

## *MME 347 - Design and Manufacturing and MME 348 - Manufacturing Processes*

Undergraduate students are introduced to manufacturing laboratories during the 3rd year of their studies in the MME 347 - Design and Manufacturing and MME 348 - Manufacturing Processes courses.

In the MME 347 manufacturing laboratories, undergraduate students are trained to use conventional lathe and milling machines and are also asked to design and manufacture an object with the conventional lathe.

In the MME 348 manufacturing laboratories, undergraduate students are trained in computer-controlled machine tools. The laboratories are equipped with C.N.C. lathe and C.N.C. milling machines. The students are generating drawings in SolidWorks and programming in SolidCam to create the G code that will be sent to the C.N.C. machine tool to produce the object they have designed. In addition, they are introduced to 3-D printing, electro-discharge machining, ultrasonic welding for plastics and metals, and thermoforming.

