

MECHANICAL ENGINEERING

Associate of Science degree



Program and Career Description:

Most careers in engineering require a bachelor's degree or higher so the Associate of Science in Mechanical Engineering is designed for students wanting to complete the first two years of the bachelor's degree in a community college setting. Our students work closely with science and math faculty and have ample access to science and computer labs. Below are a few examples of career and salary estimates for engineering. Please note that this pathway requires 66 credit hours and recommends one summer semester. Students will need to meet the requirements for MATH 1910 before their freshman fall semester.

Career	Entry-Level Education	Entry-Level Pay	Median Pay	Experienced Pay
Mechanical Engineer	Bachelor's degree	\$57,580	\$85,500	\$99,880
Electrical Engineer	Bachelor's degree	\$59,190	\$86,130	\$101,820

Career and salary information taken from JOBS4TN.GOV. Check out this website for additional information about job descriptions, education requirements and abilities, and supply and demand for these careers. For additional information from a national perspective, go to Bureau of Labor Statistics, U. S. Department of Labor on the internet at www.bls.gov. Visit the [Occupational Outlook Handbook](#) on this website. Salaries are not guaranteed.

Transfer Options

This program is a Tennessee Transfer Pathway (TTP) major. A student who completes the associates degree in this major is guaranteed that all required community college courses will be accepted in this major at the transfer institution. To see which four-year institutions offer this TTP major and guarantees a seamless transfer, visit the Tennessee Transfer Pathway website at www.tntransferpathway.org.

Articulation agreements exist between other private and non-TN public institutions. These agreements are available at www.columbiastate.edu/admissions/transfer-information.



MECHANICAL ENGINEERING

Major in Tennessee Transfer Pathway with Emphasis in Mechanical Engineering (A.S.)

Program Requirements

Students may be required to take additional Learning Support courses.

Communications Requirement
COMM 205 or COMM 2055
ENGL 1010, 1020

History Requirement (Take 2 courses)
HIST 2010, 2020, 2030, 2310, 2320

Humanities/Fine Arts (Take 3 courses -- one must be a literature course)
ART 1035, 2000, 2020
ENGL 2160, 2860
HUM 1010, 1020
MUS 1030
PHIL 1030, 1040, 2200
THEA 1030
Literature Options: ENGL 2055, 2130, 2235, 2310, 2320

Natural Sciences Requirement
PHYS 2110, 2120

Mathematics Requirement
MATH 1910

Social/Behavioral Sciences (Take 2 courses)
ANTH 1230, 1430
ECON 2100, 2200
GEOG 2010
MCOM 1110
PHED 2120
POLS 1010, 1030, 2025, 2035
PSYC 1030, 2130
SOC 1010, 1040, 2010

Major Required Courses
CHEM 1110
COLS 101
ENGR 2110, 2120
MATH 1920, 2010, 2110, 2120

If you have completed TN eCampus courses, run a degree audit from the student tab in myChargerNet to determine how these courses apply to this program.

Requirements for Graduation include:

- earning 25% of total program credits in residence at Columbia State.
- earn a cumulative GPA of 2.0 or higher.
- taking the Exit Exam.

For more information contact:
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Sample Academic Plan

Students requiring MATH 1130 and MATH 1730 should take these courses prior to beginning the following pathway to ensure timely completion.

First Year – Fall Semester

___ ENGL 1010	English Composition I	3
___ MATH 1910*	Calculus I	4
___ History Requirement		3
___ PHYS 2110	Calculus-Based Physics I	4
___ COLS 101	Columbia State College Success	1
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First Year – Spring Semester

___ ENGL 1020	English Composition II	3
___ MATH 1920	Calculus II	4
___ History Requirement		3
___ PHYS 2120	Calculus-Based Physics II	4
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First Year – Summer Semester

___ Literature Requirement		3
___ COMM 2025	Fundamentals of Communication or	
___ COMM 2055	Argumentation and Debate	3
		6

Second Year – Fall Semester

___ MATH 2110	Calculus III	4
___ ENGR 2110	Statics	3
___ CHEM 1110	General Chemistry I	4
___ Humanities/Fine Arts		3
___ Social/Behavioral Science		3
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Second Year – Spring Semester

___ MATH 2010	Introduction to Linear Algebra	3
___ MATH 2120	Differential Equations	3
___ ENGR 2120	Dynamics	3
___ Humanities/Fine Arts		3
___ Social/Behavioral Science		3
		15

TOTAL CREDIT HOURS 67

*Critical Course - Higher achievement in identified courses is predictive of graduation success.

The Associate of Science Civil Mechanical Major requires 67 college-level credits. This is a transfer program which was granted an exception to the 60-hour limit requirement reached through Tennessee Board of Regents consensus. The exception was granted due to additional hours needed to adequately cover the necessary learning outcomes in the program. Some courses have prerequisites and corequisites. See the Columbia State Catalog for more information.

Columbia State Community College, a Tennessee Board of Regents institution, is an equal opportunity, affirmative action educational institution.
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