

## Mechanical Engineering (BS)

The Mechanical Engineering Concurrent program is designed for students who wish to begin at PPCC and finish their degree program at UCCS in Mechanical Engineering. Since many lower level courses are only offered through UCCS, students will need to be concurrently enrolled at both PPCC and UCCS to complete the program in 4 years.

To earn the Associate of General Studies Degree, students must complete the following course requirements for a total minimum of 60 semester credit hours, at least 30 of which must be general education courses and at least 15 must be from Colorado State-Guaranteed courses. A minimum cumulative GPA of 2.0 (C average) must be earned on all courses. At least 15 credit hours must be earned at PPCC.

| Degree Requirements   | Courses   |         |         |         |         |         |
|---|---|---------|---------|---------|---------|---------|
| <b>Communication</b><br>(3 credit hours)  | ENG 121   |         |         |         |         |         |
| <b>Mathematics</b><br>(21 credit hours)   | <b>Complete all of the following courses.</b>   |         |         |         |         |         |
|   | MAT 201   | MAT 202 | MAT 204 | MAT 255 | MAT 265 |         |
| <b>Arts and Humanities</b><br>(3 credit hours)<br>Complete one course.  | <b>These courses meet both the GT-AH category and general education requirements at UCCS.</b> |         |         |         |         |         |
|   | ART 112   | ART 207 | LIT 115 | LIT 201 | LIT 202 | MUS 120 |
|   | PHI 111   | PHI 112 | PHI 113 |         |         |         |
| <b>Social &amp; Behavioral Sciences</b><br>(3 credit hours)<br>Complete one course.   | <b>These courses meet both the GT-SS category and general education requirements at UCCS.</b> |         |         |         |         |         |
|   | ANT 101   | ECO 201 | ECO 202 | GEO 105 | GEO 106 | POS 111 |
|   | PSY 101   | PSY 102 | PSY 226 | SOC 101 | SOC 215 | SOC 216 |
|   | SOC 218   |         |         |         |         |         |
| <b>Physical and Life Sciences</b><br>(15 credit hours)  | <b>Category GT-SC1 - Complete all the following courses.</b>                                  |         |         |         |         |         |
|   | PHY 211   | PHY 212 | CHE 111 |         |         |         |
| <b>Additional Requirements</b><br><br>24 credits recommended by UCCS for this degree plus remaining courses from the approved course list.<br><br><b>NOTE: UCCS courses will transfer to PPCC for the AGS degree.</b> | <b>PPCC Courses</b>   |         |         |         |         |         |
|   | EGG 102   |         |         |         |         | 3       |
|   | EGG 211   |         |         |         |         | 3       |
|   | EGG 212   |         |         |         |         | 3       |
|   | EGG 230   |         |         |         |         | 3       |
|   | <b>UCCS Courses</b>   |         |         |         |         |         |
|   | MAE 1090  |         |         |         |         | 3       |
|   | MAE 1503  |         |         |         |         | 3       |
|   | MAE 2055  |         |         |         |         | 3       |
|   | MATH 3810   |         |         |         |         | 3       |

### Foreign Language Note – UCCS

UCCS admission requirements include 2 years of the same high school foreign language (or equivalent 2 semesters at Pikes Peak Community College). Students planning to attend UCCS who do not have the prerequisite foreign language requirement should consider enrolling in these courses in addition to the degree requirements. Students who do not meet this requirement will need to fulfill it upon transferring to UCCS. This admission requirement does not apply to those who graduated from high school prior to 1988, who have a GED, who graduated from a non-U.S. high school, or who can prove proficiency in a foreign language through the 2<sup>nd</sup> semester at college level. **Please check with the Transfer Advisor ([ppcc@uccs.edu](mailto:ppcc@uccs.edu)) to see if this requirement applies to you.**

## Four-Year Degree Plan – Mechanical Engineering

The following four-year plan lists all the specific course requirements for the Bachelor of Science in Mechanical Engineering degree at UCCS. PCC courses are listed in bold. The order in which these courses are taken may vary with course availability. **Students are responsible for completing all course prerequisites.** Please note that this is a *suggested* degree program; your program may vary.

**NOTE: Please be aware that completing the concurrent program will require an additional 4 credit hours to complete the Mechanical Engineering degree due to differences in hours for math and science courses.**

### Suggested First Year

| FALL |   |       | SPRING |                |       |
|------|---|-------|--------|----------------|-------|
| √    | Course  | Hours | √      | Course         | Hours |
|      | <b>MAT 201</b>                                | 5     |        | <b>MAT 202</b> | 5     |
|      | <b>CHE 111</b>                                | 5     |        | <b>PHY 211</b> | 5     |
|      | <b>EGG 102</b>                                | 3     |        | MAE 1503       | 3     |
|      | <b>ENG 121</b>                                | 3     |        | MAE 1090       | 3     |
|      | <b>Social and Behavioral Sciences Course*</b> | 3     |        |                |       |
|      | <b>TOTAL</b>                                  | 19    |        | <b>TOTAL</b>   | 16    |

### Suggested Second Year

| FALL |                                    |       | SPRING |                       |       |
|------|------------------------------------|-------|--------|-----------------------|-------|
| √    | Course                             | Hours | √      | Course                | Hours |
|      | <b>MAT 204</b>                     | 5     |        | <b>MAT 265</b>        | 3     |
|      | <b>MAT 255</b>                     | 3     |        | <b>EGG 212</b>        | 3     |
|      | <b>PHY 212</b>                     | 5     |        | <b>EGG 230</b>        | 3     |
|      | <b>EGG 211</b>                     | 3     |        | MAE 2055              | 4     |
|      | <b>Arts and Humanities Course*</b> | 3     |        | MATH 3810 or ECE 3610 | 3     |
|      | <b>TOTAL</b>                       | 19    |        | <b>TOTAL</b>          | 16    |

