



PRE-ENGINEERING

Location: College Drive Campus

Program Coordinator: Mark Riggs

Program Contact Info: Mark.Riggs@kctcs.edu / 606-326-2161

Program Description: The Pre-Engineering curriculum is for students who wish to complete an associate degree for transfer to baccalaureate degree engineering programs at area universities. Initial targeted areas include civil, chemical, and mechanical engineering although core courses are compatible with other engineering programs.

Student graduating from the Pre-Engineering program typically transfer to Engineering programs at the University of Kentucky, Marshall University, Ohio University, Morehead State University, Shawnee State University, and other universities.

The pre-engineering curriculum is a list of courses leading to an Associate in Science Degree.

FIRST SEMESTER

- MT 175 Calculus I 5
- CHE 105 General Chemistry I 3
- ENG 101 Writing I 3
- COM 181 Basic Public Speaking 3
- **Total hours 14**

SECOND SEMESTER

- MT 185 Calculus II 5
- ENG 102 Writing II 3
- CHE 107 General Chemistry II 3
- CHE 115 General Chemistry Lab 3
- CS 115 Intro to Computer Programming† 3
- **Total hours 17**

THIRD SEMESTER‡ HOURS

- MT 275 Calculus III 4
- PHY 231 University Physics I 4
- PHY 241 Physics I Lab 1
- PY 110 (or other social science) 3
- **Total hours 12**

FOURTH SEMESTER‡ HOURS

- MT 285 Differential Equations 3
- ME 220 Engineering Thermodynamics I 3
- PHY 232 University Physics II 4
- PHY 242 Physics Lab II 1
- **Total hours 11**

† This or a similar course will be used as a first computer course for engineers

‡ The following courses may be taken in semester three, semester four, or summer:

- GEO 160 (international) 3
- SOC 101 (multicultural) 3
- HIS 104 (or other social science) 3
- PHI 130 Intro to Philosophy: Morality & Society 3