

SPECIAL ACADEMIC PROGRAMS

Engineering Studies

Regents' Engineering Pathway

Qualified students seeking a bachelor of engineering degree may begin their college studies at Gordon State College through the Regents' Engineering Pathway (REP). 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 extracurricular activities, and engineering major.

There are three different methods for admission to the Regents' Engineering Pathway at Gordon State College.

1. Entering freshman students must have achieved at least:
 - a. A combined SAT score of 1090;
 - b. Minimum of 440 on the verbal portion of the SAT;
 - c. Minimum of 560 on the math portion of the SAT; and
 - d. 3.0 high school grade-point average in academic courses.
2. Entering freshman students who do not meet the requirements above may still be admitted to this program, if they have been accepted for admission to an Engineering Program at Georgia Tech (based on high school academic performance). Such students must provide proof of the acceptance to Georgia Tech.
3. Students who do not initially meet the requirements of either of the above methods may join the Regents' Engineering Pathway at the end of their freshman year, if they meet the following requirements:
 - a. Completion of Calculus I and Calculus II, with grades of at least "B";
 - b. Completion of Principles of Chemistry I and Calculus-Based Physics I, with grades of at least "B"; and
 - c. A Gordon State College grade-point average of at least 3.0.

Gordon State College's faculty members have worked closely with Georgia Tech's faculty to assure a curriculum which is well-coordinated with that of Georgia Tech. Specific times each year have been established for students to visit the Georgia Tech campus and meet with representatives of their anticipated major.

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

The student who completes the designated REP program of study, as well as the core curriculum requirements of Gordon State College, will have satisfied the requirements to graduate from Gordon State College with an Associate of Science degree with a focus in physics.

The programs of study for the Regents' Engineering Pathway are listed on the following pages. Because these programs include a concentration of technical courses, as well as calculus and physics courses, the student

may decide to devote one or two additional semesters to study at Gordon State College before transferring to Georgia Tech.

Other Engineering Pathway Programs

Enrollment in the Regents' Engineering Pathway is limited to those students who meet the qualifications listed above and desire to go to Georgia Institute of Technology. However, students who do not meet the specific qualifications for RTP may still enroll in the pre-engineering program and take the course that will prepare them to enter the junior year at Georgia Tech or any other university that offers baccalaureate programs in engineering. As with the REP students, these students should complete the programs which are outlined below:

Engineering Technology Programs

Several institutions in the University System of Georgia offer strong majors in engineering technology. Completing the Gordon State College Field of Study courses in pre-engineering will also prepare a student to transfer successfully to these programs.

Engineering Pathway Programs of Study

Students wishing to complete the RTP program (or generic pre-engineering) at Gordon State College and graduate from Gordon State College will complete the following courses while completing the Gordon State core curriculum.

| Engineering Major | Mathematics | Science | Engineering |
|--|--|---|---|
| Aerospace, Civil, Mechanical & System Engineering ISYE | MATH 1113 ¹ , MATH 1501 ¹ , MATH 1502, MATH 2201, MATH 2501, MATH 3502 ² | CHEM 1211K ² , PHYS 2211K, PHYS 2212K, CSCI 1371 or CSCI 1372 | ENGR 1100 or ENGR 1111, ENGR 2201 |
| Chemical | MATH 1113 ¹ , MATH 1501 ¹ , MATH 1502 MATH 2201 MATH 2501 MATH 3502 ² | CHEM 1211K, CHEM 1212K, PHYS 2211K, PHYS 2212K, CSCI 1372 or CSCI 1371 | ENGR 1100 or ENGR 1111, ENGR 2201 |
| Computer or Electrical | MATH 1113 ¹ , MATH 1501 ¹ , MATH 1502 MATH 2201 MATH 2501 MATH 3502 ² | CHEM 1211K, PHYS 2211K, PHYS 2212K, CSCI 1372 | ENGR 1100 or ENGR 1111 |

¹ SAT Math \geq 600 or ACT Math \geq satisfies the pre-requisite for direct enrollment into Calculus I (Math 1501) and waives Pre-Calculus (Math 1113). Math 1501 credit may be awarded for AP Calculus AB or BC test scores of 4 or 5, 1B Mathematics HL scores of a 5 or high, or passing the CLEP Calculus exam with a score of 50 or higher.

² Not required for ISYE but can be used as a technical elective

³ Student with credit for calculus because of strong scores on the AP calculus tests would not need to take this course

Note: Courses not needed for a specific major can be used as a technical elective

Engineering Pathway Program of Study

Students wishing to complete the REP program or (generic pre-engineering) at Gordon State College and graduate from Gordon State

2 Special Academic Programs

College will complete the following courses while completing the Gordon State College core curriculum.