Microelectronics Fabrication Technology (6.152J)

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This combination laboratory and lecture course is offered (and taught) jointly by the Department of Electrical Engineering and Computer Science and Materials Science and Engineering Department. The course includes weekly lectures on all aspects of microfabrication technology, and includes design problems to teach process design. Additionally, the course includes 10 four-hour laboratory sessions conducted in the MTL. During these sessions, each student fabricates a wafer of poly-silicon gate MOS devices and test structures. The devices and structures are tested at the end of the semester. A final report correlating the test results with theoretical expectations culminates the education experience. The course is offered every semester, and a laboratory-only version of the course is offered 3-4 times/year. Last year, approximatley 100 students were educated in microfabrication technology through this course.