Engineering Programs

Regents Engineering Transfer Program

Qualified students seeking a bachelor of engineering degree may begin their college studies at North Georgia College & State University through the Regents Engineering Transfer Program (RETP). Upon successful completion of the pre-engineering curriculum, students may transfer to the Georgia Institute of Technology to complete the degree requirements. It is expected that students in this program, like other Georgia Tech graduates, will normally require four to five and one-half years to complete the degree requirements, depending on their pre-college preparation, involvement in extra-curricular activities, and engineering major. This program is limited to Georgia residents only.

To be admitted to the Regents Engineering Transfer Program, a student must be a Georgia resident and

* have a high school GPA of at least 3.0 and have a combined SAT score of at least 1090 (including a minimum of 560 on the math and 440 on the verbal portions), OR
* have been admitted to an engineering program at Georgia Tech, OR
* if the initial admission criteria are not met, a student may enter the RETP after the end of the freshman year by completing the first chemistry and first physics courses and Calculus I and II with grades of B or higher and attaining a cumulative GPA of at least 3.0.

(These requirements are subject to change by Georgia Tech.)

This institution’s faculty members work closely with Georgia Tech’s faculty to assure a curriculum which is well-coordinated with that of Georgia Tech. A specific time each year has been established for students to visit the Georgia Tech campus to meet with representatives of their anticipated majors.

Regents Engineering Transfer Program students who satisfactorily complete the pre-engineering curriculum and apply for transfer will be accepted to Georgia Tech. However, admission to the most popular majors, as for other Georgia Tech students, will be based upon overall grade point average, performance in the required prerequisite courses, and availability of student spaces.

To Transfer to Georgia Tech, students must:

• Complete the RETP requirements at North Georgia
• Earn a cumulative GPA of 2.7 or higher, including mathematics GPA of 2.7 and a science GPA of 2.7 (for some engineering programs these GPA requirements may be higher; see the Georgia Tech website for more information).
• Obtain a recommendation from the North Georgia RETP Coordinator
• Submit the application materials and the recommendation form to the Office of Undergraduate Admission at Georgia Tech
Each student's schedule should be discussed with the student's academic advisor before registration. While there is some flexibility in pre-engineering schedules, recommendations for schedules are given below. Note that there are two sets of recommendations, one for students starting with MATH 2450 the first semester and one for students starting with MATH 1113 the first semester. Students should be aware of the Core Curriculum requirements described elsewhere in this catalog. Military students will take Military Science courses in addition to their other courses.

For students starting with MATH 2450 (Calculus I) in the first semester:

First semester:
MATH 2450     Calculus I
CHEM 1211, 1211L   Principles of Chemistry I
ENGR 1000       Introduction to Engineering
(optional, but recommended)
ENGL 1101      English Composition I

Other courses from Core Area B, C, and E.

Second semester:
MATH 2460     Calculus II
CHEM 1212, 1212L   Principles of Chemistry II
PHYS 2211, 2211L    Principles of Physics I
ENGL 1102      English Composition II

Third semester:
MATH 3000     Differential Equations
MATH 3650     Linear Algebra
PHYS 2212, 2212L    Principles of Physics II
ENGR 2001     Statics (for Aerospace, Civil, and Mechanical Engineering)

Other courses from Core Areas B, C, and E.

Fourth semester:
MATH 2470     Calculus III
ENGR 3200     Dynamics (for Aerospace, Civil, and Mechanical Engineering)
CSCI 1301     Computer Science I

Other courses from Core Areas B, C, and E.
For students starting with MATH 1113 (Precalculus) in the first semester:

**First semester:**
- MATH 1113     Precalculus
- CHEM 1211, 1211L   Principles of Chemistry I
- ENGR 1000       Introduction to Engineering
  (optional, but recommended)
- ENGL 1101      English Composition I

Other courses from Core Area B, C, and E.

**Second semester:**
- MATH 2450     Calculus I
- CHEM 1212, 1212L  Principles of Chemistry II
- PHYS 2211, 2211L  Principles of Physics I
- ENGL 1102     English Composition II

**Third semester:**
- MATH 2460     Calculus II
- PHYS 2212, 2212L  Principles of Physics II
- ENGR 2001     Statics (for Aerospace, Civil, and Mechanical Engineering)
- CSCI 1301     Computer Science I

Other courses from Core Areas B, C, and E.

**Fourth semester:**
- MATH 2470     Calculus III
- MATH 3650     Linear Algebra  (if offered)
- MATH 3000     Differential Equations (if offered)
- ENGR 3200     Dynamics  (for Aerospace, Civil, and Mechanical Engineering)

Other courses from Core Areas B, C, and E.
Dual Degree Program

North Georgia College & State University offers a dual degree program in engineering, which provides students the opportunity to develop a strong liberal arts background before completing academic coursework at another institution. Dual degree program students normally attend North Georgia for approximately three years and then Georgia Tech, Clemson University, or Mercer University for an additional two years. Upon completion of study in this program, the successful student will receive a B.S. in an engineering field from Georgia Tech, Clemson or Mercer University in addition to a bachelor’s degree from North Georgia College & State University.

The dual degree program in engineering is offered by the Department of Chemistry, the Department of Physics, and the Department of Mathematics & Computer Science.

FOR COURSES OFFERED IN THE ENGINEERING PROGRAM
SEE COURSES DESCRIPTIONS
Pages 249-394