**MULTIDISCIPLINARY ACTIVITIES AND PROGRAMS**

The College of Engineering encourages cross-unit collaboration within the College and supports the interdisciplinary culture of Georgia Tech and the merging of disciplines that is the trait of modern technology development. Engineering faculty provide leadership for such activities through their involvement in more than thirty research centers and institutes on campus.

The College also provides opportunities for engineering students to participate in interdisciplinary activities by working with faculty in the centers as research assistants, by taking part in interdisciplinary design projects and competitions, and by completing one or more of the College's multidisciplinary certificate programs.

Any student in good academic standing who is pursuing a degree in one of the participating schools of the College of Engineering or a participating school in any of the other colleges may select elective courses and the subjects of special problems to satisfy simultaneously both the requirements of his or her major degree program and those of a specialized multidisciplinary program. Upon graduation, the student receives both the degree in the major field of study and a certificate attesting to successful completion of the particular related multidisciplinary program.

The following table shows available program offerings and the degree levels of the programs:

<table>
<thead>
<tr>
<th>Program</th>
<th>Degree Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biomaterials</td>
<td>BS</td>
</tr>
<tr>
<td>Composites Engineering</td>
<td>BS, MS, PhD</td>
</tr>
<tr>
<td>Geohydrology</td>
<td>MS, Phd</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>MS, Phd</td>
</tr>
<tr>
<td>Mechanical Properties of Materials</td>
<td>MS, PhD</td>
</tr>
<tr>
<td>Nanomaterials</td>
<td>BS</td>
</tr>
<tr>
<td>Pulp and Paper Engineering</td>
<td>BS</td>
</tr>
<tr>
<td>Technology &amp; Management</td>
<td>BS</td>
</tr>
</tbody>
</table>

**General Requirements of Undergraduate Multidisciplinary Programs**

The specific design of the multidisciplinary program of any participating undergraduate student, while individualized, must meet certain general requirements as well as requirements that are specific to that multidisciplinary area. The general (minimum) undergraduate multidisciplinary requirements are as follows:

1. The program must relate the student’s major area to the given multidisciplinary area.
2. Courses must be taken under more than one academic unit.
3. At least twelve credit hours (not required by name and number in the student’s major) must be taken in a coherent program.
4. At least nine credit hours must be at the 3000 level or higher.
5. At least three credit hours must be outside the student’s major. (Cross-listed courses may be counted outside the student’s major)
6. Courses must be taken on a letter-grade basis, and a C or better must be earned in each course counting toward a multidisciplinary certificate.

**Certificate Procedures**

Petitions for multidisciplinary program certificates are processed as follows:

1. During the semester in which the student expects to graduate, the student completes a Petition for Multidisciplinary Certificate form and obtains the signature of the chair of the certificate program.
2. When complete, the petition is forwarded to the Office of the Dean of Engineering.
3. At the end of the semester in which all graduation requirements have been met, the certificate will be signed by the dean of the College of Engineering and mailed to the student.

**General Requirements of Graduate Multidisciplinary Programs**

The specific design of the multidisciplinary program of any participating graduate student, while individualized, must meet certain general requirements as well as requirements that are specific to that multidisciplinary area. The general (minimum) graduate multidisciplinary requirements are the same as those listed previously for the undergraduate programs, with the following exceptions:

1. At least three of the coherent multidisciplinary program courses as well as nine credit hours must be at the 6000 level or higher.
2. Students at the doctoral level must, on an individual basis, meet additional requirements specified by the student’s doctoral committee, consistent with a program beyond the master’s level that has as its objective the development of a doctoral-level multidisciplinary program.

Interested students may obtain detailed information on the various undergraduate-level and graduate-level multidisciplinary programs from the main office of their academic advisors and from the links below.

**Certificate Procedures**

Petitions for multidisciplinary program certificates are processed as follows:

1. During the semester in which the student expects to graduate, the student completes a Petition for Multidisciplinary Certificate form and obtains the signature of the chair of the certificate program.
2. When complete, the petition is forwarded to the Office of the Dean of Engineering.
3. At the end of the semester in which all graduation requirements have been met, the certificate will be signed by the dean of the College of Engineering and mailed to the student.

Biomaterials Certificate (http://www.mse.gatech.edu/undergraduate-program/bio-cert)

Composites Engineering Certificate (http://www.mse.gatech.edu/undergraduate-program/comp-cert)

Geohydrology Certificate Program (http://mesl.ce.gatech.edu/EDUCATION/GEO)

Mechanical Properties of Materials Certificate (http://mprl.me.gatech.edu/education/certificate)

Nanomaterials Certificate (http://www.mse.gatech.edu/undergraduate-program/nano-cert)

Pulp and Paper Engineering Certificate (http://www.chbe.gatech.edu/node/7625)

Technology & Management Program (http://mgt.gatech.edu/programs/under-tm)