

## AAS IN INDUSTRIAL ELECTRONICS TECHNOLOGY TO BS IN ENGINEERING TECHNOLOGY, ELECTRICAL/ELECTRONICS CONCENTRATION

SUGGESTED SEQUENCE AT BELMONT COLLEGE		
Semester One	15 Credits	KSU Equivalent
EIE 1101 DC Circuits	4	EERT 12000 Electric Circuits I, Applied Course
EIE 1201 Digital Electronics	4	EERT 22004 Digital Systems, Applied Course
ENG 1110 Composition I	3	# ENG 11011 College Writing I (KCP1)
MAT 1130 College Algebra	4	# MATH 11010 Algebra for Calculus (KMCR)
Semester Two	15 Credits	KSU Equivalent
EIE 1102 AC Circuits	4	EERT 12001 Electric Circuits II, Applied Course
BUS 1125 Supervision and Management	3	BMRT 11009 Introduction to Management Technology
MAT 1140 Trigonometry	3	MATH 11022 Trigonometry (KMCR)
PHY 1110 Physics I	5	# PHY 13001 General College Physics I and PHY 13021 General College Physics I Lab (KBS, KLAB)
Semester Three	18-19 Credits	KSU Equivalent
COM 1110 Interpersonal Communications	3	COMM 20001 Interpersonal Communication
ECN 1110 Macroeconomics	3	# ECON 22061 Principles of Macroeconomics (KSS) Kent Core Additional
EIE 2105 Analog Electronics	4	EERT 12010 Introduction to Electronics, Applied Course and EERT 22011 Electronic Systems
PHY 1112 Physics II	5	# PHY 13002 General College Physics II and PHY 13022 General College Physics II Lab (KBS, KLAB)
Electronics Elective	3-4	Applied Course
Semester Four	15-16 Credits	KSU Equivalent
EIE 2120 NEC	2	ENGT 2X000, Applied Course
EIE 2301 DC & AC Machinery	4	ENGR 43220 Electrical Machinery
EIE 2190 Electronics Capstone	2	MERT 22009 Engineering Technology Project, Applied Course
FST 1116 Workplace Safety	1	TRAN 1X000, Applied Course
Arts & Humanities Elective	3	# Kent Core Humanities or Fine Arts
Electronics Elective	3-4	Applied Course
<b>63-65 Total Credit Hours to Complete AAS from Belmont College</b>		

SUGGESTED SEQUENCE AT KENT STATE UNIVERSITY	
Semester Five	16 Credits
OTEC 26636 Project Management for Administrative Professionals	1
TECH 31020 Automated Manufacturing or TECH 43700 Computer Integrated Manufacturing	3
ECON 22060 Principles of Microeconomics @	3
EERT 32003 Technical Computing	3
MATH 11012 Intuitive Calculus @	3
EERT 21010 Engineering & Professional Ethics or TECH 31010 Engineering & Professional Ethics	3
Semester Six	15 Credits
ENG 20002 Introduction to Technical Writing or ITAP 26638 Business Communications	3
TECH 36620 Project Management in Engineering & Technology	3
ENG 21011 College Writing II @	3
TECH 33363 Metallurgy and Materials Science	3
Kent Core Humanities @	3
Semester Seven	15 Credits
Electrical/Electronics Electives	9
Kent Core Fine Arts @	3
Kent Core Social Science	3
Semester Eight	14-15 Credits
TAS 47900 Applied Studies Capstone Seminar	3
TECH 31000 Cultural Dynamics of Technology (3) or TECH 33092 Cooperative Education—Professional Development (2)	2-3
TECH 43080 Industrial and Environmental Safety	3
General Elective (Upper-division)	3
TECH 33031 Programmable Logic Controllers	3
<b>123-126 Total Credit Hours to Complete BS from KSU, Including Transfer Coursework</b>	

# Course will fulfill Kent State University's Kent Core (general education) requirement.

\* Students should consult the [Kent State University Transfer Credit Guide](#) to ensure KHUM/KFA attribute.

@ Course may be taken at Belmont College and transferred to Kent State. However, please be aware of Kent State's residence policy.

# GRADUATION REQUIREMENTS SUMMARY

Belmont College: Associate of Applied Science Degree, Industrial Electronics Technology

Kent State University: Bachelor of Science Degree, Engineering Technology, Electrical/Electronics

**Minimum Total Hours:** 123

**Minimum Upper-Division Hours (30000-40000 level course):** 39

**Minimum Kent Core Hours:** 36

**Minimum Major GPA:** 2.0

**Minimum Overall GPA:** 2.0

It is recommended that students intending to pursue the Bachelor of Science Degree, Engineering Technology in Electrical/Electronics through Kent State University consult with academic advisors at both Belmont College and Kent State University.

