Georgia Tech – Then and Now

Michael Bennett, Felix Chung, Ravi Lachhman, Alex Yang, George Yim
Need For The Institute

- The South was behind economically to the North.
- A way to educate southerners in the manufacturing ways of the North.
- Based of the WPI and MIT models.
- Created during Reconstruction.
- Do you think we succeeded?
Georgia Tech – Then and Now

Then

Now
Differences in Georgia Tech

- Possession of playing cards would lead to a student's expulsion.
- A student would be allowed to leave his firearm with his professor before class.
- Dormitory bathrooms were only open until 8 pm on weekdays.
- Students were required to pay for their laundry to be done.
- Any of these do you find troubling?
Differences in Georgia Tech

Georgia School of Technology.

Miscellaneous.

(1) Students found with playing cards in their possession will be required to leave the Dormitory.
(2) Any student found with intoxicating liquor in its possession will be expelled from the Dormitory. In case such liquor is taken into the room of the dormitory, the orderly of the room will be held responsible.
(3) Students found with firearms in their possession will be expelled from the Dormitory.
(4) Firearms should be deposited with the Professor in charge.
(5) Students will not be allowed to use the bathroom after call to quarters, except on Fridays, Saturdays, and Sundays, when the bathroom will remain open until 11 p.m.
(6) Rooms must be kept in order by students, roommates taking alternate weeks in performance of this duty. The student whose week it is to keep the room in order shall be known as Doctorly and shall have his name posted on the mantle as such.
(7) All students will be excused from their duties on account of sickness unless his name is reported on the sick list by the division inspector to the Professor in charge, who will summon a physician. A fee of one dollar is charged for each visit of the physician. In case a student is taken sick during the day he shall report immediately to the President or in his absence to Professor in charge.
(8) Students must patronize the laundry.
(9) Any disorder in the mess-hall will be punished by expulsion from the Dormitory.

Division Inspectors.

The President appoints annually a number of students to assist in the inspection of the Dormitories and in the enforcement of regulations. The young men who received the appointments in 1898-9 are as follows (see page 135).—
Students in 1904 and Present

1904
- 42 graduating students
- Names were listed in the 1904 Faculty Minutes

Present
- About 18,000 undergraduate and graduate students
- Thousands of students graduate in each of the three semesters
1904 and Present Degrees

1904
- 5 degrees
  - Mechanical Engineering
  - Textile Engineering
  - Electrical Engineering
  - Engineering Chemistry
  - Civil Engineering

PRESENT
- 6 colleges (Architecture, Computing, Engineering, Management, Liberal Arts, and Sciences) with...
  - 9 certificates
  - 54 undergraduate degrees
  - 71 master’s degrees
  - 30 doctoral degrees
Differences in ME Course of Study

- Mechanical engineering program initially had a shop-work component. The products of shop exercises were sold to generate income for the school (Drury 10).
- Introductory math classes were algebra, geometry, and trigonometry.
- English was taken every term.
- Chemistry was taken in eight out of twelve terms (Announcements 70-73).
Differences in ME Course of Study (cont.)

- The curricula no longer requires shop work. However, about forty percent of all mechanical engineering majors are involved with the Cooperative Program (“A Brief History” par. 4).
- Introductory math classes today are Calculus I, Calculus II, and Calculus III (“Degree Requirements”).
- Only two English courses are required today. Students have the option of selecting English literature to fulfill the humanities requirement.
- The core curriculum requires one chemistry course but provides the freedom to schedule higher-level chemistry classes.
Course of Study in 1901

COURSE OF STUDY.
(Numbers following subjects indicate hours per week.)

MECHANICAL ENGINEERING.

Apprentice Year.

FIRST TERM.

Mathematics (5).—Elementary Algebra completed; Plane Geometry.
English (4).—U.S. History; Spelling; Readings; Essays.
Chemistry (3).—Inorganic Chemistry (2); Qualitative Laboratory (1).
Drawing (4).—Free-hand; Geometric; Linear; Perspective Sketching.
Shop-Work (12).

SECOND TERM.

Mathematics (5).—Plane and Solid Geometry completed.
English (4).—Rhetoric; Spelling; Readings; Essays.
Chemistry (3).—Inorganic Chemistry (2); Qualitative Laboratory (1).
Drawing (8).—Instrumental Linear; Descriptive Geometry Drawing.
Shop-Work (12).

THIRD TERM.

Mathematics (5).—Trigonometry completed.
Georgia School of Technology.

Junior Year

FIRST TERM.

Mathematics (3).—Higher Algebra completed; Trigonometry practice.
English (4).—Civics; Readings; Essays.
Chemistry (7).—Inorganic Chemistry (3); Qualitative Laboratory (4).
Drawing (4).—Descriptive Geometric Drawing.
Physics (3).—Kinematics and Mechanics.
Shop-Work (8).

