

Hagerstown Community College
OFFICIAL MASTER SYLLABUS DOCUMENT

COURSE: CAD 230 – Intro to 3D CADD and BIM, 4 credits

INSTRUCTOR:

SEMESTER/YEAR:

COURSE DESCRIPTION:

Introduction to Building Information Modeling (BIM) utilizing Revit. Emphasis on commercial building design with the skills and understanding of parametric modeling to create floor plans, elevations, roof plans, foundation plans, ceiling plans, site plans, as well as proper placement of building components. There will also be an introduction to rendering, animation, and presentation of architectural design.

TEXTBOOK:

Architectural Commercial Design Using Autodesk Revit 2015, Daniel John Stine
ISBN: 9781585038817

STUDENT LEARNING OUTCOMES:

- Set up a BIM template for a commercial structure including wall types, hosted components such as doors, window, etc.,
- Create a BIM model from the template created to incorporate site, building pad, walls, floors, ceilings, roof, furniture, stairs, site components, plumbing fixtures and electrical fixtures.
- Produce a set of commercial construction drawings including a site plan, floor plans, reflected ceiling plan, sections, elevations, schedules, and details.
- Create final Construction Documents (CD) in typical stages.

Total Hours of Coursework:

To earn one academic credit at HCC, students are required to complete a minimum of 37.5 clock hours (45 fifty-minute “academic” hours) of coursework per semester. Those hours of coursework may be completed through a combination of hours within the classroom and hours outside the classroom. Certain courses may require more than the 37.5 minimum hours of coursework per credit.

For most classes, students should expect to do at least 2 hours of coursework outside of class for each hour of in-class coursework

Credit Hour to Clock Hour Calculation:

Direct Faculty Instruction: 1 hour/week/credit for 15 weeks; 50 min = 1 classroom hour
 (50 min x 3 credits x 15 weeks) = 2250 minutes = 37.5 hours

Student Work Outside the Classroom: 2 hours/week/credit for 15 weeks
 (2 hrs x 3 credits x 15 weeks) = 90 hours

	Direct Faculty Instruction (In Class) 37.5 Hrs. Required	Student Work (Out of Class) 90 Hrs. Required
Lecture	52.5 Hours	
Final Exam		6 Hrs. Prep
Assignments		45 Hrs.
Final Project		25 Hrs.
Other Instructor Material		14 Hrs.