This information describes typical occupations and employment settings associated with this major. Understand that some of these options may require additional training. Moreover, you are not limited to these options when choosing a possible career path.

### Description of Electrical and Electronics Engineering

Engineering is about creating new solutions to existing or future problems. Engineers are problem solvers who employ science, math, analysis and synthesis to design unique and practical solutions to everyday problems. They must accomplish this often under the constraints of time, budgets, and safety and health issues. Engineers also must be concerned about the environmental, political and social impact their answers will create. The **electrical and electronics** engineering discipline generally deals with the study and application of electricity, electronics, and electromagnetism. Electrical engineering is considered to deal with the problems associated with systems such as electric power transmission and electrical machines, whereas electronic engineering deals with the study of electronic systems including computers, communication systems, integrated circuits, and radar.

### Researching Job Titles and Careers

**O*NET** [http://online.onetcenter.org](http://online.onetcenter.org) (click on Find Occupations)

**Occupational Outlook Handbook** [http://www.bls.gov/oco](http://www.bls.gov/oco) (type in general term for career of interest)

**Georgia Career Information Center** [http://www.gacic.peachnet.edu](http://www.gacic.peachnet.edu) (accessible only on campus computers)

**Career Insider: Vault Guides** [http://career.uga.edu/resources/online_resources](http://career.uga.edu/resources/online_resources) (Under the “Resources” tab and select “Online Resources”)

**Candid Career** [http://career.uga.edu/resources/online_resources](http://career.uga.edu/resources/online_resources) (View professionals speaking about their careers under the “Resources” tab and select “Online Resources”)

### Possible Job Titles

<table>
<thead>
<tr>
<th>Application Engineer</th>
<th>Fleet Engineer</th>
<th>Project Engineer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Assistant Project Manager</td>
<td>Food Engineer</td>
<td>Project Manager</td>
</tr>
<tr>
<td>Associate Planner</td>
<td>Illuminating Engineer</td>
<td>QC Lab Technician</td>
</tr>
<tr>
<td>Biomedical Engineer</td>
<td>Manufacturing Engineer</td>
<td>Quality Engineer</td>
</tr>
<tr>
<td>Civil Engineer</td>
<td>Mechanical Engineer</td>
<td>Research Engineer</td>
</tr>
<tr>
<td>Conservation Engineer</td>
<td>Molding Analysis Engineer</td>
<td>Sales Engineer</td>
</tr>
<tr>
<td>Controls Engineer</td>
<td>Node Specialist</td>
<td>Service Manager</td>
</tr>
<tr>
<td>Cooperative Manufacturing Engineer</td>
<td>Packaging Engineer</td>
<td>Software Engineer</td>
</tr>
<tr>
<td>Design Engineer</td>
<td>Pharmaceutical Engineer</td>
<td>Systems Engineer</td>
</tr>
<tr>
<td>Distribution Engineer</td>
<td>Plant Process Engineer</td>
<td>Task Engineer</td>
</tr>
<tr>
<td>Electrical Engineer</td>
<td>Principal Engineer</td>
<td>Test Engineer</td>
</tr>
<tr>
<td>Energy Engineer</td>
<td>Process Engineer</td>
<td>Trust Designer</td>
</tr>
<tr>
<td>Environmental Engineer</td>
<td>Product Application Engineer</td>
<td>Water and Wastewater Project Engineer</td>
</tr>
</tbody>
</table>

### Possible Employers

| Ashland, Inc. | Dynamco | Lummus |
| Baldor Electric Company | EcoMetrix Environmental Mgmt | Merck & Company |
| Bechtel | EMC Corporation | Michelin Tire Company |
| Bell South Communications | EnSafe | Milliken Industries |
| Brock Design Group | FAA | NRG Vision |
| Burns and McDonnell | Food Machinery Service | Pennington Seed |
| Carrier Transicold | Fowler Products | Proctor & Gamble |
| Carter & Slope, Inc. | Georgia Power Company | Reliance Electric |
| Case New Holland | Graco Children’s Products, Inc. | River Construction |
| Caterpillar, Inc. | John Deere | Robins Air Force Base |
| City of Gainesville | Jordan, Jones, & Goulding | Rockwell Automation |
| Cobb County Department of Transportation | Kelly Manufacturing | Savannah River Nuclear Solutions |
| ConAgra, Inc. | Logic Technologies | SEFCOR Inc. |
| Cryolife, Inc. | Lowe Engineers, Inc. | Setty Associates International, PLLC |
To learn what types of positions and companies UGA students are working with, see the UGA Career Center Post Graduation Survey at www.career.uga.edu/gradsurveyresults/ and search for alumni on Linked In at www.linkedin.com.

