Pre-Engineering at Campbellsville University

CU offers a pre-engineering curriculum that serves as a foundation for almost any engineering program in the country, including majors in biosystems, chemical, civil, computer, electrical, mechanical, materials and mining engineering. Two options are available to students, with both leading to a BS degree from an engineering school. In the 2/2 option, the student spends two years at CU taking the pre-engineering curriculum before transferring to the engineering school for two further years. In the 3/2 option, the student spends three years at CU before transferring, completes the CU general education requirements, and later transfers engineering school credits back to CU to earn a BS degree from CU also. CU has transfer agreements with the University of Kentucky and the University of Louisville, ensuring entry into the engineering programs for a student earning C or better grades in the pre-engineering curriculum.
A four-semester course layout is shown below for a student who is ready to take MTH 210 Calculus I in the Fall semester. (Some engineering schools do not require the second chemistry lab CHE 114.)

Required Courses for an Engineering Program – 60 cr[1]
CHE 111 & 113 General Chemistry I with Lab – 4 cr
CHE 112 & 114 General Chemistry II with Lab– 5 cr
CS 160 & 161 CIS I & II (Introduction to Programming) – 2 x 4 cr
ENG 111 & 112 Freshman Composition I & II – 2 x 3 cr
MTH 210, 211 & 310 Calculus I, II & III – 3 x 4 cr
MTH 311 Differential Equations – 3 cr
PHY 241 & 243 General University Physics I with Lab – 5 cr
PHY 242 & 244 General University Physics II with Lab – 5 cr
Other General Education courses, depending on the transfer institution – 12 cr

Semester layout of courses offered at CU (14-16 cr per semester)

Fall, Freshman Year
ENG 111 Freshman Composition I – 3 cr
MTH 210 Calculus I – 4 cr
CHE 111 General Chemistry I – 3 cr
CHE 113 General Chemistry I Lab – 1 cr
General Education Course – 3 cr

Spring, Freshman Year
ENG 112 Freshman Composition II – 3 cr
MTH 211 Calculus II – 4 cr
PHY 241 General University Physics I – 4 cr
PHY 243 General University Physics I Lab – 1 cr
General Education Course – 3 cr

Fall, Sophomore Year
CS 160 CIS I – 4 cr
MTH 310 Calculus III – 4 cr
PHY 242 General University Physics II – 4 cr
PHY 244 General University Physics II Lab – 1 cr
General Education Course – 3 cr

Spring, Sophomore Year
CS 161 CIS II – 4 cr
MTH 311 Differential Equations – 3 cr
CHE 112 General Chemistry II – 3 cr
CHE 114 General Chemistry II Lab – 2 cr
General Education Course – 3 cr

[1] cr = credit hour