## Kent Core Requirements

Bachelor's Requirements	
Requirement	Credits/Courses
• <a href="#">Kent Core Composition (KCOMP)</a>	6
• <a href="#">Kent Core Mathematics and Critical Reasoning (KMCR)</a>	3
• <a href="#">Kent Core Humanities and Fine Arts (KHUM/KFA) (min one course each)</a>	9
• <a href="#">Kent Core Social Sciences (KSS) (must be from two disciplines)</a>	6
• <a href="#">Kent Core Basic Sciences (KBS/KLAB) (must include one laboratory)</a>	6-7
• <a href="#">Kent Core Additional (KADL)</a>	6
<b>Total Credit Hours:</b>	<b>36-37</b>

## Electrical/Electronics Engineering Technology Concentration Requirements

Course List		
Code	Title	Credit Hours
Concentration Requirements (courses count in major GPA)		
• <a href="#">TECH 31020</a>	AUTOMATED MANUFACTURING	3
or <a href="#">TECH 43700</a>	COMPUTER INTEGRATED MANUFACTURING	
• <a href="#">TECH 33363</a>	METALLURGY AND MATERIALS SCIENCE	3
• <a href="#">TECH 43080</a>	INDUSTRIAL AND ENVIRONMENTAL SAFETY	3
Choose from the following:		12

Course List		
Code	Title	Credit Hours
• <a href="#">EERT 32005</a>	INSTRUMENTATION	
• <a href="#">GAF 42002</a>	ENERGY MANAGEMENT SYSTEMS	
• <a href="#">GAF 42003</a>	LEAN MANUFACTURING, SIX SIGMA AND OPERATIONS TECHNOLOGY	
• <a href="#">TECH 31032</a>	POWER TECHNOLOGY	
• <a href="#">TECH 33016</a>	PC/NETWORK ENGINEERING AND TROUBLESHOOTING	
• <a href="#">TECH 33031</a>	PROGRAMMABLE LOGIC CONTROLLERS	
• <a href="#">TECH 33223</a>	ELECTRONIC COMMUNICATION	
• <a href="#">TECH 33225</a>	INDUSTRIAL CONTROL SYSTEMS	
• <a href="#">TECH 33700</a>	QUALITY TECHNIQUES	
• <a href="#">TECH 43220</a>	ELECTRICAL MACHINERY	
Additional Requirements (courses do not count in major GPA)		
• <a href="#">MATH 11012</a>	INTUITIVE CALCULUS (KMCR)	3
Physics Elective A, choose from the following:		3-5
• <a href="#">PHY 12201</a>	TECHNICAL PHYSICS I (KBS) (KLAB)	
• <a href="#">PHY 13001</a> & <a href="#">PHY 13021</a>	GENERAL COLLEGE PHYSICS I (KBS) and GENERAL COLLEGE PHYSICS LABORATORY I (KBS) (KLAB)	
Physics Elective B, choose from the following:		3-5
• <a href="#">PHY 12202</a>	TECHNICAL PHYSICS II (KBS) (KLAB)	
• <a href="#">PHY 13002</a> & <a href="#">PHY 13022</a>	GENERAL COLLEGE PHYSICS II (KBS) and GENERAL COLLEGE PHYSICS LABORATORY II (KBS) (KLAB)	
• <a href="#">PHY 13012</a> & <a href="#">PHY 13022</a>	COLLEGE PHYSICS II (KBS) and GENERAL COLLEGE PHYSICS LABORATORY II (KBS) (KLAB)	
Applied Courses from Associate Degree, Minor or Individualized Specialization <sup>1</sup>		27
• <a href="#">ENGT 12005</a>	• APPLICATIONS IN COMPUTER-AIDED DESIGN	
• <a href="#">MERT 12000</a>	• ENGINEERING DRAWING	
• <a href="#">TECH 33095</a>	• SPECIAL TOPICS:APPLIED SCIENCE AND TECHNOLOGY	
• Any Electrical/Electronic and Related Technologies (EERT) Electives		
• Any other course by program director approval		
General Electives (total credit hours depend on earning 120 credit hours, including 39 upper-division credit hours)		15-16
Minimum Total Credit Hours:		74

<sup>1</sup> Applied courses should be chosen from an approved associate degree or a declared minor or individualized specialization selected in consultation with an advisor.

## University Requirements

All students in a bachelor's degree program at Kent State University must complete the following university requirements for graduation.

**NOTE:** University requirements may be fulfilled in this program by specific course requirements. Please see Program Requirements for details.

Bachelor's Requirements	
Requirement	Credits/Courses
<a href="#">Destination Kent State: First Year Experience</a>	1
<ul style="list-style-type: none"><li>Course is not required for students with 25 transfer credits, excluding College Credit Plus, or age 21+ at time of admission.</li></ul>	
<a href="#">Diversity Domestic/Global (DIVD/DIVG)</a>	2 courses
<ul style="list-style-type: none"><li>Students must successfully complete one domestic and one global course, of which one must be from the Kent Core.</li></ul>	
<a href="#">Experiential Learning Requirement (ELR)</a>	varies
<ul style="list-style-type: none"><li>Students must successfully complete one course or approved experience.</li></ul>	
<a href="#">Kent Core (see table below)</a>	36-37
<a href="#">Writing-Intensive Course (WIC)</a>	1 course
<ul style="list-style-type: none"><li>Students must earn a minimum C grade in the course.</li></ul>	
<a href="#">Upper-Division Requirement</a>	39 (or 42)
<ul style="list-style-type: none"><li>Students must successfully complete 39 upper-division (numbered 30000 to 49999) credit hours to graduate. Students in a B.A. and/or B.S. degree in the College of Arts and Sciences must complete 42 upper-division credit hours.</li></ul>	
<a href="#">Total Credit Hour Requirement</a>	120
Some bachelor's degrees require students to complete more than 120 credit hours.	

## Contact Information:

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