

Department of Mechanical and Manufacturing Engineering
Engineering & Computing Center 100 / 320-308-5654 / mme@stcloudstate.edu

B.S. in Mechanical Engineering – 128 credits in the major					
First Semester - 15 credits			Second Semester - 16 credits		
*MME 101 (3) – Ethics Engr Prof			*ECE 102 (3) – Prob Solv		
*CHEM 210 ¹ (4) – Chemistry I			*PHYS 234 (5) – Physics 1		
*MATH 221 ¹ (5) – Calculus I			*MATH 222 (4) – Calculus II		
Lib Ed ² – Goal Area 1 (3, CMST 192)			Lib Ed ² – Goal Area1 (4, ENGL 191)		
Third Semester - 17 credits			Fourth Semester - 16 credits		
*MME 223 (3) – Engr Graphics			MME 200 (3) – Thermo		
*MME 241 (3) – Statics			MME 210 (3) – Engr Materials		
*PHYS 235 (5) – Physics II			MME 230 (2) – Lean Des Manu		
*MATH 325 (3) – Diff Equations			MME 242 (3) – Dynamics		
Lib Ed ² – Goal Area 5 (3, ECON 205 or 6)			MME 380 (2) – Engr Communi		
			ECE 201 (3) – Circuits I		
			or ENGR 332 (3) Electronics		
Fifth Semester - 15 credits			Sixth Semester - 18 credits		
MME 300 (3) – Fluid Mechanics			MME 302 (3) – Heat Transfer		
MME 340 (3) – Mech Design Fun			MME 341 (3) – Dsgn Mach Ele		
MME 350 (3) – Process Sensors			MME 345 (3) – Mechanisms		
MME 330 (3) – Mat Process I			MME 351 (3) – Mach Controls		
or MME 331 (3) Mat Process II			STAT 353 (3) – Statistics for Engr		
MATH 311 ³ (3) – Lin Alg/Mult Calc			or STAT 417 (3) – Prob & Sim		
or PHYS 346 (3) – Apps Physics			Lib Ed ² -GoalArea6&7 (3, ENGL 216)		
Seventh Semester - 16 credits			Eighth Semester - 15 credits		
MME 360 (2) – Manu Econ			MME 481 (3) – Senior Design II		
MME 401 (2) – Thermal Lab			Technical Elective ⁴ (3)		
MME 480 (3) – Senior Design I			Technical Elective ⁴ (3)		
Technical Elective ⁴ (3)			Lib Ed ² -GoalArea 5 & 8 (3, HIST 106)		
Technical Elective ⁴ (3)			Lib Ed ² -GoalArea 6 & 8 (3, ART 131)		
Lib Ed ² - Goal Area 10 (3, ETS 375)					

*A GPA of 2.5 in these courses is required for admission to the MME major. A GPA of 2.5 must also be maintained in core courses while in the program. All major courses completed by admission date will be used in GPA calculation.

¹Placement exams are required for placement in CHEM 210 and MATH 221. Contact Chemistry at (320) 308-3031 or Mathematics at (320) 308-3001 for details.

²For engineering students, Goal Areas 2, 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. PESS 122 is not required for engineering students.

³If MATH 321 is desired as a free technical elective, take MATH 312 instead of MATH 311 or PHYS 346.

⁴Technical electives include **one FREE** (non-MME) course and **three AREA** technical electives. Pick the **one FREE** technical elective from: MATH 321, 427, 452, 452; CHEM 211, 240, 320; PESS 248, 249, 448; PHYS 328; BIOL 202, 366; MME 444 *Internship*. Pick the **three AREA** technical electives from MME 404 *CFD*, 405 *Energy Systems*, 411 *Materials*, 420 *Finite Element*, 430 *Precision Mfg*, 435 *Materials Processing*, 440 *Solid Mechanics*, 442 *Dynamics II*, 450 *Robotics*, 490 *Special Topics*, PHYS 333 *Optics*, 435 *Laser Optics*, ENGR 447 *Optical Design*. Other technical elective options are possible with advisor approval. Area technical electives are offered alternating years.