

Engineering Technology

Associate of Science in Engineering Technology - Pre-Engineering

The Associate of Science in Engineering Technology - Pre-Engineering Option is a transfer degree with specific mathematics, science, computer science and engineering courses needed to facilitate transfer. 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

Written and Oral Communications	Credit Hours
ENG 110 Writing I	3
Select three (3) credit hours	
ENG 210 Writing II: Academic Writing or ENG 221 Writing II: Writing for the Professions	3
COM 115 Fundamentals of Public Speaking	
Natural Sciences	Credit Hours
CHM 160 General Chemistry I	4
CHM 161 General Chemistry I Laboratory	1
Social and Behavioral Science	Credit Hours
Economics: Select three (3) credit hours	
ECO 155 Principles of Macroeconomics ECO 165 Principles of Microeconomics	3
Civics: Select three (3) credit hours	
HST 121 Survey of US History to 1877 HST 122 US History Since 1877 PLS 101 American Democracy and Citizenship	3
Institutional Requirements	Credit Hours
CIS 101 Computers for Learning IDS 110 Student Success	3 1
Engineering Technology Requirements	Credit Hours
EGR 100 Careers in Engineering and Computing EGR 110 Introduction to Engineering Design EGR 120 Introduction to Computer Aided Design EGR 297 Engineering Capstone CSC 125 Introduction to C++ Programming	1 3 2 1 4
Pre-Engineering Requirements	Credit Hours
MTH 261 Analytic Geometry & Calculus I MTH 280 Analytic Geometry & Calculus II MTH 292 Multivariate Calculus PHY 203 Foundations of Physics I PHY 204 Foundations of Physics II Electives: Select 5 credit hours (Must be approved by Engineering Department)	5 5 3 5 5 5
AS in Engineering Technology-Pre-Engineering Option Total	60

Degree Notes:

- Electives must be approved by the department.
- Students should confirm the transferability of courses with their transfer university before completing courses at MSU-WP.

Recommended Two-Year Plan

Term 1 (Fall)	Course #	Credit Hours
	CIS 101	3
	EGR 100	1
	EGR 110	3
	ENG 110	3
	IDS 110	1
	Civics	3
	Total	14
Milestone: EGR 100, EGR 110, ENG 110. Complete MTH prerequisite in place of Civics if needed.		

Term 2 (Spring)	Course #	Credit Hours
	COM 115/ENG 210/221	3
	ECO 155/ECO 165	3
	EGR 120	2
	MTH 261	5
	Elective	3
	Total	16
Milestone: Complete CSC 125, MTH 261		

Term 3 (Fall)	Course #	Credit Hours
	CHM 160	4
	CHM 161	1
	MTH 280	5
	PHY 203	5
	Total	15
Milestone: Complete MTH 280 & PHY 203. Apply for admission to 4 year university.		

Term 4 (Spring)	Course #	Credit Hours
	CSC 125	4
	EGR 297	1
	MTH 292	3
	PHY 204	5
	Elective	2
	Total	15
Milestone: Apply to graduate, Send final transcripts to 4 year university.		

Milestone Notes:

- Milestones are a major step in the completion of the degree. Each milestone must be met in order to advance to the next stage of education.
- Milestone courses should be completed in the designated semester.
- All milestone courses must be completed with a C or higher.
- Students are encouraged to apply for graduation early in their last semester.

For More Information, Contact

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