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Olin College: An Ongoing Experiment in the Future of Engineering Education

Olin College of Engineering, outside Boston, Massachusetts in the United States, was founded with a mission to prepare “students to become exemplary engineering innovators who recognize needs, design solutions, and engage in creative enterprises for the good of the world.” While it’s widely understood that new technologies can have a huge impact on societies, 20th-century engineering curricula typically focused on engineering science content, not on how students learn nor on encouraging them to think about the societal context of technology. Our goal at Olin College is to graduate engineers with a background, skills, and ways of thinking that enable them to think about engineering more broadly. This is seen in our emphasis on design (including user-centered design), entrepreneurship, and the arts and the humanities, all of which have a significant role in our curriculum. In addition to the curricular content, the pedagogical approaches used at Olin, such as project-based learning, allow students to develop their teamwork, communication, and lifelong learning skills, as well as their comfort with solving open-ended problems that do not have single right answers. We expect that our students will create innovative technologies that may have significant social impact; the Olin academic experience is designed to enable them to incorporate and understand human and social factors as well as technical content.