

Student Learning Course EIN 3390L

The EMC has been designed to support student learning by teaching manufacturing processes with a hands-on approach (EIN3390L). The student completes projects while learning the close relationship between the design process and the manufacturing process. The basics of fit, form and function are discussed and demonstrated with emphasis of how design intent plays a major role in the final outcome and cost of a manufactured part. The student gains experience by utilizing the lab equipment to create their projects. They are introduced to some of the many methods used in manufacturing today. The student tracks machine and operation process times and converts it to a final part cost. After the projects are completed they are discussed with an emphasis on different approaches to the manufacturing process used in an effort to further reduce cost and to maintain or increase quality. Proper machine use and safety is taught throughout the course.



**WHAT CAN
WE DO
FOR YOU?**

FIU
FLORIDA
INTERNATIONAL
UNIVERSITY

**Engineering Manufacturing
Center**

FIU College of Engineering and Computing
10555 West Flagler Street
OU 118
Miami, Florida 33174

Phone: 305-348-6557
E-mail: zicarell@fiu.edu

**Engineering
Manufacturing Center**

**EMC
Product/Service
Information**



**Dream It - Design It
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Tel 305-348-6557
www.eng.fiu.edu/emc

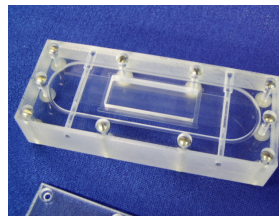
Professional Services for around 1/3 the Cost

Precision Machining, Stereo lithography and 3D Color printing available .



Student Project Assistance

The Center assists in student research and senior design projects by providing the equipment, assistance and expert guidance that the students may require to complete their projects. A machine shop (Rm. OU-117) equipped with common machining equipment is available to authorized students to use 7 days a week from the hours of 9AM to Midnight. In addition, more sophisticated CNC machining and rapid prototyping can be obtained from the EMC Senior Lab Coordinator in the main machine shop (Rm. OU-118). This service is by appointment only and may be fee based depending on the requirement.



Biomedical Senior Design

EMC Services

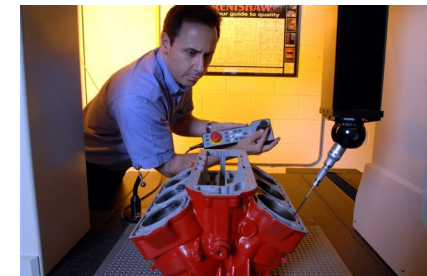
- **Rapid Prototyping**
- **Metrology-Reverse Engineering**
- **CNC Milling and Turning**
- **Design Services**



Mini Baja Team at Auburn University
MME Senior design

Industry Support

The Center is also available for outside industry sub contract work and Entrepreneurial guidance and service. The Center contains a prototyping front end combined with a CNC machining facility capable of most CNC Milling and Turning needs. In addition the Center also has inspection, measuring and Reverse Engineering capabilities by use of our Coordinate Measuring Machine (CMM), Stereo lithography (SLA). Fused Deposition Modeling (FDM) and 3D color printing (Z-corp Z510 printer).



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