The pre-engineering curriculum at ACTC is a list of courses leading to an Associate in Science Degree transferable to Engineering programs at:

- University of Kentucky
- Marshall University
- Ohio University
- Morehead State University
- Shawnee State University
- And other universities

Taking freshman and sophomore level courses at ACTC gives you the advantage of small classes that maximize your learning opportunities while staying close to home at an affordable cost.

This curriculum is designed for civil, chemical and mechanical engineering majors, but the core courses are also compatible with other engineering programs. Check with an advisor about courses appropriate for your field.

For more information:

ASHLAND.KCTCS.EDU
CLICK >> EDUCATION & TRAINING >> FIND YOUR PROGRAM

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(606) 326-2161 OR (606) 326-2105

COLLEGE DRIVE CAMPUS
1400 COLLEGE DRIVE, ASHLAND, KY 41101

GAINFUL EMPLOYMENT INFORMATION
For more information about graduation rates, the median debt of students who completed the program, and other important data on this program, visit ACTC’s website at Ashland.KCTCS.edu/Education-Training/Program-Finder/Gainful-Employment-Disclosures.aspx

COLLEGE ACCREDITATION
Ashland Community and Technical College is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award associate degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of Ashland Community and Technical College. Note: The Commission is to be contacted only if there is evidence that appears to support an institution’s significant non-compliance with a requirement or standard.

ACTC IS AN EQUAL EDUCATIONAL AND EMPLOYMENT OPPORTUNITY INSTITUTION.

JULY 2018
GENERAL CURRICULUM

This curriculum leads to an Associate in Science Degree.

NOTE: Students not ready for calculus would need previous math classes including college algebra and trigonometry.

Course: Credits
MAT 175 Calculus I 5
MAT 185 Calculus II 5
MAT 275 Calculus III 4
MAT 285 Differential Equations 3
Digital Literacy 3
PHY 231 General University Physics I 4
with PHY 241 Physics I Lab 1
PHY 232 General University Physics II 4
with PHY 242 Physics II Lab 1
CHE 170 General Chemistry I 4
CHE 175 General Chemistry I Lab 1
CHE 180 General Chemistry II 4
CHE 185 General Chemistry II Lab 1
COM 181 Basic Public Speaking 3

Total hours 16

SECOND SEMESTER
MAT 185 Calculus II 5
ENG 102 Writing II 3
CHE 180 General Chemistry II 4
CHE 185 General Chemistry II Lab 1

Total hours 16

THIRD SEMESTER
MAT 275 Calculus III 4
PHY 231 University Physics I 4
PHY 241 Physics I Lab 1
ECO 201 Principles of Microeconomics 3
(or other social interaction course)
HIS 104 History of Europe through Mid-17th Century (or other heritage course)

Total hours 15

FOURTH SEMESTER
MAT 285 Differential Equations 3
PHY 232 University Physics II 4
PHY 242 Physics Lab II 1
GEO 160 Lands and People of the Non-Western World (international)

Total hours 14

Total Degree Hours 61

Courses may change to reflect new program requirements. Check with an advisor before registering.

Most Kentucky colleges and universities offer scholarships for students who transfer from KCTCS. For more information, you can email the Advising Center at AS_ADVISORS@KCTCS.EDU.

SAMPLE SCHEDULE

FIRST SEMESTER
Course Credits
MAT 175 Calculus I 5
CHE 170 General Chemistry I 4
CHE 175 General Chemistry I Lab 1
ENG 101 Writing I 3
CIT 105 Intro to Computers 3

Total hours 16

SECOND SEMESTER
MAT 185 Calculus II 5
ENG 102 Writing II 3
CHE 180 General Chemistry II 4
CHE 185 General Chemistry II Lab 1

Total hours 16

THIRD SEMESTER
MAT 275 Calculus III 4
PHY 231 University Physics I 4
PHY 241 Physics I Lab 1
ECO 201 Principles of Microeconomics 3
(or other social interaction course)
HIS 104 History of Europe through Mid-17th Century (or other heritage course)

Total hours 15

FOURTH SEMESTER
MAT 285 Differential Equations 3
PHY 232 University Physics II 4
PHY 242 Physics Lab II 1
GEO 160 Lands and People of the Non-Western World (international)

Total hours 14

Total Degree Hours 61

PRE-ENGINEERING CURRICULUM

Application Checklist

1. Submit an Application for Admission, online, at Ashland.KCTCS.edu.

2. Submit to the Admissions Office:
   - An official high school transcript, with graduation date, or GED scores
   - Official transcripts from other colleges or universities you have attended, including those for dual credit courses
   - Placement test scores (ACT, KYOTE) or complete placement testing

3. Attend orientation and meet with an advisor to schedule classes.

4. Financial Aid is available for those who qualify.
   - Please fill out a FAFSA at www.FAFSA.ed.gov.
   - Please speak with a financial aid specialist to receive counseling, if appropriate.

5. Pay tuition and fees before published cancellation deadlines. More information regarding tuition rates can be found on our website at: Ashland.kctcs.edu /Affording-College/index.aspx

APPLICATIONS AND CLASS SCHEDULES ARE ON THE WEB: ASHLAND.KCTCS.EDU