

Electrical Engineering Technology

	Two-Year Institution		Four-Year Institution	
	18 (AAS) ¹		4 (BS) ²	
MATHEMATICS GENERAL EDUCATION	Two-Year Institution		Four-Year Institution	
	<i>Course Name</i>	<i>Frequency</i>	<i>Course Name</i>	<i>Frequency</i>
	College Algebra	33%	Pre-calculus	50%
	Technical Mathematics	28%	Math for Business Majors I	25%
	Trigonometry	22%	Business Calculus	25%
	Pre-Calculus	17%	Trigonometry	25%
	Technical Mathematics 2	11%	Technical Calculus I/ Applied Calculus I	50%
		Applied Calculus II	25%	
ARTS AND HUMANITIES GENERAL EDUCATION	Two-Year Institution		Four-Year Institution	
	<i>Course Name</i>	<i>Frequency</i>	<i>Course Name</i>	<i>Frequency</i>
	Any Course	33%	Any Course	75%
	NONE	33%	Engineering Ethics	25%
	Ethics Related	11%		
Critical Thinking	11%			
SOCIAL SCIENCES GENERAL EDUCATION	Two-Year Institution		Four-Year Institution	
	<i>Course Name</i>	<i>Frequency</i>	<i>Course Name</i>	<i>Frequency</i>
	Any Course	33%	Any Course	50%
	Microeconomics	17%	Microeconomics	25%
	Macroeconomics	17%	Macroeconomics	25%
	NONE	17%		
	Psychology	17%		
Sociology	17%			
NATURAL AND PHYSICAL SCIENCE GENERAL EDUCATION	Two-Year Institution		Four-Year Institution	
	<i>Course Name</i>	<i>Frequency</i>	<i>Course Name</i>	<i>Frequency</i>
	General Physics 1	61%	General Chemistry I	75%
	General Physics 2	22%	General Physics I	75%
	General Chemistry 1	17%	Technical Physics	25%
	Applied Physics 1	22%		
	Applied Physics 2	11%		
MAJOR COURSES	Two-Year Institution		Four-Year Institution	
	<i>Course Name</i>	<i>Frequency</i>	<i>Course Name</i>	<i>Frequency</i>
	*DC Circuits	89%	*DC Circuits	75%
	*Digital Electronics	78%	*Digital Electronics	100%
	*AC Circuits	94%	*AC Circuits	75%
	*Microprocessors	44%	*Microprocessors	100%
	*Electronics	61%	*Electronics	75%
	*Programmable Logic Controllers	39%	*Programmable Logic Controllers	75%
	Programmable Controller	44%	DC Circuits (<i>not TAG approved</i>)	25%
	Digital Electronics (<i>not TAG approved</i>)	11%	AC Circuits (<i>not TAG approved</i>)	25%

¹ Every institution except Clark State, Hocking, North Central, Rio, and Terra

² Cleveland, UC, UT, and YSU. Miami has a BS in Applied Science in Electrical and Computer Engineering Technology that is a completion program.

*Programmable Logic Controllers	Microprocessor Systems <i>(not TAG approved)</i>	17%	Electronics Principles <i>(not TAG approved)</i>	25%
	Electronics 1 <i>(not TAG approved)</i>	11%	Introduction to Engineering Technology	50%
	AC Circuits <i>(not TAG approved)</i>	11%		
	DC Circuits <i>(not TAG approved)</i>	11%		
	Introduction to Engineering	22%		
	Introduction to Engineering Technologies	17%		
	C Programming	17%		
	Circuit Analysis 2	11%		
	Communication Electronics	11%		
	Direct Current Circuit Analysis	11%		
	Electrical Machinery	11%		
	Electronic Devices and Circuits	11%		

Mechanical Engineering Technology

		Two-Year Institution		Four-Year Institution	
		17 (AAS) ³		5 (BS) ⁴	
MATHEMATICS GENERAL EDUCATION	Two-Year Institution		Four-Year Institution		
		<i>Course Name</i>	<i>Frequency</i>	<i>Course Name</i>	<i>Frequency</i>
	<u>Recommended Courses</u> College Algebra and Trigonometry or Pre-Calculus	College Algebra	29%	Trigonometry	40%
		Trigonometry	29%	Pre-Calculus	40%
		Pre-calculus	18%	Technical/Applied Calculus 1	40%
		Technical Math	24%	Calculus I	40%
		Technical Mathematics II	12%	Business Calculus	20%
Calculus 1		6%	College Algebra	20%	
ARTS AND HUMANITIES GENERAL EDUCATION	Two-Year Institution		Four-Year Institution		
		<i>Course Name</i>	<i>Frequency</i>	<i>Course Name</i>	<i>Frequency</i>
	Any course	41%	Any Course	80%	
	NONE	24%	Engineering Ethics	20%	
	Critical Thinking	12%			
	Ethics	12%			
SOCIAL SCIENCES GENERAL EDUCATION	Two-Year Institution		Four-Year Institution		
		<i>Course Name</i>	<i>Frequency</i>	<i>Course Name</i>	<i>Frequency</i>
	Any	53%	Any Course	80%	
	NONE	18%	Microeconomics	20%	
	Microeconomics	12%	Macroeconomics	20%	
	Macroeconomics	6%			
NATURAL AND PHYSICAL SCIENCE GENERAL EDUCATION	Two-Year Institution		Four-Year Institution		
		<i>Course Name</i>	<i>Frequency</i>	<i>Course Name</i>	<i>Frequency</i>
	<u>Recommended Courses</u> General Physics 1 w/lab	General Physics I (algebra-based)	77%	General Physics I	80%
		General Physics II (algebra-based)	24%	General Physics II	20%
		Algebra-based OR Calculus-based Physics I & II	6%	General Chemistry 1	100%
		Applied Physics I	12%	Technical Physics I	20%
		General Physics	6%	Technical Physics II	20%
		Chemistry	12%		
MAJOR COURSES	Two-Year Institution		Four-Year Institution		
		<i>Course Name</i>	<i>Frequency</i>	<i>Course Name</i>	<i>Frequency</i>
	<u>TAG Courses</u> *Statics	*Statics	88%	*Statics	80%
		*Strength of Materials	88%	*Strength of Materials	40%
	*Strength of Materials	*Fluid Mechanics	47%	*Fluid Mechanics	80%
		*Manufacturing Processes	59%	*Manufacturing Processes	60%
	*Fluid Mechanics	*CAD	94%	*CAD	80%
	*Manufacturing Processes	*Engineering Materials	65%	*Engineering Materials	
		*Manufacturing Processes OR Machine Tools	6%	Engineering Materials (not TAG approved)	40%

