

EXPLORE ENGINEERING LAB OPTIONS

CHEMICAL AND MATERIALS ENGINEERING

Bioengineering Cell Growth and Fermentation Module Lab

Students will monitor cell density to determine the microbial growth curve.

Product Design and Injection Molding Lab

Go through the steps used to design a product. Make plastic parts by operating an injection molding unit.

CIVIL AND ENVIRONMENTAL ENGINEERING & ENGINEERING MECHANICS

Energy and Environmental Engineering Lab

Create alternative energy using water-based solutions by designing and testing a fuel cell.

Head Loss Experiments in Pipelines Lab

This experiment demonstrates the friction loss along pipe walls and how the friction or head loss varies with the flow through the pipe.

Strength of Materials Lab

Compression testing of concrete, tensile and torsion testing of steel.

ELECTRICAL AND COMPUTER ENGINEERING

Computer Architecture Simulator Lab

Robots and Sensors Lab

Build mobile robots that interact with their surroundings.

MECHANICAL AND AEROSPACE ENGINEERING

Aerodynamics Lab

Design a low drag vehicle with wind tunnel testing.

Biomechanical Design Lab

Design and test prosthetic hands.

Machine Design Lab

Design and build your own functioning mechanism.

ENGINEERING TECHNOLOGY

Lean Airplanes Lab

Analyze a simulated aircraft assembly line and design a new improved assembly process while learning lean management and productivity improvement concepts.

Practical Electronic Circuit Design Lab

Design, build and test a practical electronic circuit.

Product Design and Testing Lab

Integrate product design, construction and testing with continuous improvement techniques.