

Mechatronics Certificate

Certificate in Mechatronics

The Certificate in Mechatronics is an introductory level certificate providing students will knowledge and skills in the Mechatronics field. This academic guide is based on the 2023-2024 Missouri State University-West Plains Catalog. The time to complete the degree will vary, depending on remediation, summer enrollment, number of classes taken per semester, etc.

Degree Requirements

Courses	Credit Hours
TEC 100 Introduction to AC and DC Electricity	2
TEC 180 Fundamentals of Mechatronics	2
TEC 240 PLCs & Sensors	2
TEC 245 Mechanical Systems	2
TEC 248 Fluid Power	2
TEC 275 Automated Systems	2
TEC 110 Printreading and Basic CAD or	2
EGR 120 Introduction to Computer Aided Design	2
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Courses included in the Mechatronics Certificate may be applied toward the Industrial Maintenance Certificate, the AS in Engineering Technology - Mechatronics Option, and the AAS in Technology - Industrial Maintenance Option

Recommended One-Year Plan

Term 1 (Fall)	Course #	Credit Hours
	TEC 100	2
	TEC 180	2
	TEC 245	2
	6	

Term 2 (Spring)	Course #	Credit Hours
	TEC 240	2
	TEC 248	2
	TEC 275	2
	6	

Industrial Maintenance Technology Certificate

Certificate in Industrial Maintenance Technology

The Certificate in Industrial Maintenance Technology is designed to prepare students for a career in industrial maintenance. This academic guide is based on the 2023-2024 Missouri State University-West Plains Catalog. The time to complete the degree will vary, depending on remediation, summer enrollment, number of classes taken per semester, etc.

Degree Requirements

Courses	Credit Hours
TEC 102 Mathematics for the Trades *	1
MTH 100 Intermediate Applied Mathematics	1
TEC 110 Print Reading & Basic CAD	3
TEC 180 Fundamentals of Mechatronics	2
Select 18 credit hours from the following:	
TEC 100 Introduction to AC and DC Electricity	
TEC 111 Manufacturing Processes	
TEC 165 Manufacturing Machine Technology	
TEC 197 Special Topics in Technology	
TEC 240 PLCs & Sensors	18
TEC 245 Mechanical Systems	
TEC 248 Fluid Power	
TEC 270 Alternative Energy	
TEC 275 Automated Systems	
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* Enrollment in TEC 102 is contingent on a minimum score on the technology department math placement exam

Courses included in the Industrial Maintenance Certificate may be applied toward the AAS in Technology - Industrial Maintenance Option

Recommended One-Year Plan

Term 1 (Fall)	Course #	Credit Hours
	TEC 102 or MTH 111	1
	TEC 110	3
	TEC 180	2
	TEC Electives	6
	12	

Term 2 (Spring)	Course #	Credit Hours
	TEC Electives	12
		12

For More Information, Contact

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