

ADM 162 : ADDITIVE MANUFACTURING PROCESS- POLYMERS

Class Program

Advanced Manufacturing Technology (ADM)

Credits

3

Lecture Hours

1

Lab Hours

4

This course focuses on basic principles and methodology of different types of polymers and processes created with the Additive Manufacturing (AM) process. Comparison of selecting the best type of polymer for production will be discussed. Students receive proper instruction on safety operations, setup and routine maintenance and production on the AM systems. Students learn the various types of polymer AM systems; i.e. Fused Deposition Manufacturing (FDM), PolyJet, and SLA. Students also learn the software used for each AM system. Upon completion, students will be able to describe the different types of polymers available for the AM process including but not limited to ABS, PC, PC-ABS, ULT, PPSF, and Nylon 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.

Prerequisites

DDT 144 (or co-requisite)