CAD FOR THE BUILDING PROFESSIONAL CERTIFICATE

Total Credits: 27
Catalog Edition: 2024-2025

Program Description

(R): 203

This certificate curriculum prepares students for entry-level positions in architectural firms or construction-related businesses by providing an opportunity to learn computer-aided drafting (CAD) skills, while developing a preliminary understanding of building technology. This curriculum also serves professionals currently in the architectural field who are seeking career advancement through the development of intensive technical and creative CAD skills and experience. These courses can be applied to the architectural technology AAS area of concentration.

Program Outcomes

Upon completion of this program, a student will be able to:

- Prepare construction documents in a variety of formats including hand drafting, 2D CAD [computer-aided drafting], 3D presentation and rendering, and 3D object based modeling.
- Demonstrate a thorough understanding of construction details and building sections.
- Differentiate between BIM software and non-object CAD software.
- Describe construction details in BIM documents.
- Prepare BIM construction documents based on designs submitted by employers or clients.
- Revise BIM construction documents.
- Arrange construction information in a BIM format.

Program Advisors

Rockville

- Prof. Chantal Vilmar, 240-567-1718, Chantal.Vilmar@montgomerycollege.edu

For more information, please visit https://www.montgomerycollege.edu/academics/programs/architectural-technology/cad-for-building-professional-certificate.html

To view the Advising Worksheet, please visit https://www.montgomerycollege.edu/_documents/counseling-and-advising/advising-worksheets/current-catalog/203.pdf

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Program Requirements

A suggested course sequence for full-time students follows. All students should review this advising guide and consult an advisor.

Program Requirements

ARCH 103 - Building Technology and Documentation *3 semester hours*

ARCH 183 - CAD: Architectural Applications *4 semester hours*

ARCH 200 - CAD: 3D Presentation *4 semester hours*

ARCH 202 - CAD: REVIT I *4 semester hours*

CMGT 100 - Construction Methods and Materials *3 semester hours*

ENGL 101 - Introduction to College Writing *3 semester hours* *

Total Credit Hours: 27

* ENGL 101/ENGL 101A, if needed for ENGL 102/ENGL 103,or elective.

* *Course meets General Education requirements.

Transfer Opportunities

Montgomery College has partnerships with multiple four-year institutions and the tools to help you transfer. To learn more, please visit https://www.montgomerycollege.edu/transfer or http://artsys.usmd.edu .

Get Involved at MC!

Employers and Transfer Institutions are looking for experience outside the classroom.

MC Student Clubs and Organizations: https://www.montgomerycollege.edu/life-at-mc/student-life/

Related Careers

Some require a Bachelor's degree.
Architect, Architectural Technologist, CAD Technician, Interior Designer, Construction Manager, Sustainability Specialist, Civil Drafters, Urban and Regional Planners, Postsecondary Architecture Teacher, Construction and Building Inspectors.

Career Services

Montgomery College offers a range of services to students and alumni to support the career planning process. To learn more, please visit https://www.montgomerycollege.edu/career

Career Coach

A valuable online search tool that will give you the opportunity to explore hundreds of potential careers or job possibilities in Maryland and the Washington D.C. metropolitan area. Get started today on your road to a new future and give it a try. For more information, please visit https://montgomerycollege.emsicc.com

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