



Introduction to Engineering Design (IED) is a high school level course that is appropriate for 9th or 10th grade students who are interested in design and engineering. The major focus of the IED course is to expose students to design process, research and analysis, teamwork, communication methods, global and human impacts, engineering standards, and technical documentation. IED gives students the opportunity to develop skills and understanding of course concepts through activity-, project-, and problem-based (APPB) learning. Used in combination with a teaming approach, APPB-learning challenges students to continually hone their interpersonal skills, creative abilities and understanding of the design process. It also allows students to develop strategies to enable and direct their own learning, which is the ultimate goal of education.

PATHWAY COURSES

- Foundations of Engineering and Technology
- Engineering Concepts
- Engineering Applications

RECOMMENDED COURSES

- Algebra/Geometry
- Trigonometry/Physics

POST-SECONDARY DEGREES, DIPLOMAS, AND CERTIFICATES

TECHNICAL COLLEGES

- Electrical Utility Technology
- Engineering Technology
- Industrial Systems Technology
- Mechatronics Technology
- Military
- On-the-Job Training
- Special Purpose Schools
- State Registered Apprenticeships
- Wireless Engineering Technology

COLLEGES/UNIVERSITIES

- See www.GAcollege411.org for additional information.

CAREER AND TECHNICAL STUDENT ORGANIZATIONS



ENGINEERING AND TECHNOLOGY PATHWAY

TOP CAREER CHOICES

Civil Engineer

Bachelor Degree needed
\$56,259 annual salary

Electrical Engineer

Bachelor Degree needed
\$52,990 annual salary

Industrial Engineer

Bachelor Degree needed
\$47,720 annual salary

Materials Engineer

Bachelor Degree needed
\$51,420 annual salary

Mechanical Engineer

Bachelor Degree needed
\$47,900 annual salary

ADDITIONAL CAREER CHOICES

Civil Engineer
Designer
Drafter
Machinist
Manufacturing
Mechanical Engineer
Quality Control Inspector



**CAREER
EXPLORATION
& Pathway Discovery**
CTAE Career Pathways / Fine Arts Pathways



Source: GADOE Plans of Study

<http://www.gadoe.org/Curriculum-Instruction-and-Assessment/CTAE/Pages/Georgia-Career-Pathways-New-Rule.aspx>