

# MA IN DIGITAL DESIGN & FABRICATION

## Program Overview

<b>Program Coordinator</b>	Aaron Nelson, (845) 257-7887, <a href="mailto:nelsona@newpaltz.edu">nelsona@newpaltz.edu</a>
<b>Program ID</b>	240
<b>Credits</b>	36
<b>Program Length</b>	MA can be completed in 2-3 semesters if enrolled full-time, but students must complete degree within 7 years
<b>Modality</b>	In-person
<b>Full-time/Part-time</b>	Full-time
<b>Transfer Credits</b>	6
<b>Capstone</b>	Thesis or Fieldwork

## Program Description

The Digital Design & Fabrication (DDF) will prepare students to utilize modern digital fabrication methods in the design and fabrication process.

Modern methods of fabrication, such as 3D printing, have changed not only how objects are designed, but have also changed what can be designed and manufactured. As modern fabrication technologies continue to advance, the worlds of design and manufacturing will change and merge into something much more seamless. Through an approach that blurs traditional boundaries between art, engineering, design, fabrication and science, the DDF program will enable students to take full advantage of advanced manufacturing and fabrication techniques. Graduates will earn the Rhinoceros CAD certification (levels 1 & 2) and Stratasys Additive Manufacturing Certification.

## Admission Requirements

- One official transcript of all undergraduate and graduate work providing evidence of a baccalaureate degree in any design-related field (e.g., art, engineering, industrial design, architecture and graphic design) from an accredited institution with at least a 3.0 cumulative grade point average on a 4.0 scale
  - Undergraduate preparation should include a basic drawing course or its equivalent
- Admission Essay describing interest in the program
- Contact information for two references
- Satisfactory TOEFL or IELTS scores for students who have a non-US degree.
- Portfolio including samples of completed work. When uploading your portfolio, include a minimum of 15 images.
  - Please note that we require a minimum of 10 individual works or projects; additional detail photographs and installation documentation can be included. You may either upload videos or include external links to videos as part of your portfolio. Each work sample must be labeled with the title of work, medium, size, and date. Images can be labeled and ordered as they are uploaded. For good image quality and fast upload, we recommend jpeg images no larger than 1280 x 1280 pixels @ 72 ppi.

## Application Deadlines

<b>July 31</b>	Fall Admission
<b>January 1</b>	Spring Admission

Accepting on a rolling basis until the program is full.

The MA in Digital Design & Fabrication consist of 36 credits. Students will produce/design a body of work using an array of advanced manufacturing techniques.

Code	Title	Credits
<b>Design and Fabrication Coursework (24 Credits)</b>		
DDF510	Computer Aided design 1	3
DDF502	Introduction to Computation for Media	3
ARH526	Studies in the History of Design	3
DDF512	Computer Aided Design 2	3
DDF555	3D Computational Design	3
DDF705	Advanced 3D Printing	3
DDF560	Introduction to Designing with Microprocessors	3
DDF701	Advanced Computer Aided Design	3
<b>Electives (6 Credits)</b>		
Working with their advisor, students will select 6 credits of graduate coursework in art, engineering and computer science.		6
<b>Capstone Experience (6 Credits)</b>		
Working with their advisor, students will enroll in 6 credits of thesis or fieldwork as their culminating experience.		6
<b>Total Credits</b>		<b>36</b>

## Program Requirements

Complete the prescribed course work and other requirements within seven years after matriculation. Maintain a cumulative grade point average of 3.0 or better, with no more than two grades below B-.

## Graduate Checklist

- Apply for graduation via [my.newpaltz.edu](http://my.newpaltz.edu) under "Graduation" tab according to the schedule in the [academic calendar](#).
- Resolve any pending admission conditions (outlined in your acceptance letter) and/or missing documents if applicable.
- Review your progress report via [my.newpaltz.edu](http://my.newpaltz.edu) to ensure that you have completed all program requirements.
- Remember that only two grades below a B- may be applied to your [plan of study](#)
- Contact your advisor if you need to amend your plan or process [transfer credit](#).
- Ensure that you are in [good academic standing](#) with a GPA (Grade Point Average) of 3.0 or higher.
- Pass your capstone or culminating assessment.
- Complete your degree within the [specified time limit](#) outlined in the Program Overview.

## Program Learning Objectives

- Expand knowledge of diverse histories and contemporary practices in studio art, design, and art education
- Demonstrate—in written, visual, and oral forms—an understanding of a work of art or design, in terms of its social, political, cultural, aesthetic and historical context
- Develop and articulate self-reflective practices as artists, designers, teachers, and citizens
- Create collaboration and engagement with local and global art, design, and learning communities
- Build professional networks to support lifelong learning and sustainable practices