

# ADM 164 : Additive Manufacturing Processes - Metals

This course focuses on the basic principles and methodology of different types of metal powders and processes created with the Additive Manufacturing (AM) process. Students receive instruction on safety operations, set-up and routine maintenance and production of the AM Systems. Students learn metal powder based AM with the use of the Direct Metal Laser Sintering (DMLS) system. Students also learn various design software programs used for a metal powder system. Upon completion, students will be able to describe the different types of metal powders including, but not limited to aluminum, stainless steel, cobalt, titanium, and nickel and explain what the benefits are of basic AM. They should be able to demonstrate how to take a "part" from start to finish on the AM system and be able to select the best process for the type of product being produced. (Offered Spring Semester)

**Credits** 3

**Theory Credit**

1

**Experimental Laboratory Credit**

4

**Prerequisites**

C or better in ADM 108 and ADM 112

Additive Manufacturing degree seeking students must earn a C or better in ADM 164 to meet the graduation requirement.