

# BUILDING INFORMATION MODELING

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## Certificate

- Building Information Modeling (BIM) - Certificate of Achievement

### **BIM 120 Construction, Means, Methods, and Materials 3 Units**

This course is an introduction to construction management as it relates to understanding the multi-faceted roles and responsibilities that are typically shared by project team members during the course of a construction project. The material is presented through lecture, discussion, mixed media and real-world examples. Innovations that are changing the industry as well as building for a sustainable future are also covered.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L  
Advisory Level: Read: 3 Write: 3 Math: 2  
Transfer Status: CSU Degree Applicable: AA/AS  
CSU GE: None IGETC: None District GE: None

### **BIM 121 Virtual Design and Construction Workflow 3 Units**

This course will introduce students to Virtual Design and Construction workflow processes and procedures, and expose them to the software tools required.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L  
Advisory Level: Read: 3 Write: 3 Math: 1  
Transfer Status: CSU Degree Applicable: AA/AS  
CSU GE: None IGETC: None District GE: None

### **BIM 122 Managing Construction Coordination Meetings 3 Units**

This course will cover the most commonly used software tools for managing construction coordination meetings. The software tools will be used in conjunction with "Best in Class" Clash Detection and Coordination meeting processes that enable rapid decision making abilities to keep projects on schedule, as well as maintain budgets and within the defined quality requirements of the projects.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L  
Advisory Level: Read: 3 Write: 3 Math: 1  
Transfer Status: CSU Degree Applicable: AA/AS  
CSU GE: None IGETC: None District GE: None

### **BIM 123 Fundamentals of Revit 2 Units**

This course will cover the fundamentals of Autodesk Revit Architecture in a lab format with hands-on learning. Students will learn how to set up a new building information model; create a basic floor plan; work with basic architectural elements (walls, doors, windows, floors, ceilings, roofs, curtain walls, stairs and railings); create sections, elevations and callout views; add annotations including dimensions, text, tags, schedules and legends; and share designs by working in teams, creating architectural visualization renderings and plotting finished drawings. Students are also introduced to the basics of creating simple families.

Lecture Hours: None Lab Hours: 6 Repeatable: No Grading: L  
Recommended: Basic AutoCAD or equivalent skills  
Advisory Level: Read: 2 Write: 2 Math: 2  
Transfer Status: None Degree Applicable: AS  
CSU GE: None IGETC: None District GE: None

### **BIM 124 Advanced Revit 2 Units**

This course is focused specifically on providing an intermediate to advanced level of training on Revit Architecture. The skills presented during this class are for experienced Revit users and are designed to help experienced users take the next step in advancing their current knowledge of Revit Architecture. Students will create architectural visualization renderings, use filters, section boxes, design options and phasing to present various display ideas and solutions. They will also create advanced families, develop advanced schedules using project and shared parameters and conceptual massing.

Lecture Hours: None Lab Hours: 6 Repeatable: No Grading: L  
Prerequisite: BIM 123 with C or better  
Advisory Level: Read: 3 Write: 3 Math: 3  
Transfer Status: None Degree Applicable: AS  
CSU GE: None IGETC: None District GE: None

### **BIM 125 Planning and Managing Construction Projects With 4D CAD 3 Units**

Building Information Modeling (BIM) integrates 3D drawings and 4D animations to dramatically improve the communication, coordination, and planning of construction projects, while reducing risks, errors, and costs. BIM is an in-depth resource that shows architects and building professionals how to capitalize on BIM concepts, tools, and techniques for their own building projects.

Lecture Hours: 3 Lab Hours: None Repeatable: No Grading: L  
Advisory Level: Read: 3 Write: 3 Math: 1  
Transfer Status: None Degree Applicable: AS  
CSU GE: None IGETC: None District GE: None

**BIM 138 BIM Work Experience 1-8 Units**

Occupational work experience is designed for students who work or volunteer in the field related to their career major. Students are required to provide evidence that they are enrolled in BIM course(s). Students can earn one unit of credit for each 60 hours of unpaid volunteer time or 75 hours of paid work during the semester. Students can repeat Career/Occupational Work Experience, combined with General Work Experience, or alone, up to a maximum of 16 units. Internship/job placement is not guaranteed.

Lecture Hours: None Lab Hours: 2.07 Repeatable: Yes Grading: O  
Corequisite: Be employed or a volunteer at an approved work-site for the minimum number of hours per unit as stipulated for paid and unpaid status

Advisory Level: Read: 3 Write: 3 Math: None  
Transfer Status: CSU Degree Applicable: AA/AS  
CSU GE: None IGETC: None District GE: None