## IE - Imagine, Model, and Make (Fall 2016)

**Instructor:** Professor Ramses V. Martinez (rmartinez@purdue.edu)

Time: Tuesday, Thursday. From 1:30pm to 2:45pm

<u>Place:</u> Forney Hall of Chemical Engineering (FRNY-B124)

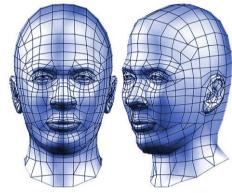
Course Credits: 3.0 Course Number: IE-490 (CRN 12004)

Open to: ANY MAJOR! Undergraduate, Graduate, or Professional.

Prerequisites: This course DOES NOT REQUIRE to have any previous

experience on 3D modeling software, design, or manufacturing techniques

<u>Course Description</u>: Everyone should be able to design and optimize new prototypes in 3D, applying textures and materials to visualize the final products and manufacture them in the most effective way.



In this course you will learn how to <u>model and animate</u> objects using Autodesk 3D Max (the software used in Avatar, X-Men, and Transformers). After your design is created we will work together to optimize it and to manufacture it using rapid prototyping techniques like laser cutting or 3D printing.

## Don't Miss This Course If You Want to Learn:

- How to model anything (including your face!) in 3D.
- How to render to photo-realistic images of your projects.

How to make animation movies of the objects and characters you create.

 The capabilities of modern manufacturing and rapid prototyping techniques.

 How to do hand sketching, optimize products, and meet tolerance requirements.

The teaching style is based on active learning (tutorials that we will do together during the classes) and a balance of lectures and hands-on activities.

Required Textbook: This course will only require to follow the lecture notes provided by the

