Bachelor of Science in Computer Engineering

Note: All bachelor's degree students are required to complete the general education requirements, at least one major course of study, and enough electives to total a minimum of 120 semester hours of credit.

General Education Courses (33-34 Credit Hours)

General education is composed of a Christian liberal arts core curriculum that seeks to transform students to think, live and serve as Christian leaders in the 21st century. General education courses are carefully designed with job preparation in mind, aiming at helping students develop the important career skills that employers are looking for.

All students (online and campus) are educated to be competent in the following areas:

Biblical Worldview

- GENE 100 Making of the Christian Mind (3)
- GENE 402 Making of the Christian Leader (3)

Communication

- COMM 110 Public Speaking (3) (Campus Students ONLY) or UNIV 100 – Regent Foundations of Success (3) (Online Students ONLY)
- ENGL 101 English Composition (3)

Critical Thinking and Moral Reasoning

- GENE 250 Making of the Christian Life (3)
- ENGL 102 Research and Academic Writing (3)

Quantitative & Scientific Literacy

- MATH 211 Calculus I (4)
- PHYS 221 University Physics I with Lab (4)

Cultural Foundations

- ENGL 205 Literature of the Western World (3)
- ECON 101 Introduction to Economics (3)
- History or Government Course (3) (see Degree Works for options)

Effective Catalog Term: Spring/Summer 2022 – All official degree information is found in Degree Works and the <u>Undergraduate Catalog</u>

Core Requirements (88 Credit Hours)

- MATH 211 Calculus I (4)
- MATH 212 Calculus II (4)
- MATH 213 Calculus III (4)
- MATH 230 Linear Algebra (3)
- MATH 320 Differential Equations (3)
- NSCI 110 Origins of the Cosmos (3)
- PHYS 221 University Physics I with Lab (4)
- PHYS 222 University Physics II with Lab (4)
- ENGR 225 Prob, Stats and Quant Methods with Lab (3)
- ENGR 201 Engineering Foundations I (3)
- ENGR 202 Engineering Foundations II (3)
- ENGR 220 Systems Thinking and Approach (3)
- ENGR 230 Modeling, Design, and Analysis (3)
- ENGR 310 Engineering Ethics and Profession (3)
- ENGR 491 Engineering Capstone I (4)
- ENGR 492 Engineering Capstone II (4)
- CSCI 201 Introduction to Computer Science (3)
- ECEN 220 Digital Logic Design (3)
- ECEN 320 Digital Systems Design (3)
- CSCI 210 Computer Architecture (3)
- CSCI 220 Operating Systems (3)
- CSCI 314 Programming (3)
- CSCI 315 Data Structures & Algorithms (3)
- CSCI 316 Programming Languages (3)
- CSCI 317 Database Fundamentals (3)
- CSCI 450 Software Engineering (3)
- MATH 220 Discrete Math (3)

Notes:

- A minimum cumulative GPA of 2.0 is required to graduate and maintain good academic standing. Some
 majors also require a minimum grade in all major courses. Please see Degree Works or the Undergraduate
 Catalog for these specifics.
- 50% of all major requirements must be taken at Regent University.
- Please reference Degree Works for course pre-requisite information.
- As a general rule of thumb, 100 and 200 level courses should be taken prior to upper level (300 and 400) level courses.
- MATH 211 and PHYS 221 count towards both the General Education Requirement and the Computer Engineering Core Requirement categories.