

The educational program of Georgia Tech (chartered in 1885) was shaped by the convergence of two powerful forces in the larger world. The first was the drive for southern industrialization and economic development, championed in the 1880s by Henry W. Grady, editor of the Atlanta Constitution. Georgia Tech was founded by people like Grady who were intent on engineering a New South--enlisting the scientist and engineer in the cause of regional development. The second was the creation of a new system (actually two competing systems) for the education of engineers. Both systems included collegiate academic study, but one simulated the apprenticeship system by having students manufacture items for sale in a shop, while the other emphasized "industrial science" and laboratory work.

In 1883 a group of Georgians, led by State Representative N. E. Harris of Macon, toured colleges of both types. They selected Worcester Free Institute, the leading exemplar of the shop approach, as a model for the Georgia School of Technology. The Georgians were so impressed with the Worcester Shop that they hired its superintendent, Milton P. Higgins, to set their school in operation. Higgins was more influential in establishing the school than was Tech's first president, Rev. Isaac S. Hopkins, former president of Emory College.

When the North Avenue campus opened in 1888, students spent their mornings taking courses in mechanics, drawing, physics, chemistry, mathematics, and English. Afternoons were spent in the shop under the gaze of experienced foremen. Tech was, in theory, training specialists in mechanical engineering. In practice, the entire curriculum was geared to give students a nodding acquaintance with all types of engineering. Instruction in physics, for example, included work in electromagnetics (electrical engineering). Field work in surveying gave students in mathematics courses a taste of civil engineering. Even the English course helped to instill in the students the founders' vision of southern progress. An early student composition entitled "The Importance of Mechanical Training for Southern Young Men" showed that they learned their lessons well.

Within a decade Georgia Tech scrapped the commercial shop, though retaining an "instructional" shop program. The shop had never turned a profit. Also by the turn of the century Tech expanded its formal curriculum to include electrical and civil engineering plus industrial chemistry and textiles. These changes reflected the continuing influence of the two forces which had defined its initial program. In the evolution of professional engineering, electrical and chemical engineering were assuming key positions. Furthermore, these new fields of study were perceived as crucial in the building of the New South. With a rhetorical flourish worthy of Henry Grady, President Lyman Hall declared in 1898, "when the first brick is laid in the textile department of the Georgia School of Technology, the South declares war against New England." But, again, the expertise and some of the capital for this new venture in engineering education came from the north. The more some things changed, the more they stayed the same.

*Summary provided by Prof. McMath.