

Name: \_\_\_\_\_

Date Started: \_\_\_\_\_

### **MakerSpaceUSNA Qualification Card - AY2023**

*Background.* Due to the growing complexity of MakerSpaceUSNA and the desire for students to be able to work independently, users of MakerSpaceUSNA must complete a qualification process to use MakerSpaceUSNA facilities. Qualification is divided into Beginner, Advanced, and Expert levels corresponding to the additive manufacturing methods used. No specific time is required between qualification levels, but users are intended to show proficiency in each level of qualification before proceeding to the next.

1. *Prior to starting qualification.* Watch the training videos: MakerSpaceUSNA Introduction (<https://youtu.be/goBviH7TkHw>) and MakerSpaceUSNA Saved Rounds and Alibis (<https://youtu.be/9nS4QgF4QTw>)

Verified complete: \_\_\_\_\_  
MakerSpaceUSNA Staff

2. *Beginner Qualification.* Includes proficiency in Material Extrusion methods (specifically Fused Deposition Modeling), understanding of MakerSpaceUSNA policies, and basic understanding of Information Technology (IT) associated with MakerSpaceUSNA.

- a. Watch the training video: Beginner Level Qualification (<https://youtu.be/qx9E5IgfESs>).

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- b. Watch the training video: MakerSpace USNA Rules and Hours (<https://youtu.be/DUL9eGHctxA>).

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- c. Watch the training video: Introduction to FDM (<https://youtu.be/4C5vRSvuArg>).

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- d. Watch the training video: Beginner MakerSpaceUSNA IT (<https://youtu.be/c5rWemtu-h4>).

Verified complete: \_\_\_\_\_  
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Beginner level qualification complete. This entitles the student to: access to MakerSpaceUSNA workstations, cypher combinations to MakerSpaceUSNA, and access to FDM printers.

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\_\_\_\_\_  
Date Completed

3. *Advanced Qualification.* Includes proficiency in Vat Photopolymerization methods (specifically Stereolithography), understanding of post processing methods, and advanced understanding of IT associated with MakerSpaceUSNA.

- a. Watch the training video: Advanced Level Qualification (<https://youtu.be/bACW5Nzfe-E>).

Verified complete: \_\_\_\_\_  
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- b. Watch the training video: Introduction to SLA (<https://youtu.be/0YhiXgGXaRs>).

Verified complete: \_\_\_\_\_  
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- c. Watch the training video: Advanced MakerSpaceUSNA IT (<https://youtu.be/ghnfwWTohNE>).

Verified complete: \_\_\_\_\_  
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Advanced level qualification complete. This entitles the student to: MakerSpaceUSNA passwords and access to SLA printers.

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MakerSpaceUSNA Staff

\_\_\_\_\_  
Date completed

4. *Expert Qualification*. Includes proficiency in Powder Bed Fusion methods (specifically Selective Laser Sintering), understanding of 3D scanning capability, and expert understanding of IT associated with MakerSpaceUSNA.

- a. Watch the training video: Expert Level Qualification ([https://youtu.be/3\\_fO8Q\\_nYNk](https://youtu.be/3_fO8Q_nYNk)).

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- b. Watch the training video: Introduction to SLS (<https://youtu.be/b70XetCmap4>).

Verified complete: \_\_\_\_\_  
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- c. Watch the training video: Introduction to 3D Scanning (<https://youtu.be/NhxaD6xvF-4>).

Verified complete: \_\_\_\_\_  
MakerSpaceUSNA Staff

- d. Watch the training video: Expert MakerSpaceUSNA IT (<https://youtu.be/6Xzd2LtET14>).

Verified complete: \_\_\_\_\_  
MakerSpaceUSNA Staff

Expert level qualification complete. This entitles the student to: full access to all MakerSpaceUSNA resources including laser cutting, 3D scanning, and all printers.

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MakerSpaceUSNA Staff

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Date Completed