

# GE 402: Computer-Aided Product Realization

(Rev -)

Week	Date	Topics	Reading	Learning/Training	Assessment
1	8/22 8/24	Introduction Lab	MCAD: key historical developments	Fusion – Sketch (PA1), Import	
2	8/29 8/31	Solid modeling Lab		Fusion – Model (PA2), Drawings (PA3)	FA1 model
3	Labor Day 9/7	<a href="#">Design project intro</a>	<a href="#">Engineering design thinking, teaching, learning</a>		<a href="#">DP deliverables, assessment rubric</a>
4	9/12 9/14	Surface modeling Lab		Fusion – Sculpt (PA4), Patch	FA2 sculpt
5	9/19 9/21	Next Gen: CAD & Design Project	<a href="#">Designerly ways of knowing CAD &amp; creativity</a>		<a href="#">Teams selected, projects assigned</a>
6	9/26 9/28	Freeform modeling Lab	T-splines and T-NURCC's		FA3 sculpt
7	10/3 10/5	<a href="#">Design thinking</a> Project	<a href="#">Reflective practice of design teams</a>		
8	10/10 10/12	Assembly modeling Project	Cloud-based design & manufacturing	Fusion – Assemble (PA5), Manage (PA6), Collaborate (PA7)	FA4 assembly
9	10/17 10/19	Additive manufacturing	Making sense of 3D printing	3D printers - Dimension, Ember	<a href="#">Design review 1 (question, define)</a>
10	10/24 10/26	Mesh modeling Project	Status, challenges, future of additive manufacturing	Fusion – Mesh (PA) 3D scanners – Creaform handheld, David	FA5 mesh
11	10/31 11/2	<a href="#">Brainstorming</a> Project		RE software - ReMake, Geomagic (PA)	FA6 mesh
12	11/7 11/9	Simulation		Fusion – Simulate (PA8)	FA7 simulate <a href="#">Design review 2 (ideate)</a>
13	11/14 11/16	<a href="#">Prototyping</a> Project	<a href="#">A study of prototypes</a>	Fusion – Render (PA9), Animate (PA10)	
14	11/21	Thanksgiving Break			
15	11/28 11/30	Project			<a href="#">Design review 3 (prototype)</a>
16	12/5 12/7	Project Project			Online exam
Finals	12/12				<a href="#">Team final presentations</a> <a href="#">Tuesday December 13, 1:30 - 4:30PM</a>

NOTES: "Lab" indicates time available in class to work on assignments; "Project" means time available in class to work on team design project