Program Overview

**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.

**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...”

**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.

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# 3D Printing Technician-Level I Certificate

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<thead>
<tr>
<th>Course</th>
<th>Credit</th>
<th>Grade</th>
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<tbody>
<tr>
<td>DPT 100 International to 3D Printing Technology OR DPT 102 3D Printing Technology Fundamentals AND CIT 105 Introduction to Computers</td>
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<tr>
<td>BAS 160 Introduction to Business OR BAS 170 Entrepreneurship</td>
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<tr>
<td>DPT 150 Introduction to Engineering Mechanics for 3D Printing</td>
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<tr>
<td>DPT 280 Special Projects for 3D Printing, Level I</td>
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<tr>
<td>Elective Any technical, entry level course within a field where 3D printing application exists</td>
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**TOTAL HOURS FOR PROGRAM – 16-18**