

PPCC Mechanical Engineering Transfer Guide 2007-2008

Below is the four-year sample program for Mechanical Engineering students at UCCS. Courses in bold with an asterisk (*) can be taken at PPCC either prior to coming to UCCS or concurrently at both campuses. To graduate within 4 years, a student would have to be concurrently enrolled for the duration of the degree program. To assure ease of transfer it is recommended that you contact the UCCS Engineering Advisor (262-3427) before each semester.

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| Freshman Year | |
| <i>Fall Semester (17 semester hours)</i> | |
| * MATH 135 Calculus I (MAT201 @ PPCC) | 4 |
| * PES 111. General Physics I (PHY211 @ PPCC) | 4 |
| MAE 1502 Principles of Engineering | 3 |
| * CS 107 Intro. to Visual Basic (CSC150 @ PPCC) | 3 |
| * Social Sciences/Humanities Elective (see list below) | 3 |
| | Total 17 |
| <i>Spring Semester (17 semester hours)</i> | |
| * MATH 136 Calculus II (MAT202 @ PPCC) | 4 |
| * PES 112 General Physics II (PHY212 @ PPCC) | 4 |
| * ENGL 131 Rhetoric and Writing I (ENGL121 @ PPCC) | 3 |
| MAE 1503 Introduction to Engineering Design | 2 |
| * Social Sciences/Humanities Elective (see list below) | 3 |
| | Total 16 |
| Sophomore Year | |
| <i>Fall Semester (18 semester hours)</i> | |
| * MATH 235 Calculus III (MAT203 @ PPCC) | 4 |
| * MATH 313 Introduction to Linear Algebra (MAT255 @ PPCC) | 3 |
| * CHEM 103 General Chemistry I (CHE111 @ PPCC) | 5 |
| MAE 2101 Statics | 3 |
| ENGL 309 Technical Writing and Presentation | 3 |
| | Total 18 |
| <i>Spring Semester (15 semester hours)</i> | |
| * MATH 340. Intro to Differential Equations (MAT265 @ PPCC) | 3 |
| MAE 2055 MechEtronics I | 3 |
| MAE 2102 Dynamics | 3 |
| MAE 2301 Thermodynamics | 3 |
| MATH 381 Probability and Statistics OR ECE 3610 Engineering Probability & Stats | 3 |
| | Total 15 |
| Junior Year | |
| <i>Fall Semester (15 semester hours)</i> | |
| MAE 3302 Thermodynamics II | 3 |
| MAE 3201 Strength of Materials | 3 |
| MAE 3401 Modeling and Simulation of Dynamic Systems | 3 |
| MAE 3055 MechEtronics II | 3 |
| CHEM 301 Materials Science | 3 |
| | Total 15 |
| <i>Spring Semester (15 semester hours)</i> | |
| MAE 3130 Fluid Mechanics | 3 |
| MAE 3310 Heat & Mass Transfer | 3 |
| MAE 3005 Engineering Measurement Lab | 3 |
| MAE 3501 Machine Design | 3 |
| Technical Elective (see below) | 3 |
| | Total 15 |

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|---|------------------------|
| Senior Year | |
| <i>Fall Semester (18 semester hours)</i> | |
| MAE 3010 Mechanical Engineering Lab | 2 |
| MAE 4120 Kinematics | 3 |
| MAE 4402 Intermediate Dynamics | 3 |
| MAE 4421 Feedback Control | 3 |
| MAE 4510 Engineering Design I | 1 |
| Technical Elective (see below) | 3 |
| *Business Elective (see list below) | 3 |
| | Total 16 |
| <i>Spring Semester (15 semester hours)</i> | |
| MAE 4511 Engineering Design II | 3 |
| Technical Electives (see below) | 6 |
| *Social Sciences/Humanities Electives (see list below) | 3 |
| *Business Elective (see list below) | 3 |
| | Total 15 |
| | Total Hours 128 |
| Social Sciences/Humanities Requirements for Mechanical Engineering degree | |
| <p>Mechanical Engineering students at UCCS are required to take 9 credits of social sciences and humanities so that they can be more aware of their social responsibilities and better able to consider related factors in the decision making process. To ensure this, a minimum of 9 hours in social sciences and/or humanities must be taken; at least 3 of these hours must be beyond the introductory level (200 level or higher course). Breakouts by areas are as follows:</p> <p>- Social Science/Humanities Departments: Anthropology, Art History, Communications, Economics, Ethnic Studies, English (150 or higher classes), Film, Gerontology, History, Humanities, Languages, Music (except choir or lessons), Philosophy, Political Science, Psychology, Sociology, Visual and Performing Arts and Women's Studies.</p> <p><i>Note: PPCC students should look closely at the PPCC to UCCS transfer course listing to ensure that they will meet the 200+ level requirement.</i></p> | |
| Technical Elective Requirements for Mechanical Engineering degree | |
| <p>All Mechanical Engineering students are required to take at least 12 hours of 300/3000+ level technical electives to satisfy requirements for technical breadth and depth. (Students must meet course prerequisites). Of these 12 hours at least 6 hours must come from Mechanical Engineering and at least 6 hours must be at the 400/4000+ level. Non-Mechanical Engineering courses may come from the following departments: Computer Science, Electrical Engineering, Mathematics, and Physics.</p> | |
| Business Electives for the Mechanical Engineering degree | |
| <p>All Mechanical Engineering students must complete 6 credit hours of Business electives from the following list:</p> <p>*BUAD 100 Introduction to Business (BUS115 @ PPCC)</p> <p>*ACCT 201 Introduction to Financial Accounting (ACC121 @ PPCC)</p> <p>*ORMG 330 Introduction to Organizational Management (MAN226 @ PPCC)</p> <p>*MKTG 300 Principles of Marketing (MAR216 @ PPCC)</p> <p>MAE3342 Engineering Economy (recommended)</p> | |