

Macomb Community College: Associate of Applied Science (AAS) in Electronic Engineering Technology	Wayne State University: Bachelor of Science (BS) in Electrical/Electronic Engineering Technology
<i>Articulated Program: Students who have declared this program on their student record are following a formal agreement between Wayne State University and Macomb Community College.</i>	
Macomb Community College - Before Transfer	
Major Requirements	Minimum 62 Hrs
Semester 1:	
ELEC 1161 - Electronic Technology 1	3
ELEC 1171 - Electronic Technology 2	3
TMTH 1150 - RCL Analysis	4
CORE 1060 - Industrial Computer Technology	4
Semester 2:	
ELEC 1182 - Semiconductor Theory & Devices	3
ELEC 1192 - Semiconductor Devices & Circuits	3
ELEC 1211 - Digital Electronics Basics	3
<i>GEN ED - Group I.A Satisfies MTA</i> ENGL 1180 - Communications 1 or ENGL 1210 - Composition 1	3-4
<i>GEN ED - Group II Satisfies MTA</i> PHYS 1180 - College Physics 1 <i>Required for WSU's program</i> or PHSA 1050 - Physical Science	4
Semester 3:	
ELEC 1221 - Microcontrollers With Robotic Application	3
ELEC 2010 - Instrumentation 1-Transducer Theory	3
ELEC 2150 - LabVIEW Basics 1	3
ELEC 2160 - LabVIEW Basics 2	3
<i>GEN ED - Group III Satisfies MTA</i> Take one (1) course from any of the following: Anthropology, Economics, Geography, History, INTL 2010, Political Science, Psychology, or Sociology	3-4
Semester 4:	
ELEC 2490 - Instrumentation 2-Advanced Op-Amps & Linear Integrated Circuits	3
ELEC 2270 - Microcontroller Programming	3
ELEC 2400 - Microprocessor Interfacing	3
ELEC 2005 - Discrete Amplifiers & Introduction to Op-Amps	3
<i>GEN ED - Group IV Satisfies MTA</i> PHIL 2120 - Professional Ethics <i>Required for WSU's program</i>	3

Additional requirements to be completed at Macomb Community College	Minimum 20 Hrs
<i>Satisfies MTA</i> MATH 1465 - Accelerated Precalculus or MATH 1415 - Precalculus 1: College Algebra and MATH 1435 - Precalculus 2: College Trigonometry	5 4 3
ENGL 1190 - Communications 2 <i>Satisfies MTA</i> or ENGL 1220 - Composition 2 <i>Satisfies MTA</i>	3-4
CHEM 1050 - Introduction to General Chemistry <i>Satisfies MTA</i>	4
PHYS 1190 - College Physics 2 <i>Satisfies MTA</i>	4
BCOM 2050 - Business Communications	4
Optional: ITCS 2530 - C++ Programming 1 <i>Meets WSU's ET 2160 Requirement</i>	(4)
General Education--Michigan Transfer Agreement plan*	Minimum 30 Hrs
<i>Students who complete a Michigan Transfer Agreement (MTA or MACRAO) will have met the general education requirements for Wayne State University. Students who do not complete a Michigan Transfer Agreement will have additional requirements. See a Macomb counselor or academic advisor for specific MTA courses and requirements or visit: www.macomb.edu/transfer.</i>	
Basic Composition--2 courses: ENGL 1180 or ENGL 1210 <i>Met in degree requirements</i> and ENGL 1190 or ENGL 1220	-
Mathematics--1 course: <i>Required for WSU's program</i> MATH 1465 - Accelerated Precalculus or MATH 1415 - Precalculus 1: College Algebra and MATH 1435 - Precalculus 2: College Trigonometry	-
Humanities & Fine Arts--2 courses: PHIL 2120 - Professional Ethics <i>Required for WSU's program</i> And 1 additional course from a different subject area: any ARAB, any CHIN, any FREN, any GRMN, any ITAL, any SPAN (except SPAN 1265), ARTT 1620, ARTT 1625, ARTT 2650, ARTT 2660, ENGL 1730, ENGL 2410, ENGL 2420, ENGL 2510, ENGL 2520, ENGL 2600, ENGL 2610, ENGL 2640, ENGL 2710, ENGL 2720, ENGL 2730, ENGL 2740, ENGL 2800, ENGL 2810, ENGL 2850, any HUMN, INTL 2000, INTL 2300, INTL 2800, MUSC 1030, MUSC 1040, MUSC 1050, MUSC 1060, MUSC 1070, MUSC 1160, MUSC 1170, MUSC 2080, MUSC 2180, MUSC 2710, or MUSC 2720	3-4
Sciences--2 courses needed from different subject areas, with one course containing a lab CHEM 1050 - Introduction to General Chemistry <i>Required for WSU's program</i> PHYS 1180 - College Physics 1 <i>Required for WSU's program</i>	-
Social Sciences--2 courses from different subject areas: 1 additional course from subject area not selected in Semester 3, Group III any ANTH, any ECON, any GEOG, any HIST, INTL 2010, any POLS, any PSYC, or any SOCY	3-4
If needed, complete an additional course(s) from the applicable general education categories above to reach the minimum 30 MTA required credit hours	-

