

Additive Manufacturing, Certificate

School of Technology

Program Description

The Additive Manufacturing Certificate prepares students with the basic working knowledge of a production level 3D printer capable of producing various types of precision polymer and metal parts in the field of additive manufacturing. The fundamental duties of an operator are explored including, traditional manufacturing processes, 3D CADD documentation, and electronic components related to additive manufacturing. The primary focus of this certificate is to prepare for continuation of the AMT program or entry-level career opportunities in additive manufacturing.

Career Opportunities

Students who complete a certificate in Additive Manufacturing can expect entry-level operator or clerk positions in additive manufacturing. Students who already possess an AAS degree in another area will use this certificate to enhance their current skills. Expected job titles within additive manufacturing: AM Production Designer, AM Production Assistant, and AM Technician.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Identify the various 3D printing processes employed in additive manufacturing.
- Explain the proper methods of handling and storing printing materials used in the field of additive manufacturing.
- Perform basic maintenance and troubleshooting of various types of industrial 3D printers.
- Compare traditional and additive manufacturing for effective operation selection.

Sugg. Term	Seq #	Course ID	Course Title	Cr.	Prereq/Coreq(Co)	Options Available
Fall	1	PDV 101	First Year Seminar	1		
	2	MTH 104	Introduction to Applied Mathematics	4	MTH 050 or Placement	
	3	EGR 101	Introduction to Engineering I	3	Co: MTH 104 or MTH 157	
	4	DFT 105	Technical Drafting I	4		
	5	DFT 112	Introduction to Design, Materials, and Processing	3		
	6	AMT 101	Introduction to Additive Manufacturing	3		

Minimum Program Credits

18

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