

Product Development CAD/CAM

EDDT - 2460 101

Course Description

Uses CAD to design and layout advanced production drawings. Uses CAM to create industry level CNC files for production. Uses industry standard reference materials, i.e., Machinery's or Engineers Handbook, ANSI and/or ASME Specifications, GD & T. Course supports the design, drafting & fabrication for a student's capstone project. It is recommended students complete EDDT 2540 prior to or during this course.

Prerequisite(s): EDDT 1050 with a C or better grade; EDDT 2340 with a C or better grade; EDDT 2350 with a C or better grade.

Semester(s): Fall & Spring

Course Student Learning Outcomes

- Create industry standard professional drawings.
- Create industry standard professional CNC programs.
- Identify the role a Mechanical Engineer plays in an Engineering and/or Manufacturing Organization.
- Identify the role a Manufacturing Engineer plays in an Engineering and/or Manufacturing Organization.
- Perform cost analysis that determines manufacturability of products.
- Develop the ability to search for and interpret industry standard specifications. ANSI, ASME, ASTM.
- Test and validate designs using CAE simulation and actual functional testing.
- Engage in in-class discussions with regards to design team goals.

Assignment Schedule

Due Date	Assignment Name	Assignment Type	Points
	ARM	Discussion	0
	Complete Large Mars Rover (LMR) model with arm	Discussion	0
	Cost of Materials	Discussion	0
	Feature CAM files for MMR FULLSIZE	Discussion	0
	FeatureCam Training Doc	Discussion	0
	FSMR VISE BLOCK	Discussion	0
	Introduce Yourself	Discussion	0
	Introduce Yourself	Discussion	0
	Legacy Assembly	Discussion	0
	Link for Standoff order	Discussion	0
	Motor Mount Model and Feature Cam	Discussion	0
	Parasolid files	Discussion	0
	Tool List	Discussion	0
	UP TO DATE PART FILES - FALL 2023 SEMESTER	Discussion	0
9/9/25	Activity Log - Weekly 9/02 - 9/04	Assignment	10

Due Date	Assignment Name	Assignment Type	Points
9/16/25	Activity Log - Weekly 9/09 - 9/11	Assignment	10

Grading Scale

Grading: All grades will be given based on the following distribution:

92 – 100% A 72 – 77.9% C

90 – 91.9% A- 70 – 71.9% C-

88 – 89.9% B+ 68 – 69.9% D+

82 – 87.9% B 62 – 67.9% D

80 – 81.9% B- 60 – 61.9% D-

78 – 79.9% C+ < 59% E

Grades distribution:

Individual & Group Projects 70%

ePortfolio 30%

How to Navigate to Canvas

Institutional Policies

As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements. By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

For more information, navigate to the Institutional Policies tab on the [Institutional Syllabus](#) page.

Learning Support and Tutoring Services

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, visit the [Institutional Syllabus](#) page under the Tutoring and Learning Support tab. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

Advising and Counseling Support Services

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to access them, visit the [Institutional Syllabus](#) page under the Advising and Counseling Support Services tab. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

Student Academic Calendar

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

[SLCC Student Academic Calendar](#)