Wayne State University Coursework - After Transfer:

Wayne State University Coursework - After Transfer:	
Major Requirements	42 Hrs
ET 2160 - Computer Applications for ET <i>Requirement met if ITCS 2530 is completed at Macomb</i>	2
ET 3430 - Applied Differential and Integrated Calculus	4
ET 3450 - Applied Calculus and Differential Equations	4
ET 3850 - Reliability and Engineering Statistics	3
ET 3870 - Engineering Economic Analysis	3
ET 5870 - Engineering Project Management	3
EET 3100 - Advanced Digital Design	3
EET 3150 - Network Analysis	4
EET 3500 - Electrical Machines and Power Systems	3
EET 3720 - Micro and Programmable Controllers	3
EET 3300 - Applied Signal Processing	3
EET 4200 - Control Systems	4
ET 4999 - Senior Project	3
Maximum Macomb Credits = 86	Minimum credits at Wayne State University = 42
Minimum credits for Bachelor of Science in Electrical/Electronic Engineering Technology - 124 credit hours	

Important Information:

- All content is for informational purposes and is designed to be used as a tool to assist students with transfer information but should not be used for self-advising.
- Courses may require prerequisite courses not included on this guide. Consult with your academic advisor before registering for classes.
- When pursuing a Macomb degree work closely with a Macomb and Wayne State University advisor to ensure BOTH Macomb and Wayne State University degree requirements are being met.
- A minimum cumulative 2.00 GPA or better is required for admission.
- This transfer guide may contain more than the maximum number of allowable transfer credits Wayne State University will accept.
- Macomb and Wayne State University reserve the right to make any necessary changes to courses, provisions, or transfer requirements without notice.
- It is the responsibility of the student to be aware of changes that affect their transfer program. Students are strongly encouraged to contact Wayne State University on an annual basis to review their program requirements.
- Students may concurrently be enrolled and taking courses at both Macomb and Wayne State University the same semester after completing the minimum requirements for Wayne State University. Meet with an academic advisor or counselor for additional information.
- Macomb Community College has a Reverse Transfer Agreement with Wayne State University. If you decide to transfer before graduating from Macomb you may be eligible to earn your associate degree after the fact.
www.macomb.edu/transfer
- Please contact Wayne State University at 586-447-3905 to schedule an appointment, or to view additional information visit:
Wayne State University - Macomb University Center
- Please refer to Wayne State University's transfer guide, or consult with a WSU Engineering Technology advisor before taking these classes.
<https://wayne.edu/transfercredit/>

