

# MICRO-STRUCTURE DESIGN TECHNOLOGY, CERTIFICATE OF ACHIEVEMENT

**Banner Code:** 1\_CM\_MSDT

**Control Number:** 41940

**Not Financial Aid Eligible**

The Micro-Structure Design Technology Program is a blend of design, building, and technology that will empower people to make small, environmentally sustainable structures that will provide needed housing and promote personal experiences and professional growth. Courses include design, drawing/visualization, building, and PV (solar) panel skills so that students can quickly explore and implement innovative design solutions.

## Program Outcome

Students will be able to design, plan, build, and produce power for a small structure at an entry level of skill in the design/build profession.

Review Certificate Requirements (<https://catalog.cccd.edu/orange-coast/graduation-requirements/certificates/#achievementtext>).

Course	Title	Units
<b>Required Courses</b>		
ARCH A104	Introduction to FrameCAD Steel Framing	1
ARCH A105	Architectural Drawing and Design Visualization 1	2
ARCH A106	Accessory Dwelling Unit Design	1
ARCH A107	Tiny House Design	1
ARCH A201 or ARCH A201H	Design/Build 1 for Architecture Design/Build 1 for Architecture Honors	2
ARCH A108 or CNST A108	Solar Panels for Small Projects Solar Panels for Small Projects	1
<b>Total Units</b>		<b>8</b>

## Program Sequence

These sequences at Orange Coast College are curriculum maps for students to finish all requirements for the certificate. There may be advisories, prerequisites, or time requirements that students need to consider before following these maps. **Students are advised to meet with an Orange Coast College Counselor for alternate sequencing.**

Course	Title	Units
<b>Year 1</b>		
<b>Semester 1</b>		
ARCH A104	Introduction to FrameCAD Steel Framing	1
ARCH A105	Architectural Drawing and Design Visualization 1	2
ARCH A106	Accessory Dwelling Unit Design	1
<b>Units</b>		<b>4</b>
<b>Semester 2</b>		
ARCH A107	Tiny House Design	1

Course	Title	Units
ARCH A201 or ARCH A201H	Design/Build 1 for Architecture or Design/Build 1 for Architecture Honors	2
ARCH A108 or CNST A108	Solar Panels for Small Projects or Solar Panels for Small Projects	1
<b>Units</b>		<b>4</b>
<b>Total Units</b>		<b>8</b>