SECOND TERM.

Mathematics (3).—Analytic Geometry.
English (3).—English Literature; Mythology; Readings; Essays.
Chemistry (8).—Laboratory Work.
Drawing (4).—Machine Drawing to Scale.
Physics (3).—Sound and Light.
Shop-Work (8).

THIRD TERM.

Mathematics (3).—Analytic Geometry completed.
English (4).—History of England; Readings; Essays.
Chemistry (6).—Qualitative Laboratory.
Drawing (4).—Machine Drawing to Scale.
Physics (3).—Light and Heat.
Surveying (4).—Use of Level, Compass and Transit.
Shop-Work (8).

Middle Year.

FIRST TERM.

Mathematics (3).—Calculus.
English (3).—Political Economy; Readings; Essays.
Drawing (4).—Spur, Bevel and Worm Gearing.
Engineering (3).—Kinematics and Mechanism.
Physics (4).—Electricity and Magnetism.
Shop-Work (8).
# Course of Study in 2007

## First Year - Fall

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<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Hrs</th>
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<tbody>
<tr>
<td>MATH 1101</td>
<td>CALCULUS I</td>
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<tr>
<td>ENGL 1101</td>
<td>ENGLISH COMPOSITION III</td>
<td>3</td>
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<tr>
<td>CHEM 1200</td>
<td>GENERAL CHEMISTRY</td>
<td>4</td>
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<td>HIST 2101 or 2112 or PSCI 1101 or PUBP 3500 or INT 1200</td>
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<td>WELLNESS</td>
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<td><strong>TOTAL SEMESTER HOURS</strong></td>
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## First Year - Spring

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<tr>
<td>MATH 1102</td>
<td>CALCULUS II</td>
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<td>ENGL 1102</td>
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<td>PHYS 2211</td>
<td>INTRODUCTORY PHYSICS I</td>
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<tr>
<td>CS 1371</td>
<td>COMPUTING FOR ENGINEERS</td>
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<td>ME 1770</td>
<td>ENGINEERING GRAPHICS &amp; VISUALIZATION</td>
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## Second Year - Fall

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<td>MATH 2401</td>
<td>CALCULUS III</td>
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<tr>
<td>PHYS 2212</td>
<td>INTRODUCTORY PHYSICS II</td>
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<td>MSE 2001</td>
<td>PRINCIPLES &amp; APPLICATIONS OF ENGINEERING MATERIALS</td>
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<td>ME 2018</td>
<td>COMPUTING TECHNIQUES</td>
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<td>COE 2001</td>
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## Second Year - Spring

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<td>MATH 2402</td>
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## Third Year - Fall

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<tr>
<td>ME 3302</td>
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<td>ME 3340</td>
<td>FLUID MECHANICS</td>
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<tr>
<td>COE 3300</td>
<td>MECHANICS OF DEFORMABLE BODIES</td>
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<tr>
<td>ENGR 3100 or ENGR 3105 or ENGR 3110</td>
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<tr>
<td>ECE 3710</td>
<td>INSTRUMENTATION &amp; ELECTRONICS LAB</td>
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<tr>
<td>SOCIAL SCIENCE ELECTIVES</td>
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<td><strong>TOTAL SEMESTER HOURS</strong></td>
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<td>ME 3945</td>
<td>HEAT TRANSFER</td>
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<tr>
<td>CCE 3310</td>
<td>ENVIRONMENTAL SCIENCE &amp; APPLICATIONS</td>
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<td>MSE 3305</td>
<td>ESSENTIALS OF ENGINEERING ECONOMY</td>
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<td>HUMANITIES ELECTIVES</td>
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## Fourth Year - Fall

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<td>EXPERIMENTAL METHODOLOGY &amp; TECHNICAL WRITING</td>
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<td>ME 3100</td>
<td>MECHANICAL DESIGN</td>
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<tr>
<td>ME 4100</td>
<td>ENERGY SYSTEMS ANALYSIS &amp; DESIGN</td>
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<td>ME 4200</td>
<td>MANUFACTURING PROCESSES &amp; ENGINEERING</td>
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<td>MECH 4000</td>
<td>MECHANICAL ENGINEERING ELECTIVES</td>
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<td><strong>TOTAL SEMESTER HOURS</strong></td>
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Questions?

- Take a ~5 year snapshot of your major, are there any differences in the requirements now than 5 years ago?
- What have been some new rules that have changed in the last 5 years?
- Does Georgia Tech have any current rules or regulations you find absurd?
- How do you see Georgia Tech changing in the Future?
Sources

- Announcements. Georgia Institute of Technology Archives. Atlanta, GA. 1900-1901.