

Digital Printing Technology (3D Printing)

3D Printing Technician-Level I certificate

ADVISOR

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PROGRAM DETAILS

As the call from industry for training in 3D printing increases, Somerset Community College has stepped to the forefront in offering a certificate in the technology. SCC was the first institution of higher education in Kentucky to offer the statewide certificate in additive manufacturing, also known as 3D printing.

Experts in nearly every manufacturing industry, as well as various biomedical and service industries, are predicting that training in additive manufacturing/3D printing is what their employees will need for the future. In the next decade, the market potential in this field of technology is estimated to be between \$230 to \$550 billion dollars, mainly associated with transportation, biomedical, and tooling industries.

The potential for growth in the additive manufacturing/3D

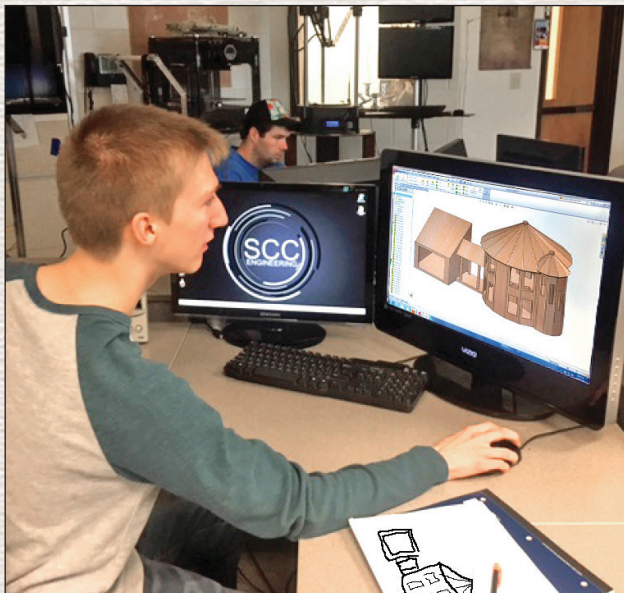
printing field is particularly great in Kentucky because aerospace (aircraft parts) is the state's number one export with automotive parts following at number two.

Printed parts and pieces are becoming more of the norm and students with the knowledge of how additive manufacturing/3D technology works should have a distinct advantage in the workplace of the future.

The certificate at SCC will consist of five classes, including design classes, individual hands-on projects and a business class with a focus on entrepreneurship.

Additive printing/3D technology is constantly changing and business and industry leaders are finding ways to incorporate it everywhere — in business, art, health, manufacturing, education and more.

By offering the 3D Printing Technician certificate, SCC places itself at the forefront of this growing technology. Students successfully completing the coursework will be poised to take the lead in this technology across the state.



THE TOP 10 FIELDS WHERE 3D CAN BE APPLIED ARE:

- Engineering
- Design
- Architecture
- Research & Development
- Prosthetics
- Bio Technologies
- Art
- Materials Development
- Manufacturing
- Culinary Arts

If you are considering going into one of these fields of study, then 3D printing may be right for you.

DIGITAL PRINTING TECHNOLOGY (3D PRINTING) CREDENTIAL:

CERTIFICATE:

- 3D Printing Technician-Level I*
(16-18 credit hours)

*A Federal Gainful Employment program

Learn more about it on SCC's website:
somerset.kctcs.edu/Academics/Programs
of Study/Digital Printing Technology

COORDINATOR'S NOTES:

There are several fields where additive manufacturing/3D printing is gaining strength in terms of end-use part production. These include products like aerospace parts and custom tooling devices, where complexity, low product count, and lighter product weight are of significant interest. For example, multiple aircraft manufacturers already have aircraft in the skies with numerous 3D printed parts.

An article by Michael Molitch-Hou on 3dprintingindustry.com confirmed, stating "While GE continues to work towards metal printed parts into aircraft, Stratasys is hard at work on the plastics side. (On May 6, 2015) the company (Stratasys) announced that aerospace giant Airbus has 3D printed over 1,000 parts for the passenger A350 XWB aircraft..."



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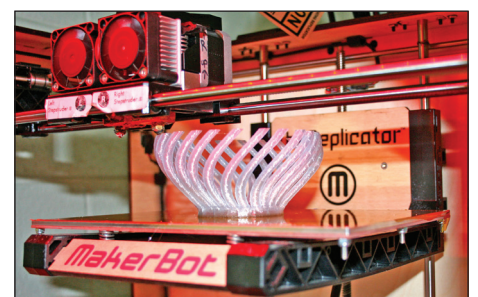
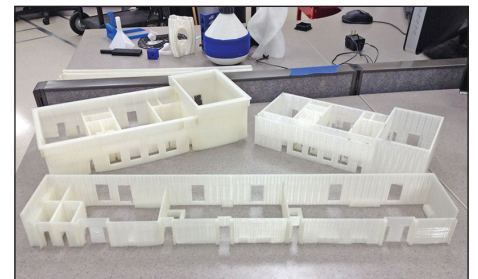
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3D PRINTING TECHNICIAN-LEVEL I CERTIFICATE

		Credit	Grade
DPT 100	Introduction to 3D Printing Technology <u>OR</u>	3	_____
DPT 102	3D Printing Technology Fundamentals <u>AND</u>	(2)	_____
CIT 105	Introduction to Computers	(3)	_____
BAS 160	Introduction to Business <u>OR</u>	3	_____
BAS 170	Entrepreneurship	(3)	_____
DPT 150	Introduction to Engineering Mechanics for 3D Printing	3	_____
DPT 280	Special Projects for 3D Printing, Level I	1	_____
Elective	Any technical, entry level course within a field where 3D printing application exists	3	_____
Elective	Any technical, entry level course within a field where 3D printing application exists	3	_____

TOTAL HOURS FOR PROGRAM – 16-18



STUDENT _____

ID NO. _____ DATE _____

SIGNATURE _____

ADVISOR _____