# **15.99.99.H1.01** Use of **3-D** Printers

Approved: May 15, 2020 Next Scheduled Review: May 2025



## **Procedure Statement**

3-D printers have become a critical component to engineering instruction and rapid prototyping for research. This procedure outlines appropriate use of University owned 3-D printers for University purposes.

### **Reason for Procedure**

Through the technology afforded by rapid prototyping and 3D printing, members of the University community may produce devices and components to further learning and research. However, the technology presents the opportunity for misuse and misapplication. This document outlines the proper use of University 3-D printing resources.

#### **Procedures and Responsibilities**

The 3D printers owned by Texas A&M University - Texarkana are available for use primarily by the Engineering Department in support of Engineering Graphics courses and engineering projects completed in other courses. The 3D Printers also may be used to support academic research and undergraduate research with University Faculty.

Students may be granted access to the 3D Printers only under the supervision of the Course Instructor or Engineering Lab Coordinator. Faculty that are not familiar with rapid prototyping using 3D Printers and engineering graphic design must also get approval from the current Engineering Graphics Course Instructor or the Engineering Lab Coordinator prior to use.

The 3D Printers are designed for rapid prototyping, not production. Requests for multiple copies of the same file must be approved by the Course Instructor or Engineering Lab Coordinator.

Objects printed on the University's 3D Printers must be produced for lawful purposes. The 3D Printers may NOT be used to create parts that are:

- Prohibited by local, state or federal law.
- Unsafe, harmful, dangerous or poses an immediate threat to the well-being of others.
- Components for the assembly of firearms or other weapons.
- Obscene or inappropriate objects.

• In violation of another's intellectual property rights. For example, the 3D Printers will not be used to reproduce material that is subject to copyright, patent or trademark protection.

The Course Instructor or Engineering Lab Coordinator reserve the right to decline the use of the 3D Printers for any reason not listed herein.

Any use of the 3D Printers will be under the supervision of the Course Instructor or the Engineering Lab Coordinator. Anyone (Faculty, Staff or Students) utilizing the 3D Printers must be trained in the appropriate use of the printers to ensure that a part can be successfully printed which is neither too large, takes too much time or wastes materials due to mistakes in the part design. The University has more than one model and type of 3D Printer which can print only specific types of materials. Therefore, the 3D print file must be of the appropriate file type and size. The Course Instructor or Engineering Lab Coordinator will review the part design file prior to printing the part to insure the following:

- Correct size and scale of the part
- Correct printing material is used that corresponds to the specific 3D Printer and part
- The part is correctly located on the printer bed prior to printing
- The 3D Printer settings that are contained in the part file are correct

3D Printer maintenance or modifications shall only accomplish by the current Engineering Graphics Instructor or Engineering Lab Coordinator.

#### **Related Statutes, Policies, or Requirements**

<u>Texas A&M University System Policy 15.02, Export Controls Program Management</u> <u>International Traffic in Arms Regulations (ITAR) 22 C.F.R. §§ 120-130</u> <u>Export Controls Compliance Program Manual</u>

#### **Contact Office**

Office of Research Compliance 903-223-3003