

**Department of Mechanical and Manufacturing Engineering**  
**Engineering & Computing Center 100 / 320-308-5654 / [mme@stcloudstate.edu](mailto:mme@stcloudstate.edu)**

<b>B.S. in Manufacturing Engineering – 128 credits in the major</b>					
<b>First Semester - 15 credits</b>			<b>Second Semester - 15 credits</b>		
*GENG 101(3) – Ethics Engr Prof *CHEM 210 (4) – Chemistry I *MATH 221 (4) – Calculus I Lib Ed <sup>1</sup> – Goal Area 1 (4) ENGL 191			*GENG 102 (3) – Prob Solv *PHYS 234 (5) – Physics 1 *MATH 222 (4) – Calculus II Lib Ed <sup>1</sup> – Goal Area 1 (3) CMST 192		
<b>Third Semester - 16 credits</b>			<b>Fourth Semester - 17 credits</b>		
* ECE 201 (3) – Circuits I Or ENGR 332 (3) - Electronics *MME 243 (4) – Statics/Dynamics *PHYS 235 (5) – Physics II *MATH 327 (4) – Diff Eq w/Lin Alg			MME 201 (4) – Thermo/Heat Xfr MME 211 (4) – Materials/Struct MME 224 (4) – Engr Graphics GENG 380 (2) – Engr Communi ETS 345 (3) Manufact Processes		
<b>Fifth Semester - 18 credits</b>			<b>Sixth Semester - 17 credits</b>		
MME 333 (4) – Processes MME 342 (4) – Fatigue/Machines MME 352 (4) – Sensors/Controls MATH 320 (3) or 321 (4)– Multi Var Calc Or PHYS 346 (3) – Apps in Phys Lib Ed <sup>1</sup> –GoalArea 5 (3) ECON 205 or 206			MME 334 (4) – Lean Manufacturing MME 346 (4) – Mechans/Robotics MME 353 (4) – Controls/Vibrate GENG 360 (2) – Engr Econ STAT 353 (3) – Statistics for Engr or STAT 417 (3) – Prob & Sim		
<b>Seventh Semester - 15 credits</b>			<b>Eighth Semester - 15 credits</b>		
MME 461 (3) – Quality Engineering MME 480 (3) – Senior Design I MME 464 (3) – Proc & Tool Design Lib Ed <sup>1</sup> - Goal Area 5&10 (3) SOC 200 Lib Ed <sup>1</sup> –GoalArea 2&6 (3) ENGL 306 or CMST 306			MME 481 (3) – Senior Design II MME 470 (3) - Facilities Design MME Technical Elective <sup>2</sup> (3) Lib Ed <sup>1</sup> -GoalArea 7 (3) GWS 220 Lib Ed <sup>1</sup> -GoalArea 6 & 8 (3) ART 131		

\*A minimum GPA of 2.50 in these courses is required prior to applying for admission to the MME major. A minimum GPA of 2.50 must also be maintained in core (MME, MATH, PHYS, ECE, etc.) courses afterward to maintain good standing in the program.

<sup>1</sup>For engineering students, Goal Areas 3, 4, and 9 are satisfied within the major. ECON 205 or 206, two diversity, and one racial issue course must be completed as part of satisfying the other Goal Areas. Options other than the examples shown are possible.

<sup>2</sup>Technical electives include **one MME** technical elective.

- Pick the **one MME** technical elective from MME 404 *Computational Fluid Dynamics*, 414 *Composite Materials*, 420 *Finite Element*, 430 *Precision Manufacturing*, 440 *Solid Mechanics*, 442 *Dynamics II*, 450 *Robotics*, 490 *Special Topics*, PHYS 333 *Optics*, 435 *Laser Optics*

MME area technical electives are offered alternating years.