MET 2606 - Solid Modeling

Fall 2026 Syllabus, Section 01, CRN 42750,

Credit hours: 4

Instructor

Md Mehedi Hasan

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Public Instructor Information

Instructor Title: Lecturer

Professional Qualifications:

Ph.D. in Mechanical Engineering, University of Kentucky, Aug 2025
Master's in Engineering Mechanics, Pennsylvania State University, 2015
Master's in Mechanical Engineering, North Dakota State University, 2011
B.Sc. in Mechanical Engineering, Bangladesh University of Engineering and Technology, 2007

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Course Description

2606. Solid Modeling. Study of parametric solid modeling and other 3D techniques using SolidWorks software for the development of spatial skills needed for the definition of critical aspects of a 3D object in practical artistic, business, educational, and technical situations. Topics include procedures and guidelines for identifying and evaluating models and their parameters, recognizing and eliminating incomplete information, design intent, and suitability for purpose. Four hours lecture per week. 4 s.h.

Course Readings

Group	Title	Author	ISBN
Required	Parametric Modeling with SOLIDWORKS	Randy H. Shih and Paul J. Schilling	78-1-63057-699-8

The course readings are subject to change in the event of extenuating circumstances, research developments, current events, and/or to ensure better learning.

Schedule of Topics and Assignments

Week of	Reading(s)	Proposed Topic	Due/To Prepare for Class
8/24	Syllabus; Ch. 1	Course introduction; syllabus; SOLIDWORKS interface; getting started	
8/31	Ch. 2-3	Parametric Modeling Fundamentals; Constructive Solid Geometry Concepts	
9/7	Ch. 4	Feature Design Tree	
9/14	Ch. 5-6	Geometric Relations Fundamentals; Geometric Construction Tools	
9/21	Ch. 7-8	Feature Relationships and BORN Technique; Part Drawings and Associative Functionality	
9/28	Lecture; Ch. 9	Reference Geometry and Auxiliary Views	
10/5	Ch. 10-11	Introduction to 3D Printing; Symmetrical Features in Designs	

10/12	Review	Review; Midterm Examination
10/19	Ch. 12-13	Advanced 3D Construction Tools; Sheet Metal Design
10/26	Ch. 14-15	Assembly Modeling; Design Library and Basic Motion Study
11/2	Ch. 16	Design Analysis
11/9	Supplemental	CSWA Exam Preparation; Drafting Concepts
11/16	Supplemental	CSWA Assembly Modeling I; CSWA Assembly Modeling II
11/23	Supplemental	CSWA Assembly Modeling III
11/30	Supplemental	Sample CSWA Examination; Certification Exam Review
12/7	Certification Exam	Final Exam

The course schedule, policies, procedures, and assignments in this course are subject to change in the event of extenuating circumstances, by mutual agreement, and/or to ensure better learning.