

 	<p style="text-align: center;">CAREER ENHANCEMENT CERTIFICATE</p> <p style="text-align: center;">MECHANICAL ENGINEERING TECHNOLOGY – MACHINE DESIGN</p> <p><i>The catalog in force is assigned to students based on the academic year they first applied to the college, and changes only when students change their major or request the change in writing. Refer to Policy No. 3357:15-13-28.</i></p>	<p>2025-26 Catalog Effective Summer 2025</p> <p style="text-align: center; font-size: 2em;">4056</p>
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Business, Engineering, and Information Technologies Division

Engineering Technology Department

Course Number	Course Title	Credits	Pre- and Co-Requisites	Completed Sem./Year
DET125	Basic AutoCAD	3		
MET124	Statics and Strength of Materials	4	Pre-Co-PHY121 or Pre-Co-PHY221	
MET221	Advanced Strength of Materials	2	MET124	
MET226	Technical Project – Mechanical and Design	2	Pre-Co-MET228 and Pre-Co-DET125	
MET228	Machine Design	4	MET124	
MTH135	Precalculus [^] - A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement	5	MTH025 or Proficiency	
PHY121	College Physics I with Algebra (lab) [^]	4	MTH135 or (MTH125 and MTH130) or Proficiency	
TOTAL CREDIT HOURS		24		

STUDENT ADVISING NOTES

Academic Advising

Students should make an appointment to see their advisor before registering for classes each semester. They should have prepared a completed registration form, including courses they wish to take, prior to this meeting.

First Semester

DET125	Basic AutoCAD	<u>3</u>	
MTH135	Precalculus [^] - A student may take MTH125 (College Algebra) and MTH130 (Trigonometry) over two semesters to satisfy this requirement	<u>5</u>	MTH025 or Proficiency
		8	

Second Semester

PHY121	College Physics I with Algebra (lab) [^]	4	MTH135 or (MTH125 and MTH130) or Proficiency
MET124	Statics and Strength of Materials	<u>4</u>	Pre-Co-PHY121 or Pre-Co-PHY221
		8	

Third Semester

MET221	Advanced Strength of Materials	2	MET124
MET226	Technical Project – Mechanical and Design	2	Pre-Co-MET228 and Pre-Co-DET125
MET228	Machine Design	<u>4</u>	MET124
		8	
TOTAL CREDITS		24	

[^]Based on SSC placement scores

The classes in this certificate also apply toward the completion of a Mechanical Engineering Technology Degree (4050).