### Suggested Third Year

| FALL |                   |       | SPRING |                                    |       |
|------|-------------------|-------|--------|------------------------------------|-------|
| √    | Course            | Hours | √      | Course                             | Hours |
|      | MAE 2200          | 3     |        | MAE 3201                           | 3     |
|      | MAE 3302          | 3     |        | MAE 3005                           | 3     |
|      | MAE 3401          | 3     |        | Humanities/Social Science elective | 3     |
|      | ENGL 2090         | 3     |        | MAE 3342                           | 3     |
|      | Business Elective | 3     |        | Technical Elective                 | 3     |
|      | <b>TOTAL</b>      | 15    |        | <b>TOTAL</b>                       | 15    |

### Suggested Fourth Year

| FALL |                      |       | SPRING |                        |       |
|------|----------------------|-------|--------|------------------------|-------|
| √    | Course               | Hours | √      | Course                 | Hours |
|      | MAE 3130             | 4     |        | MAE 4310               | 4     |
|      | MAE 3501             | 3     |        | MAE 4120               | 3     |
|      | MAE 4000             | 1     |        | MAE 4511 (spring only) | 3     |
|      | MAE 4421             | 3     |        | Technical Elective     | 3     |
|      | MAE 4510 (fall only) | 2     |        | Technical Elective     | 3     |
|      | Technical Elective   | 3     |        |                        |       |
|      | <b>TOTAL</b>         | 16    |        | <b>TOTAL</b>           | 16    |

#### \*Humanities/Social Science Note

- A minimum of 9 hours of humanities and social science courses are required.

- Select one course from the following AH, ANTH, COMM, ECON, ENGL (except ENGL99, 1310, 1350 & 1410), FILM, GRNT, GES 1980 or GES 1990 only, HIST, INDS 2000 or 4090, Languages, MUS (except choir or lessons) PHIL, PSC, PSY, SOC, VA and WEST.

*Be sure to check with the Engineering Advisor to ensure that your Humanities/Social Science electives will meet the above requirements, especially with course level and distribution.*

#### Transfer Completion

After completing the AGS, you should be able to complete the remainder of your BS degree in Mechanical Engineering in two additional years, if you have followed the transfer plan in its entirety (see below for details). However, most students take 1 to 3 classes in the summer to relieve their spring and fall semester loads.

## UCCS Bachelor of Science, Computer Engineering Concurrent Program Requirements

### Application Process:

#### 1. Admission Criteria

Students must meet one set of criteria listed below before they can apply to the program.

**Criteria 1** – Students with fewer than 15 credit hours of college level course work will be evaluated based on typical freshman admission criteria to the College of Engineering and Applied Science. Generally students who meet the following **minimum** requirements will be seriously considered for the concurrent program:

21+ ACT or 1020+ SAT composite score

21+ ACT or 510+ SAT math score

19+ ACT or 450+ SAT English/Verbal score

3+ years of high school math to include either pre-calculus or trigonometry

3.2+ high school GPA or top 40% of class, whichever is higher

Students also will need to meet all Higher Education Admission Requirements (HEAR).

**Criteria 2** – Students who do not meet Criteria 1 and have completed at least 15 hours of college level course work (not including remedial course work) can apply to the program once they meet the following criteria:

2.4 or higher transfer GPA

A grade of “B” or better in one of the following courses: MAT 122, 166 or 201

**NOTE: Meeting the criteria of either set is not a guarantee of admission to the program, but rather a minimum requirement a student should attain before attempting application.**

#### 2. Application

Application to the Engineering Concurrent Program requires admission to UCCS. Students will need to apply through the UCCS online application and will need to write “Engineering Concurrent Program” in the essay section of the application. The application also will require additional materials listed on the online application.

#### 3. Deadlines

For Summer admission – May 1<sup>st</sup>

For Fall admission – July 1<sup>st</sup>

For Spring admission – December 1<sup>st</sup>

### Financial Aid

Students who qualify for Financial Aid will need to work with both campuses to set up their award package. See the Financial Aid offices on each campus for more details.

### UCCS Contact Information

Academic Advising: [www.uccs.edu/advising](http://www.uccs.edu/advising)

Concurrent Program advising: Engineering Advisor, [success@uccs.edu](mailto:success@uccs.edu)

(719) 255-3260

### Required Academic Advising

Concurrent program participants are required to see their academic advisors at each campus before being able to register for the following semester. Participants also are required to submit transcripts from each campus after grades have been posted to remain in the program.

### Recommendations

The UCCS Transfer Website contains answers to several transfer questions, provides extra resources, and information about transfer events ([www.uccs.edu/transfer](http://www.uccs.edu/transfer)). UCCS applications are good for one year. Students wanting to attend UCCS are encouraged to apply up to one year in advance in order to meet FAFSA and scholarship deadlines. Visit the UCCS campus by registering for a tour at [www.uccs.edu/visit](http://www.uccs.edu/visit). Prospective transfer students are encouraged to contact the UCCS Transfer Advisor at [ppcc@uccs.edu](mailto:ppcc@uccs.edu) with any questions or concerns about transferring.