MECHANICAL ENGINEERING
Manufacturing Lab

PRODUCT DESIGN AND DEVELOPMENT
project based learning
The SDSMT Department of Mechanical Engineering offers a cohesive project-based learning curriculum. But unlike many universities, we have a comprehensive training program that ensures student safety and the opportunity to learn regardless of previous experience. Students have the option of training in traditional "hands on" processes or "hands off" computer-based fabrication.

Students develop their own projects to maximize student interest, ownership and motivation. This includes project-based coursework, extracurricular teams within the Center of Excellence for Advanced Multidisciplinary Projects (CAMP) and Students for the Exploration and Development of Space (SEDS), as well as student-generated non-academic projects.

The goal is to help students develop key “design for manufacturing” skills, including process planning, resource planning, material selection, cost analysis, Computer-Aided Design (CAD), Geometric Dimension and Tolerance (GD&T) and project management through concurrent engineering and fabrication. We maximize student effort by allowing students the freedom to choose their project.