³ Every institution except Belmont, Hocking, Lorain, Owens, Rio, and Southern State

⁴ Cleveland, Kent, UC, UT, and YSU. UAkron has a BS in MET and Miami has a BSAS in MET that are both a completion programs for students who have an AAS in MET.

*CAD *Engineering Materials	Statics and Strength of Materials (combined course)	12%	CAD (<i>not TAG approved</i>)	20%
	Fluid Mechanics/Hydraulics & Pneumatics (not TAG approved)	24%	Manufacturing Processes (<i>not TAG approved</i>)	20%
	Engineering Materials (not TAG approved)	6%	Strength of Materials (<i>not TAG approved</i>)	40%
	Introduction to Engineering /Tech	47%	Introduction to Engineering /Tech	60%
	Introduction to MET	6%		

Civil/Construction Engineering Technology

	Two-Year Institutions		Four-Year Institutions	
	10 (AAS) ⁵		3 (BS) ⁶	
MATHEMATICS GENERAL EDUCATION <u>Recommended Courses</u> College Algebra or Pre-Calculus	Two-Year Institutions		Four-Year Institutions	
	Course Name	Frequency	Course Name	Frequency
	Pre-Calculus	30%	Technical Calculus I	67%
	Trigonometry	30%	Applied Calculus II	67%
	College Algebra	20%	Applied Calculus I	33%
	Technical Mathematics I	20%	Technical Calculus II	33%
	Technical Mathematics II	20%		
ARTS AND HUMANITIES GENERAL EDUCATION	Two-Year Institutions		Four-Year Institutions	
	Course Name	Frequency	Course Name	Frequency
	Any Course	40%	Any Course	33%
	History of Architecture	20%	Engineering Ethics	33%
	AH or Social Science course	20%	Western/World Civilization I	33%
	None	20%	Western/World Civilization II	33%
SOCIAL SCIENCES GENERAL EDUCATION	Two-Year Institutions		Four-Year Institutions	
	Course Name	Frequency	Course Name	Frequency
	Any Course	40%	Any Course	67%
	Macroeconomics	10%	American Urban Society	33%
	None	30%	Survey of Basic Economics	33%
NATURAL AND PHYSICAL SCIENCE GENERAL EDUCATION <u>Recommended Courses</u> General Physics I	Two-Year Institutions		Four-Year Institutions	
	Course Name	Frequency	Course Name	Frequency
	General Physics I	70%	General Physics I	67%
	Environmental Science	10%	General Physics II	33%
	Any Course	10%	Allied Health Chemistry	33%
	Applied Physics I	10%	Technical Physics	33%
	Applied Physics 2	10%		
FOREIGN LANGUAGE	Two-Year Institutions		Four-Year Institutions	
	Course Name	Frequency	Course Name	Frequency
	n/a		n/a	
MAJOR COURSES <u>TAG Courses</u> *Surveying *Construction Methods and Materials *Soils *Construction Materials Testing *Soils *Construction Materials Testing	Two-Year Institutions		Four-Year Institutions	
	Course Name	Frequency	Course Name	Frequency
	*Surveying	50%	*Surveying	67%
	*Construction Methods and Materials	50%	*Surveying or Site Engineering	33%
	*Soils	30%	*Soils	100%
	*Construction Materials Testing	20%	*Construction Methods and Materials	100%
	Construction Estimating	40%	*Construction Materials Testing	100%
	Surveying (<i>not TAG approved</i>)	40%	Plan Reading	67%
	Construction Methods and Materials (not TAG)	10%	Construction Management	100%

⁵ COTC, Cincinnati State, CSCC, Tri-C, Lakeland, Lorain, Northwest, Sinclair, Stark State, and Zane State

⁶ UAkron, UT, and YSU

	approved)			
	Soils (not TAG approved)	30%	Construction Estimating	100%
	Construction Materials Testing (not TAG approved)	30%	Hydraulics	67%
	Computer Aided Design	80%	Intro to Engineering Technology	67%
	Strength of Materials	60%		
	Statics	40%		
	Statics & Strength of Materials	30%		
	Construction Safety	10%		