | | |
| | Water Quality | E | | | | |
| | Hydraulic Structures: Design and Systems | E | | | | |
| | Highway Engineering | E | | | | |
| | University Electives III | E | | 6 | | |
| | World History | E | | | | |
| | Modern Europe | E | | | | |
| | History of Religions | E | | | | |
| | Interpersonal Communications | E | | | | |
| 4.2 | Professional Electives 3 | E | | 6 (√) | | |
| | Water Supply and Water Distribution Systems | E | | | | |
| | Hydropower Engineering | E | | | | |
| | Integrated Highway Bridge Design | E | | | | |
| | Professional Electives 4 | E | | 6 (√) | | |
| | Water Treatment Engineering | E | | | | |
| | Ports and Marine Structures | E | | | | |
| | Airport Engineering | E | | | | |
| | Professional Electives 5 | E | | 6 (√) | | |
| | Wastewater Treatment Engineering | E | | | | |
| | Management of Hydraulic Engineering | E | | | | |
| | Railroad Engineering | E | | | | |
| | Construction Management and Safety | R | | 6 | | |
| | Capstone Design Project | R | | 6 (√) | | |

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|---|-------------------------------|-----------|------------|-----------|----------|
| TOTALS-ABET BASIC-LEVEL REQUIREMENTS | | | | | |
| OVERALL TOTAL CREDIT HOURS FOR COMPLETION OF THE PROGRAM = 240 ESTC | | 62 26% | 134 56% | 32 13% | 12 5% |
| Must satisfy one set | Minimum semester credit hours | 60 | 90 | | |
| | Minimum percentage | 25.0% | 37.5% | | |

(√) – means design