TRANSFER PATHWAY GUIDE

FOR

Associate in Applied Science in Automation and Industrial Technology to Murray State University's Bachelor of Science in Manufacturing Engineering Technology

Overview

Completion of the following curriculum will satisfy the requirements for Associate in Applied Science Automation and Integrated Technology (AIT) at the Kentucky Community and Technical College System and leads to the Bachelor's of Science in Manufacturing Engineering Technology (MET) at Murray State University. Students completing their AAS in AIT with KCTCS can complete their MET degree at Murray State 100% online.

Admission Requirements

Murray State University admission requirements for domestic first-time transfer students can be found online. Current link is available [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 Jake Hildebrant at jhildebrant@murraystate.edu or 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 at or before February 5th before the Fall semester entry. All students must complete the FAFSA to be eligible for scholarships.

KCTCS Automation and Industrial Technology AAS TO Murray State University's Bachelor's of Science in Manufacturing Engineering Technology CHECKLIST

Kentucky Community and Technical College System

Category 1: KCTCS General Education Requirements (16-33 hours)

KCTCS Course	Course or Category	Credits	Murray State Course	Completed
ENG 101	Writing 1	3	ENG 105 (w/102)	
MAT 150	College Algebra	3	MAT 140	
Choose one: PHY 151 & PHY 161 OR PHY 171	Introductory Physics I **and** Introductory Physics I Laboratory OR Applied Physics	4 \n\n 4	PHY 130 & PHY 131 *OR* PHY 121 & PHY 122	
TBS XXX	Social/Behavioral Elective	3	TBD XXX	
TBS XXX	Heritage/Humanities Elective	3	TBD XXX	
Subtotal - Minimum General Education Reqs for AAS		**16**		
For full Category Certification: Students may wish to pursue full category certification at KCTCS. Please complete the additional courses listed below to complete category certification prior to transfer.				
ENG 102	Writing II	3	ENG 105 (w/101)	
TBS XXX	Arts & Humanities Elective	3	TBD XXX	
TBS XXX	Arts & Humanities Elective	3	TBD XXX	
TBS XXX	Social & Behavioral Elective	3	TBD XXX	
COM 181	Basic Public Speaking	3	COM 161	
STA 220	Statistics	3	STA 135	
Subtotal General Education Courses		**33**		

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 Requirements

Technical Core Courses

KCTCS Course	Course or Category	Credits	Murray State Course	Completed
DIL XXX	Digital Literacy**	0-3	TBD XXX	
AIT 1001	Basic Electrical Knowledge	2	EMT 110	
AIT 1002	Power Development	1	TBD XXX	
AIT 1101	Electrical Power Distribution	1	TBD XXX	
AIT 1201	Electrical Installation	1	TBD XXX	
AIT 1301	Principles of Instrumentation	2	TBD XXX	
AIT 1302	Integrated Process Control	2	TBD XXX	
AIT 1401	Basic Electrical Controls	2	EMT 305	
AIT 1501	Intermediate Electrical Controls	2	TBD XXX	
AIT 2710	Intro. to Programmable Logic Controllers	2	TBD XXX	
AIT 2711	Introduction to Robotics	2	TBD XXX	
Subtotal AAS Technical Core Requirement Courses		**17-20**		
Required Track		**26-27**		
Subtotal AAS Requirement Courses		**60-63**		

Automation Technician Track

KCTCS Course	Course or Category	Credits	Murray State Course	Completed
AIT 2001	Integrated Process Management	2	TBD XXX	
AIT 2002	Quality Control and SPC	2	TBD XXX	
AIT 273	Intermediate Robotics	3	TBD XXX	
AIT 275	Intermediate Prog Logic Controllers	4	TBD XXX	
AIT 277	Advanced Prog Lobic Controllers	4	TBD XXX	
AIT 280	Automation Capstone	3	TBD XXX	
CAD 100	Introduction to Computer Aided Design	3	EGD 101	
TBS XXX	Automation and Industrial Tech Electives[1]	6	TBD XXX	
Subtotal Automation Technician Track Courses		**27**		

Multi-Skilled Maintenance Technician Track

KCTCS Course	Course or Category	Credits	Murray State Course	Completed
AIT 1003	Hydraulic/Pneumatic Fundamentals	1	EMT 261	
AIT 1102	Fluid Power Distribution	2	EMT 262	
AIT 1202	Piping & Pneumatic Installation	1	TBD XXX	
AIT 1203	Mechanical Installation	1	TBD XXX	
AIT 1402	Basic Pneumatic Controls	1	TBD XXX	
AIT 1403	Basic Hydraulic Controls	1	TBD XXX	
AIT 1502	Intermediate Pneumatic Controls	1	TBD XXX	
AIT 1503	Intermediate Hydraulic Controls	1	TBD XXX	
AIT 2101	Power Transmission Systems	1	TBD XXX	
AIT 2103	Advanced Mechanical	2	TBD XXX	
TBS XXX	Automation & Industrial Tech Electives[1]	14	TBD XXX	
Subtotal Multi-Skilled Maintenance Technician Track Courses		**26**		

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

[1]Elective courses may not be duplicated from the technical core listing in the Automation and Industrial Technology Program. Students can select other courses as approved by the program coordinator.

Murray State Univesity

Major Requirements for the Bachelor of Science in Manufacturing Engineering Technology after the student completes the AAS in Automation and Industrial Technology

Murray State Course	Course	Credits	KCTCS Course	Taken at KCTCS
ENT 100T**	Transitions	1		
MET 322	Plastics Manufacturing	3		
EMT 351	Power Distribution	3		
MET 310	Manufacturing Analysis	3		
MET 320	Manufacturing Control Systems	4		
MET 400	Lean Manufacturing	3		
MET 410	Sustainablity Management	3		
MET 420	Manufacturing Material Science	3		
MET 440	Quality Systems Management	3		
MET 450	Project Management	3		
SOE 350	Management of Technology	3		
SOE 399	Professional Dev Seminar	1		
SOE 488	Cooperative Ed/Internship	1		
	Electives – Note 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).	9		
	Any University Studies Courses Remaining	0-18		
Subtotal Murray State Credit Hours		43 - 60		
Total Baccalaureate Degree Credit Hours		122		

** Transition courses are waived for students who transfer 30 hours or more to Murray State University.