

## **Synopsis for Fundamental of Additive Manufacturing Course**

This is a preparatory course to make the participants ready to take the Certification Exam. The preparatory course is a discussion-oriented and interactive session in which participants receive comprehensive introductory knowledge of the 3D printing industry. The preparatory course helps to systematically align the knowledge gained by the participants from the recommended reading resources.

This preparatory course covers, terms and definitions in Additive Manufacturing (AM), software and hardware used, different AM technologies and type of materials, use of AM technologies with conventional manufacturing methods, discussion on AM applications, and fundamentals of AM safety. With this course you will begin to understand the benefits of AM and how well you can utilize this technology for your business needs.

### **Certification Exam**

The certification exam is three hour proctored, online, open book and open note exam consisting of 110 multiple choice questions. The exam will be conducted on the same day afternoon of the preparatory course

#### **Exam Requirements:**

- Bring your laptop or iPad for taking the online exam.
- If you have the recommended reading book in eBook format please make sure to bring a second device (iPad, kindle, phone) to use so there are no disruptions during your online exam.
- The exam is open book and notes.
- Three hours is allowed to complete the exam.
- Once you log into the exam and click "Begin" the timer will start.
- NO cell phone use during the exam

## FAQ

### *Why become certified?*

Whether you are just starting out, or a seasoned professional, certification can help you become a high-value commodity to your employer and be among the most sought-after individuals in your industry. Certifications not only help you attain knowledge, they prove it. Certifications are a recognized and respected industry credential.

- Validates your knowledge against industry standards.
- Provides a portable, industry-recognized credential that travels with you throughout your career.
- Enhances your career opportunities — certification can provide a competitive advantage in the job market.
- Improves your marketability by demonstrating your commitment to continuous learning.

### *Is the preparatory course just sufficient to pass the certification exam?*

The topics for the certification examination will be discussed during the preparatory course so as to get a broad understanding on AM fundamentals and align the knowledge that you already have towards the exam. For a beginner, taking the preparatory course alone may not guarantee a pass in the certification exam. So prior knowledge from the ‘recommended readings’ combined with the preparatory course will be helpful for you to get certified.

### *How do I list my certification credential?*

Once you successfully achieve your certification, the credential may be added after your name as follows:

Certified Additive Manufacturing – Fundamentals (CAM-F): John Smith, CAM-F

### *Where can I find resources to prepare for the exam?*

You can find a list of preparation resources for AM Fundamentals Certifications [here](#) (Annexure 1)

### *How will I find out my exam results?*

You will learn your results immediately after the exam. You will receive a letter and a detailed score report in the mail. Upon passing, you will receive your certificate.

### *When will I receive my certificate?*

You will receive your certificate within 30 days of completing your certification requirements. Your certificate will be mailed to the preferred mailing address you provide on your exam application.

*Is this certification internationally recognized?*

Yes, our certification programs are internationally recognized.

## Annexure 1

### Recommended Reading for the Additive Manufacturing Fundamentals Certification

#### Recommended Reading

Gibson, Ian, Rosen, David, and Strucker, Brent. *Additive Manufacturing Technologies: 3D Printing, Rapid Prototyping, and Direct Digital Manufacturing*, Second Edition. Springer, 2015. ISBN 978-1493921126

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NanoSteel Company, Inc. “Safety Data Sheet: Bronze-A.” SDS Rev. 1.1, September 30, 2015.

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Occupational Safety and Health Administration, U.S. Department of Labor. “[General Environmental Controls: The Control of Hazardous Energy \(Lockout/Tagout\)](#).” Occupational Safety and Health Standards – 29 CFR 1910.147.

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Thomas, Douglas S., and Gilbert, Stanley W. *Costs and Effectiveness of Additive Manufacturing: A Literature Review and Discussion*. NIST Special Publication 1176. National Institute of Standards and Technology, 2014.