

**Common Course Outline**  
**CADD 243**  
**Intermediate Solid Modeling**  
**3 Credits**

**The Community College of Baltimore County**

**Description**

**CADD 243 – Intermediate Solid Modeling** continues practices and techniques developed in CADD 242, Solid Modeling; covers advanced modeling techniques, parametric dimensioning, complex geometry and assemblies.

**3 Credits:** 2 lecture and 2 laboratory hours

**Prerequisites:** CADD 242 or permission of Program Coordinator.

**Overall Course Objectives**

Upon completion of this course students will be able to:

1. apply advanced parametric dimensioning techniques to drawn parts;
2. develop families of parts;
3. generate complex features;
4. create irregular and transitional surfaces by lofting and other advanced techniques;
5. develop surface models;
6. apply assembly techniques to multiple part designs;
7. produce two dimensional drawings from solid models;
8. manage solid model files; and
9. use and apply solid modeling concepts using common software.

**Major Topics**

- I. Review of solid modeling principles.
- II. Discussion of changes in solid modeling software.
- III. Development of complex individual parts.
- IV. Creation of assemblies.
- V. Tolerancing and interference
- VI. Techniques for managing solid model files

**Course Requirements**

Grading procedures will be determined by the individual faculty member but will include the following:

### **Grading/exams**

- Portfolio including a minimum of three graded exercises
- A minimum of three tests
- One comprehensive midterm and final examination (Two examinations)

Written Assignments: Students are required to use appropriate academic resources.

### **Other Course Information**

This course is an elective course in the CADD curricula. This course is taught in a computerized environment.

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