

**Purdue Graduate Certificate Plan of Study**  
**COMPUTER-AIDED MECHANICAL ENGINEERING**  
**Department of Mechanical Engineering, IUPUI CAMPUS**

Last Name	First Name	IUID	PUID

Admit Term	Expected Grad Term	Other Certificate	Grad Degree	Other Reg type: GND, UN, TR

<b>Degree Requirements</b>		✓
Total number of graded credits required	12	
Minimum grade for any course applied to certificate	C	
Minimum GPA	3.0	
Maximum transfer credits	3	
Maximum credits taken prior to enrollment in certificate program	6	
Maximum undergraduate-level courses	Zero	
Completion of certificate requirements	3 years	

Course Substitution Exceptions may be approved by the ME Graduate Education Committee

Courses may apply toward a graduate degree program but may not be used for credit toward another certificate program.

**Required Courses**

Sem	Year	Subj	Number	Course Title	Credits	Grade	MS*
		ME	55100	Finite Element Analysis			
		ME	54600	CAD/CAM Theory and Advanced Applications			

**Electives (Choose 2)**

Sem	Year	Subj	Number	Course Title	Credits	Grade	MS*
		ME	50000	Advanced Thermodynamics			
		ME	50500	Intermediate Heat Transfer			
		ME	50900	Intermediate Fluid Mechanics			
		ME	51000	Gas Dynamics			
		ME	52000	Imaging-based Comp Hemodyn for Cardiovasc Assessment			
		ME	52500	Combustion			
		ME	53503	Model-based Systems Engineering			
		ME	53504	Systems Driven Product Development			
		ME	55000	Advanced Stress Analysis			
		ME	55800	Composite Materials			
		ME	56300	Mechanical Vibrations			
		ME	56900	Mechanical Behavior of Materials			
		ME	58100	Numerical Methods in Mechanical Engineering			
		ME	59100	Mechanical Engineering Projects			
		ME	59700	Composite Materials for Automotive Applications			
		ME	60101	Computational Modeling of Turbulence			
		ME	60601	Optimal Design of Complex Mechanical Systems			
		ME	61400	Computational Fluid Dynamics			
		ME	65100	Advanced Finite Element Method for Solids			

**Dept approved course substitution(s)**

Sem	Year	Subj	Number	Course Title	Credits	Grade	MS*
Substituting for:							

\*Check box if course will apply to MS degree

Graduate Program Director/Advisor Signature	Date
Graduate Office Approval	Date