Macomb Community College: Any Associate Degree (AA, AAS, ABA, AGS, AS)	Wayne State University: Bachelor of Science (BS) in Mechanical Engineering Technology, Electrical/Electronic Engineering Technology, OR Electromechanical Engineering Technology
<i>Articulated Program: Students who have declared this program on their student record are following a formal agreement between Wayne State University and Macomb Community College.</i>	
Macomb Community College - Before Transfer	
Requirements vary with each Macomb degree. The courses below fulfill Wayne State University's curriculum requirements for MET, EET, and EMT programs, as well as MTA course requirements. Consult with your Macomb Advisor to ensure Macomb degree requirements are also being met.	
Program Requirements	Minimum 62 Hrs
<i>Satisfies MTA</i> ENGL 1180 - Communications 1 or ENGL 1210 - Composition 1	3-4
<i>Satisfies MTA</i> ENGL 1190 - Communications 2 or ENGL 1220 - Composition 2	3-4
<i>Satisfies MTA</i> MATH 1465 - Accelerated Precalculus or MATH 1415 - Precalculus 1: College Algebra and MATH 1435 - Precalculus 2: College Trigonometry	5 4 3
PHYS 1180 - College Physics 1 <i>Satisfies MTA</i>	4
PHYS 1190 - College Physics 2 <i>Satisfies MTA</i>	4
CHEM 1050 - Introduction to General Chemistry <i>Satisfies MTA</i>	4
PHIL 2120 - Professional Ethics <i>Satisfies MTA</i>	3
BCOM 2050 - Business Communications	4
Select a total of 21 credits from the following subject areas: ATAM, ATAP, ATBC, ATDD, ATEM, ATMT, ATPP, ATSS, ATTR, ATWD, AUTO, CIVL, CLCT, CORE, DRAD, DRCG, ELEC, ENGR, MACA, MECT, PRDE, RNEW, ROBO, SURV	21
Mechanical Engineering Technology Pathway	
ATMT 1300 - Metallurgy-Characteristics of Ferrous Metals	2
ATMT 1310 - Metallurgy-Characteristics of Non-Ferrous Metals	2
Select one course from the following: ATAP 2010, ATAP 2030, ATAP 2350, ATAP 2360, ATAP 2370, DRCG 1140, PRDE 1400, PRDE 1410, PRDE 1450, PRDE 1520, PRDE 1620, PRDE 2520	2-4
ELEC 1141 - Basic Electronics	3
ATMT 1150 - Machine Theory-Machine Tool Laboratory 1	3
Electrical/Electronic Engineering Technology Pathway	
ELEC 1141 - Basic Electronics	3
ELEC 1211 - Digital Electronics Basics	3
ELEC 2270 - Microcontroller Programming	3
Additional Electives <i>May be fulfilled within degree, MTA, and/or prerequisite courses</i> Optional: ITCS 2530 - C++ Programming 1 (4 cr) <i>Meets WSU's ET 2160 Requirement</i>	(3-4)
Electromechanical Engineering Technology Pathway	
Select one course from the following: ATAP 2010, ATAP 2030, ATAP 2350, ATAP 2360, ATAP 2370, DRCG 1140, PRDE 1400, PRDE 1410, PRDE 1450, PRDE 1520, PRDE 1620, PRDE 2520	2-4
ATMT 1150 - Machine Theory-Machine Tool Laboratory 1	3
ELEC 1141 - Basic Electronics	3
ELEC 1211 - Digital Electronics Basics	3
ELEC 2270 - Microcontroller Programming	3

