

Master Syllabus

MET 1431 - Additive Manufacturing Post Process

Division: Science, Mathematics and Engineering

Department: Mechanical Engineering Technology

Credit Hour Total: 2.0

Lecture Hrs: 1.0 **Lab Hrs:** 2.0

Prerequisite(s): OR MET 1301OR MET 1351 MET 1231OR MET 1331OR MET 1401

Date Revised: June 2016

Course Description:

A course designed to examine the post process aspects of bonding, securing, finishes and assembly operation of components. One classroom, two lab hours per week.

General Education Outcomes:

- Oral Communication Competency
- Critical Thinking/Problem Solving Competency
- Computer Literacy Competency
- Information Literacy Competency
- Written Communication Competency

Course Outcomes:

Bonding Techniques of Additive Materials

Determine and apply the best bonding techniques for additive materials.

Assessment Method: Portfolios

Performance Criteria:

70% or better score on the evaluation of the completed assembly model submission.

Tools and Equipment

Use appropriate tools and equipment to accomplish a task.

Assessment Method: Portfolios

Performance Criteria:

70% or better score on the evaluation of the complete assembly model submission.

Communicate Ideas

Effectively communicate ideas to customers, managers and other key individuals through both written and oral formats.

Assessment Method: Behavioral observations

Performance Criteria:

70% or better score on the explanation of the process and solution of the final assembly model project.

Outline:

Additive manufacturing materials and bonding techniques, mechanical & chemical
Additive Manufacturing assembly develop considerations
Additive manufacturing material finishing techniques
Additive manufacturing machine shop techniques, tap, drill, clearances, tolerances
Additive manufacturing quality control
Final presentation of assembly modeling solutions