

TRANSFER PATHWAY GUIDE

FOR

Associate in Applied Science in Industrial Maintenance to Murray State University's Bachelor of Science in Applied Engineering/Automation and Controls Track

Overview

Completion of the following curriculum will satisfy the requirements for Associate in Applied Science in Industrial Maintenance at the Kentucky Community and Technical College System and leads to the Bachelor of Science in Applied Engineering/Automation & Controls at Murray State University.

Admission Requirements

Murray State University admission requirements for domestic first-time transfer students can be found online [here](#).

Degree Requirements

At least 42 semester hours of the 120 hours required for a baccalaureate degree must be earned in courses at the 300-level or above (upper-level courses). Transfer courses at the 100- or 200-level that are direct equivalents of upper-level Murray State courses will be considered upper-level credit. Transfer courses at the 100- or 200-level that may be substituted for upper-level Murray State courses or requirements will not be considered upper-level credit.

The baccalaureate degree candidate must have a GPA of at least 2.00: (1) in all credits presented for graduation whether earned at Murray State or elsewhere (cumulative GPA); (2) in all credits completed at Murray State; and (3) in the courses for each major, minor or area.

General Transfer Requirements

Students can apply for Murray State online here: <https://www.murraystate.edu/admissions/apply.aspx>. Transfer requirements, scholarship information, and other relevant transfer information can also be found at www.murraystate.edu/admissions/transfer. Once the student has been accepted at Murray State and they receive their student ID (M#), they can apply for scholarships within our student portal, MyGate.

For specific questions concerning the transfer, students can contact the Transfer Center at (270)-809-3350 or msu.transfercenter@murraystate.edu.

A list of Murray State's General Education courses can be found here: <https://www.murraystate.edu/academics/UniversityStudies/courses.aspx>

The general University Scholarship application is due on or before February 5th before the Fall semester entry. All students must complete the FAFSA to be eligible for scholarships.

**KCTCS AAS in Industrial Maintenance/Advanced Manufacturing Track TO Murray State University's Bachelor of Science in Applied Engineering/Automation & Controls Track
CHECKLIST**

Kentucky Community and Technical College System

Category 1: KCTCS General Education Requirements

KCTCS Course	Course or Category	Credits	Murray State Course	Completed
ENG 101	Writing I	3	ENG 101	
PHY 151	Introductory Physics I	3	PHY 130	
TBS XXX	Social & Behavioral Sciences	3	TBD XXX	
TBS XXX	Arts & Humanities: Heritage	3	TBD XXX	
Choose one of the following to meet the Quantitative Reasoning Gen Ed requirement*				
MAT 150	College Algebra	3	MAT 140	
TBS XXX	Oral Communication Elective	3	TBD XXX	
Subtotal General Education Courses		18		

	<i>For full Gen Ed Certification:</i>			
ENG 102	Writing II	3	ENG 105 (w/ ENG 101)	
PHY 161	Introductory Physics I Lab	1	PHY 131	
TBS XXX	Arts & Humanities: Humanities	3	TBD XXX	
TBS XXX	Social & Behavioral Electives (2 Diff Subjects)	6	TBD XXX	
STA 220	Statistics	3	STA 135	
Subtotal General Education Courses		30-32		

* Both of these are required for the Murray State University degree; the one not completed at KCTCS, must be taken at Murray State University.

TBS XXX means to be selected by KCTCS student.

TBD XXX means to be determined by Murray State University based on course selected.

Category 2: KCTCS AAS Technical Core and Track Requirements

KCTCS Course	Course or Category	Credits	Murray State	Completed
			Course	
TBS XXX	Digital Literacy	0-3	TBD XXX	
BRX 120	Basic Blueprint Reading	3	DET 102	
CNM 110	Fundamentals of Machine Tools A	3		
EET 248 OR IMT 220&IMT 221	Electric Motor Controls I (LAB) OR Industrial Maintenance Electrical Motor Controls (LAB)	4	EET 305	
EET 259 OR IMT 222 & IMT 223	Motor Controls 2 OR Industrial Maintenance Electrical Motor Controls (LAB) 2	4	Technical Elective	
EET 288 OR IMT 280 & IMT 281	Programmable Logic Controllers (LAB) OR Advanced Programmable Logic Controllers (LAB)	4	EMT 310	
ELT 265 OR FPX 100 & FPX101	Applied Fluid Power OR Fluid Power & Fluid Power Lab	3 OR 4	EMT 261 & EMT 262	
IET 111 or IMT 1381	Safety Culture	1	SOE 350 Technical Elective	
IET 112 or IMT 1383	Lean Concepts	1		
IET 113 or IMT 1382	Lean 5S	1		
IET 114 or IMT 1384	Lean Methodology	1		
IET 115 or IMT 1385	Lean Machine Reliability	1		
IMT 100 & IMT 101	Welding for Maintenance	5		
EET 119 OR ELT 110	Basic Electricity OR Circuits I	5	EMT 110	
IMT 150&151	Maintaining Industrial Equipment	5	EMT 201	
IMT 200	Industrial Robotics	4	EMT 101	
IMT 289	Industrial Maintenance Technology Capstone	1		
	Subtotal AAS Requirement Courses	46-51		
	TOTAL Associate Degree Hours	64-69		

** Students must demonstrate computer/digital literacy skills, either through completing a course or passing a test.

TBS XXX means to be selected by KCTCS student.

TBD XXX means to be determined by Murray State University based on course selected.

Murray State University

Major Requirements for Bachelor of Science in Applied Engineering/Automation & Controls Track

Murray State Course	Course	Credits	KCTCS Course	Taken at KCTCS
ENT 100T*	Transitions	1		
EMT 351	Power Distribution	3		
EMT 455	Industrial Networking Systems	4		
SOE 399	Professional Development Seminar I	1		
SOE 488	Cooperative Education/Internship	1-3		
EMT 312	Industrial Instrumentation	4		
EMT 320	SCADA Systems	3		
EMT 365	Dynamics for Technology	3		
EMT 461	Robotics and Motion Controls	4		
PHY 132	General Physics II	3	PHY 152 OR PHY 203	
PHY 133	General Physics II Lab	1	PHY 162 OR PHY 204	
ENT 365	Statics and Strengths of Materials	4		
ENT 419	Senior Project I	3		
MAT 230	Technical Math II	5		
Select the course that wasn't completed at KCTCS				
STA 135**	Introduction to Probability and Statistics**	4*	STA 220**	
MAT 130**	Technical Math**	5*	MAT 171**	
OR	OR	OR	OR	
MAT 140**	College Algebra**	4*	MAT 150**	
Subtotal Murray State Credit Hours		56-59		
Additional credits to Degree		1-4		
Total Baccalaureate Degree Credit Hours		120		

* Transitions courses are waived for students who transfer 36 hours or more to Murray State University.

** The student must complete this course at MSU only if it was not taken at KCTCS as the Quantitative Reasoning Gen Ed requirement.

Updated: July 29, 2026