Additive Manufacturing

Program Offered

- Minor in Additive Manufacturing

Program Description

The Minor in Additive Manufacturing provides undergraduate students with the practical, interdisciplinary skills to apply cutting-edge manufacturing techniques to a wide range of industries, including aerospace, biomedical, defense, and energy, among others.

This program highlights the process, design, materials, data aspects and operational efficiency aspects of additive manufacturing with an emphasis on additive manufacturing of structural materials and smart manufacturing operations.

Minor and ASI in Additive Manufacturing

The interdisciplinary Additive Manufacturing program will prepare undergraduates to meet the challenges of careers in additive manufacturing. Undergraduate students have the following degree options:

- Area of Special Interest (12 credits)
  - Requirements: AMFG401 and 9 credits of electives (see Table 1)
- Minor (18 credits)
  - Requirements: AMFG401 and 15 credits of electives (see Table 1)

Table 1: Undergraduate elective courses, listed by specialty area (AMFG531, AMFG 511 and FEGN 526 require approval by appropriate program directors)

Additive Manufacturing of Structural Materials		
MEGN381	MANUFACTURING PROCESSES	3.0
MEGN412	ADVANCED MECHANICS OF MATERIALS	3.0
AMFG421	DESIGN FOR ADDITIVE MANUFACTURING	3.0
AMFG531	MATERIALS FOR ADDITIVE MANUFACTURING	3.0
AMFG498	SPECIAL TOPICS IN ADVANCED MANUFACTURING	1-6
AMFG511	DATA DRIVEN ADVANCED MANUFACTURING	3.0
FEGN525	ADVANCED FEA THEORY & PRACTICE	3.0
FEGN526	STATIC AND DYNAMIC APPLICATIONS IN FEA	3.0