

# ENGINEERING SYSTEMS TECHNOLOGY

## Associate of Applied Science degree



### Program and Career Description:

The Associate of Applied Science in Engineering Systems Technology is a two-year degree program designed to prepare graduates for many different careers related to manufacturing with an emphasis on technology, critical thinking, and problem solving. Students will take courses in the basic fundamentals of engineering technology and move to very advanced applications including robotics. This degree is accredited by The Association of Technology, Management, and Applied Engineering (ATMAE).

Career	Beginning Salary	Experienced Salary Median
Industrial Machinery	\$32,750	\$46,780
Maintenance Workers	\$25,460	\$40,110
Electrical/Electronic Engineering Technicians	\$43,450	\$62,360
Maintenance & Repair Workers	\$23,910	\$34,580

Career and salary information taken from [www.bls.gov](http://www.bls.gov). Check out this web site for additional information about education requirements and preferred work styles and abilities for these careers. Salaries are not guaranteed.

### Transfer Options

This degree program is in compliance with the Common Course Curriculum Library for the A.A.S. in Engineering Systems Technology program as delivered by the Tennessee Board of Regents community colleges.

This degree program is not designed for transfer to a four year college or university. However, some agreements are in place that will allow credit to be given for a portion or the entirety of this degree path. Please check with the transfer institution or your advisor for specific details.

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



# ENGINEERING SYSTEMS TECHNOLOGY

## Major in Engineering Systems Technology (A.A.S.)

### Program Requirements

Students may be required to take additional Learning Support courses.

Communications Requirement  
ENGL 1010

Humanities/Fine Arts (Take one course)  
ART 1035, 2000, 2020  
ENGL 2055, 2130, 2160, 2235, 2310, 2320, 2860  
HUM 1010, 1020  
MUS 1030  
PHIL 1030, 1040, 2200  
THEA 1030

Mathematics Requirement (Take one course)  
MATH 1010, 1130, 1530, 1630, 1710, 1720, 1730, 1830, 1910

Natural Science Requirement  
PSCI 1030

Social/Behavioral Sciences (Take one course)  
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 Field Core  
ENST 1311, 1350, 1370, 2391  
INFS 1010

Required Electives from Common Course Library  
COLS 101  
COMM 2025  
EETC 1311, 2311, 2332, 2333, 2350, 2361  
ENST 1360, 2361  
ENST 2382 or ENST 2399

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 GPA of at least 2.0 in program courses.
- earn a cumulative GPA of 2.0 or higher.
- taking the Exit Exam.

### Sample Academic Plan

#### First Year – Fall Semester

___	INFS 1010	Computer Applications	3
___	EETC 1311	Electrical Circuit I	3
___	ENST 1350	Industrial Safety	3
___	ENST 1370	Manufacturing Processes	3
___	COLS 101	Columbia State College Success	1
			<b>13</b>

#### First Year – Spring Semester

___	ENGL 1010	English Composition I	3
___	Mathematics Requirement		3
___	ENST 1360	Mechanical Power Transmission	3
___	ENST 2361	Fluid Power Systems	3
___	EETC 2333	Industrial Electric Control	3
			<b>15</b>

#### First Year – Summer Semester

___	Social/Behavioral Sciences Requirement - PHED 2120		3
___	Humanities/Fine Arts Requirement - MUS 1030		3
			<b>6</b>

#### Second Year – Fall Semester

___	PSCI 1030	Survey of Physical Science	4
___	EETC 2361	Instrumentation Technology	3
___	EETC 2332	PLC II	3
___	EETC 2350	Integrated Robotics	3
___	EETC 2311	Power Technology	3
			<b>16</b>

#### Second Year – Spring Semester

___	ENST 1311	Computer Aided Design I	3
___	ENST 2391	Internship	3
___	COMM 2025	Fundamentals of Communication	3
___	ENST 2382	Fundamentals of Mechatronics <b>or</b>	
___	ENST 2399	Special Topics - Multi Skilled	3
			<b>12</b>

**TOTAL CREDIT HOURS 62**

**For more information contact:  
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or  
Science, Technology and Math Division office  
at 931.540.2710**