

MECHANICAL ENGINEERING

CODE: 4680 (141901-01) Bachelor of Science in Mechanical Engineering

Students with ACT score of 30 or above in mathematics and with at least 8 weeks of trigonometry in high school may register for Mathematics 270, Calculus I, upon entry. Students with ACT scores between 26-29 may take the advanced placement test given by the math department. Those who do not meet these qualifications must take Mathematics 109, Algebra, and Mathematics 110, Trigonometry, and are advised to complete these courses in the summer semester prior to the freshman year.

Freshman Year

| First Semester | | | Credit | Second Semester | | | Credit |
|----------------|-----|----------------------------------------|-----------|-----------------|-----|------------------------------------|-----------|
| CHEM | 107 | General Chemistry I | 3 | ENGL | 102 | Comp and Lit..... | 3 |
| ENGL | 101 | Rhet and Comp | 3 | MATH | 301 | Calculus II | 4 |
| MATH | 270 | Calculus I | 4 | MCHE | 103 | Graph Comm & Design | 2 |
| MCHE | 101 | Intro Mech Engr..... | 1 | PHYS | 201 | General Physics I | 4 |
| | | Elective (BIOL SCI) ¹ | 3 | | | Elective (ARTS) ² | 3 |
| | | | <u>14</u> | | | | <u>16</u> |

Sophomore Year

| | | | | | | | |
|------|-----|-----------------------------------|-----------|------|-----|------------------------------|-----------|
| CHEE | 317 | Materials of Engineering. | 3 | ENGL | 365 | Technical Writing..... | 3 |
| ENGR | 211 | Statics | 3 | ENGR | 201 | Electrical Circuits..... | 3 |
| MATH | 302 | Calculus III | 4 | ENGR | 313 | Dynamics..... | 3 |
| PHYS | 202 | General Physics II | 4 | MATH | 350 | Differential Equations | 3 |
| | | Elective (LIT) ¹ | 3 | MCHE | 263 | Engineering Design..... | 3 |
| | | | | PHYS | 215 | General Phys Lab..... | 1 |
| | | | <u>17</u> | | | | <u>16</u> |

Junior Year

| | | | | | | | |
|------|-----|------------------------------|-----------|------|-----|------------------------------------|-----------|
| ENGR | 203 | Mechanics of Materials | 3 | ECON | 300 | Fundamentals of Econ | 3 |
| ENGR | 301 | Thermodynamics..... | 3 | MCHE | 358 | Instr/Meas II | 2 |
| ENGR | 304 | Fluid Mechanics | 3 | MCHE | 362 | Thermal Engineering..... | 3 |
| MCHE | 301 | Engineering Analysis..... | 3 | MCHE | 365 | Manufacturing Processes. | 3 |
| MCHE | 357 | Instr/Meas I | 2 | MCHE | 467 | Machine Design I | 3 |
| MCHE | 376 | Kin & Dyn of Machinery..... | 3 | | | Elective (HIST) ¹ | 3 |
| | | | <u>17</u> | | | | <u>17</u> |

Senior Year

| | | | | | | | |
|------|-----|------------------------------------|-----------|------|-----|----------------------------|-----------|
| MCHE | 461 | Systems Analysis | 3 | MCHE | 471 | Fluid Mechanics | 3 |
| MCHE | 468 | Machine Design II | 3 | MCHE | 483 | Engr Systems Design..... | 3 |
| MCHE | 469 | Heat Transfer | 3 | MCHE | 484 | Engineering Projects | 3 |
| MCHE | 485 | Mech Vibrations | 3 | MCHE | 490 | Senior Seminar | 1 |
| | | Elective (TECH) ¹ | 3 | PHIL | 316 | Professional Ethics..... | 3 |
| | | | | ECON | 330 | Managerial Economics..... | 3 |
| | | | <u>15</u> | | | | <u>16</u> |

NOTE: A maximum of one grade of "D" is allowed for all math and engineering courses in this curriculum. "D" grades may be improved by repeating the course. Other departments may require a "C" or better in certain courses.

¹Must be chosen from the Department of Mechanical Engineering approved list of electives.

²Arts elective must be chosen from DANC, MUS, THEA, or VIAR. (See approved Department of Mechanical Engineering list).