

Course Title: **Digital Fabrication III: Additive Manufacturing**

Course Code: **ARDN610**

Descriptor Start Date: **01/01/2021**

Descriptor End Date: **31/12/2023**

POINTS: **15.00**

LEVEL: **6**

PREREQUISITE/S: **ARDN505**

COREQUISITE/S: **None**

RESTRICTION/S: **None**

LEARNING HOURS

Hours may include lectures, tutorials, online forums, laboratories. Refer to your timetable and course information in Canvas for detailed information.

Total learning hours: 150

PRESCRIPTOR

Explores design for Additive Manufacturing (sometimes known as Rapid Prototyping). This includes advanced CAD modelling, and Additive Manufacturing processes. Students will be encouraged to explore and experiment with key concepts, including parametric CAD modelling and mass-customisation, leading to experimental art and design project/s.

LEARNING OUTCOMES

1. Understand and utilise key CAD modelling and Additive Manufacturing processes and workflows.
2. Understand and utilise key Additive Manufacturing equipment.
3. Experiment with Additive Manufacturing ideas and concepts and apply to one or more design projects.
4. Critically reflect on and evaluate own work process and outcomes.

CONTENT

- Introduction to Additive Manufacturing
- Conceptual design for Additive manufacturing
- Parametric CAD modelling processes
- Design for multiples and mass-customisation

Disclaimer: Course descriptors may be amended between teaching periods/semesters

LEARNING & TEACHING STRATEGIES

The pedagogical approach will emphasise student-centred learning through a blended work environment. There will be a variable mix of individual and group meetings, workshops, seminars, tutorials, presentations, guest critics and the use of the Learning Management System.

ASSESSMENT PLAN

| Assessment Event | Weighting % | Learning Outcomes |
|------------------|-------------|-------------------|
| Project 1 | 50.00 | 1-4 |
| Project 2 | 50.00 | 1-4 |

| | |
|------------------|-------------------------------|
| Grade Map | MAP1 |
| | A+ A A- Pass with Distinction |
| | B+ B B- Pass with Merit |
| | C+ C C- Pass |
| | D Fail |

Overall requirement/s to pass the course:

To gain a pass in this course, a student needs to submit work for all summative assessments and obtain at least a 50% passing grade overall.

LEARNING RESOURCES

There are no prescribed text/s. Required and recommended readings and resources will be indicated at the beginning of the academic year.

For further information, contact: Te Ara Auaha - Faculty of Design & Creative Technologies

Principal Programme: AK3352, Bachelor of Visual Arts Te Tohu Paetahi mō Toi Ataata

Related Programme/s: AK3619

Disclaimer: Course descriptors may be amended between teaching periods/semesters