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<p>Basic Composition--2 courses: ENGL 1180 or ENGL 1210 and ENGL 1190 or ENGL 1220</p>	<p>-</p>
<p>Mathematics--1 course: <i>Required for WSU's program</i> MATH 1465 - Accelerated Precalculus or MATH 1415 - Precalculus 1: College Algebra and MATH 1435 - Precalculus 2: College Trigonometry</p>	<p>-</p>
<p>Humanities & Fine Arts--2 courses: PHIL 2120 - Professional Ethics And 1 additional course from a different subject area: any ARAB, any CHIN, any FREN, any GRMN, any ITAL, any SPAN (except SPAN 1265), ARTT 1620, ARTT 1625, ARTT 2650, ARTT 2660, ENGL 1730, ENGL 2410, ENGL 2420, ENGL 2510, ENGL 2520, ENGL 2600, ENGL 2610, ENGL 2640, ENGL 2710, ENGL 2720, ENGL 2730, ENGL 2740, ENGL 2800, ENGL 2810, ENGL 2850, any HUMN, INTL 2000, INTL 2300, INTL 2800, MUSC 1030, MUSC 1040, MUSC 1050, MUSC 1060, MUSC 1070, MUSC 1160, MUSC 1170, MUSC 2080, MUSC 2180, MUSC 2710, or MUSC 2720</p>	<p>3-4</p>
<p>Sciences--2 courses needed from different subject areas, with one course containing a lab CHEM 1050 - Introduction to General Chemistry PHYS 1180 - College Physics 1</p>	<p>-</p>
<p>Social Sciences--2 courses from different subject areas: any ANTH, any ECON, any GEOG, any HIST, INTL 2010, any POLS, any PSYC, or any SOCY</p>	<p>6-8</p>
<p>If needed, complete an additional course(s) from the applicable general education categories above to reach the minimum 30 MTA required credit hours</p>	<p>-</p>

Wayne State University Coursework - After Transfer:

Major Requirements

Mechanical Engineering Technology Program Requirements		48 Cr
ET 2160 - Computer Applications for ET		2
ET 3430 - Applied Differential and Integrated Calculus		4
ET 3450 - Applied Calculus and Differential Equations		4
ET 3030 - Statics		3
ET 3050 - Dynamics		3
ET 3850 - Reliability and Engineering Statistics		3
ET 3870 - Engineering Economic Analysis		3
ET 5870 - Engineering Project Management		3
MCT 4150 - Thermodynamics		3
ET 4999 - Senior Project		3
DESIGN TRACK		
MCT 3100 - Mechanics of Materials		3
MCT 3410 - Kinematics and Dynamics of Machines		3
MCT 4400 - Design of Machine Elements		3
Upper Division Tech Electives		8
ENERGY TRACK		
MCT 4180 - Fluid Mechanics		3
MCT 4210 - Heat Transfer		3
MCT 5210 - Energy Sources and Conversion		3
Upper Division Tech Electives		8
MANUFACTURING TRACK		
MIT 3520 - Manufacturing Processes Theory		2
MIT 3600 - Process Engineering		3
MIT 4700 - Computer-Aided Design and Manufacturing		3
Upper Division Tech Electives		9
Electrical/Electronic Engineering Technology Program Requirements		52 Cr
ET 2160 - Computer Applications for ET	<i>Requirement met if ITCS 2530 is completed at Macomb</i>	2
ET 3430 - Applied Differential and Integrated Calculus		4
ET 3450 - Applied Calculus and Differential Equations		4
ET 3850 - Reliability and Engineering Statistics		3
ET 3870 - Engineering Economic Analysis		3
ET 5870 - Engineering Project Management		3
EET 3100 - Advanced Digital Design		3
EET 3150 - Network Analysis		4
EET 3180 - Analog Electronics		4
EET 3500 - Electrical Machines and Power Systems		3
EET 3720 - Micro and Programmable Controllers		3
EET 3300 - Applied Signal Processing		3
EET 4200 - Control Systems		4
Upper Division Tech Electives		6
ET 4999 - Senior Project		3

Electromechanical Engineering Technology Program Requirements		51 Cr
ET 2160 - Computer Applications for ET		2
ET 3430 - Applied Differential and Integrated Calculus		4
ET 3450 - Applied Calculus and Differential Equations		4
ET 3030 - Statics		3
ET 3050 - Dynamics		3
ET 3850 - Reliability and Engineering Statistics		3
ET 3870 - Engineering Economic Analysis		3
MCT 3010 - Instrumentation		3
EET 3150 - Network Analysis		4
EET 3500 - Electrical Machines and Power Systems		3
EET 3720 - Micro and Programmable Controllers		3
EET 4200 - Control Systems		4
EET/MCT Upper Electives		9
ET 4999 - Senior Project		3
Maximum Macomb Credits = 75-86	Minimum credits at Wayne State University = 49	
Minimum credits for Bachelor of Science in MET, EET, or EMT - 124 credit hours		

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