**Campus Resources**

- American Institute of Chemical Engineers-UGA Chapter
- American Society of Agricultural and Biological Engineers-UGA Chapter
- American Society of Civil Engineers-UGA Chapter
- Engineers Without Borders-UGA Chapter
- The Society of Environmental Engineers at UGA
- Institute of Electrical and Electronics Engineers (IEEE)-UGA Chapter
- Society of Hispanic Professional Engineers at UGA
- Society of Women Engineers
- The National Society of Black Engineers

To find additional clubs and organizations, go to the Center for Student Organizations at http://stuorgs.uga.edu/find/index.html

Connect with your Career Consultant http://career.uga.edu/contact#careerconsultants

**Employment Websites**

**GENERAL:**
- CareerSearch http://career.uga.edu/resources/online_resources (Research employers by location and/or industry)
- DAWGlink www.career.uga.edu/ (login with your UGA MyID and password)
- GoinGlobal (To access GoinGlobal, login to your DAWGlink account)
- Idealist www.idealist.org/ (nonprofit jobs)
- USAJobs www.usajobs.gov/ (federal jobs)

**MAJOR/CAREER SPECIFIC:**
- Engineering Jobs-http://www.engineeringjobs.net/
- Think Jobs-Engineering Jobs- http://www.thinkjobs.com
- Agricultural Engineering Positions-http://agcareers.com
- Civil Engineering Central-http://www.civilengineeringcentral.com/
- Environmental Job Board-http://www.ecojobs.com

**Professional Information Resources**

- American Academy of Environmental Engineers-http://www.aaees.org/
- American Institute of Chemical Engineers-http://www.aiche.org/
- American Society of Agricultural and Biological Engineers-http://www.asabe.org/
- American Society of Civil Engineers-http://www.asce.org
- American Society of Mechanical Engineers-http://www.asme.org/
- American Society of Naval Engineers-https://www.navalengineers.org
- American Society of Safety Engineers-http://www.asse.org/
- Association for Computing Machinery- http://www.acm.org/
- Biomedical Engineering Society-http://www.bmes.org
- Institute of Biological Engineering- http://www.ibe.org/
- Institute of Electrical and Electronics Engineers-http://www.ieee.org/portal/site
- Institute of Industrial Engineers- http://www.iienet2.org/
- Institute of Transportation Engineers- http://www.ite.org/
- National Academy of Forensic Engineers- http://www.nafe.org/
- National Society of Black Engineers- http://www.nsbe.org/
- Society of American Military Engineers- http://www.same.org/
- Society of Automotive Engineers- http://www.sae.org/
- Society of Hispanic Professional Engineers- http://www.shpe.org/
- Society of Manufacturing Engineers- http://www.sme.org/
- Society of Naval Architects and Marine Engineers- http://www.sname.org/Home/
Society of Petroleum Engineers - http://www.spe.org/unitedstates/
Society of Women Engineers - http://societyofwomenengineers.swe.org/

Tip: Join LinkedIn groups that are related to your career interest. Need help finding groups? Check out the Groups You May Like link under the Interests/Groups tab. Review the groups that professionals in your field of interest have joined and consider joining them as well.

**Additional Career Consultant Recommendations:**

**Preparing Early for the Job Market: Tips for Getting a Jumpstart on your Career**

There are many things that you can do throughout college to help prepare you for the professional world. Below are a few tips to get you started.

**Staying Professional throughout Your College Career:**

- Carefully choose your e-mail address. You will use your e-mail to communicate with many people throughout your college career—friends, professors, advisors, potential employers, and more. It is important to have an e-mail address appropriate for all situations.
- Have at least one suit. There may be times in your college career where professional business attire will be required, such as job interviews, career fairs, and class presentations.
- Gain practical experience inside the classroom. Courses that offer tips in résumé writing and interviewing skills will help you tremendously when beginning the job search or graduate admissions processes.
- Look for possible work experience and/or internship opportunities. This can be one of the best ways to gain work experience before you graduate and enter the field.
- Find a balance in extracurricular activities. Activities outside the classroom can offer students a variety of options for participation; from volunteer organizations and Greek life to athletics, clubs, and professional organizations, students can meet new people and become involved on campus.
- Meet with your advisor regularly. Even if you have a specific reason for meeting, it is important to develop a relationship with your advisor. He or she can help you decide which courses and career paths are right for you.

**Tips for Beginning the Job Search and Interviewing Process:**

- Always have your résumé up to date. Even if you’re not actively searching for a job yet, you never know when an unexpected opportunity may arise.
- Start to build a portfolio of your work. Whether you have examples of classroom projects, samples of work from an internship or co-op, or an assortment of both, many prospective employers like to see the type experience that you’ve had and the quality of work you can do.
- Get letters of recommendation before you graduate. If graduate school is a possibility for your future or you feel that a recommendation from a faculty member could increase your chances of getting a job, try to get a letter of recommendation before you graduate. Some schools will even keep them on file for you for future use.
- Use the career service centers that are available on campus. Career centers offer services such as career advising, practice interviews, résumé critiques, and much more.
- Attend job fairs. Many colleges and universities offer job fairs that bring representatives from businesses and organizations across the United States. Job fairs can be a great place to make new contacts and talk to others who work in your field.
- Make the most of alumni/faculty contacts. Sometimes the best way to get your foot in the door is through people you know. Some schools even provide graduates with an alumni network to help them get started in their careers.
- Take the time to really look at the jobs or graduate programs to which you are applying. Avoid blindly applying to jobs and programs without knowledge of the company or school—you don’t want to be caught off guard if the employer or school representative calls you to discuss a position or program. Being able to ask questions and engage in a discussion will increase your marketability.

*Taken from [http://www.collegeview.com/articles/article/preparing-early-for-the-job-market](http://www.collegeview.com/articles/article/preparing-early-for-the-job-market)*