

DRAFTING DESIGN, COLLEGE CREDIT CERTIFICATE

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|---------------------------|------------------------|-----------|
| TARC 1120 | Architectural Drafting | 4 |
| Credit Hours | | 12 |
| Total Credit Hours | | 22 |

Program Code: DACC
Meta-Major: INMC
Location(s): Cocoa, Melbourne
Delivery Method(s): On-Campus
Previous Degree Required: HS Diploma
Eligible for Financial Aid: Yes
Additional Limited Access Application Process Required: No
Program Testing Requirements:
Classification of Instructional Programs (CIP) Code: 15.1302
Florida Department of Education CIP Code: 0615130200

This certificate is part of the [Drafting and Design Technology A.S.](#) degree program.

This certificate program prepares students for employment as a designer/draftsman. The program is designed to give the student a broad base of drafting instruction and its application into various design professions.

The curriculum uses the latest technological information methodology and standards relating to drafting design and construction. Previous drafting experience or permission from an instructor are needed to pursue courses for this certificate. Credits earned in this certificate also apply to the [Associate in Science \(A.S.\) degree in Drafting and Design Technology](#). [Visit the program page for more details and how to apply.](#)

Refer to [course descriptions](#) to determine prerequisites.

Certificate Requirements

| Code | Title | Credit Hours |
|---------------------------|----------------------------|--------------|
| Major Courses | | |
| CGS 2100 | Microcomputer Applications | 3 |
| ETDC 1150 | Blueprint Reading | 3 |
| ETDC 1540 | Civil Drafting | 4 |
| ETDC 2320 | AutoCAD Fundamentals | 4 |
| ETDC 2340 | Advanced AutoCAD | 4 |
| TARC 1120 | Architectural Drafting | 4 |
| Total Credit Hours | | 22 |

| Course | Title | Credit Hours |
|---------------------|----------------------------|--------------|
| Year 1 | | |
| Term 1 | | |
| CGS 2100 | Microcomputer Applications | 3 |
| ETDC 1150 | Blueprint Reading | 3 |
| ETDC 2320 | AutoCAD Fundamentals | 4 |
| Credit Hours | | 10 |
| Term 2 | | |
| ETDC 1540 | Civil Drafting | 4 |
| ETDC 2340 | Advanced AutoCAD | 4 |

Learning Outcomes: Drafting & Design Technology A.S.

- Demonstrate knowledge of maps, surveying, bearing angles, plan and profile views, and grading cut/fill
 - Core Ability Supported: Think Critically and Solve Problems*
- Apply basic CAD drafting skills for engineering drawings, including orthographic projection, dimension assignment, and precise geometry
 - Core Ability Supported: Think Critically and Solve Problems*
- Apply advanced CAD techniques for engineering drawings, including use of Attributes, XREFs, Layers, Blocks, and Curve creation
 - Core Ability Supported: Think Critically and Solve Problems*
- Prepare mechanical CAD drawings based on 3D models
 - Core Ability Supported: Think Critically and Solve Problems*
- Prepare parametric 3D model drawings to include advanced features, rendering, motion analysis, and assembly constraints
 - Core Ability Supported: Think Critically and Solve Problems*
- Prepare civil drafting drawings, including parcel and roadway layouts and profiles
 - Core Ability Supported: Think Critically and Solve Problems*
- Prepare architectural floor plans, elevations, sections, and schedules for a complete residence
 - Core Ability Supported: Think Critically and Solve Problems*
- Create a 3D architectural CAD model of a complete office building, with associated construction drawings
 - Core Ability Supported: Think Critically and Solve Problems*