

Missouri S&T — Ozarks Technical Community College

OTC Engineering AS General Engineering Transfer Guide - Effective Fall 2009

The following Ozarks Technical Community College course work will apply to Missouri S&T engineering degree requirements as outlined below.

Ozarks Technical Community College			Missouri S&T		
OTC #	Title	Hours	S&T #	Title	Hours
Engineering Degree Requirements: Take all Courses					
Math prerequisites. While they are not part of Missouri S&T engineering degree requirements, algebra and trigonometry skills are critical to success in calculus. Students should follow math placement testing and advising recommendations at their schools.					
MTH 140	Analytic Geometry and Calculus I	5	MATH 014	Calculus for Engineers I	4
MTH 141	Analytic Geometry and Calculus II	5	MATH 015	Calculus for Engineers II	4
MTH 240	Analytic Geometry and Calculus III	3	MATH 022	Calculus with Analytic Geometry III	4
MTH 241	Differential Equations	3	MATH 204	Elementary Differential Equations	3
PHY 220	Physics for Engineers and Scientists I	5	PHYS 023	Engineering Physics I	4
PHY 222	Physics for Engineers and Scientists II	5	PHYS 024	Engineering Physics II	4
CHM 111	General Chemistry I	5	CHEM 001, 002	General Chemistry I and Lab	4
EGR 100	Study and Careers in Engineering	1	FE 010	Study and Careers in Engineering	1
ENG 101	Composition I	3	ENG 020	Exposition and Argumentation	3
See Degree Requirements below and Notes on back.				Second Communication Requirement*	3
ECO 275 or ECO 270	Principles of Economics II or Principles of Economics I	3	ECON 121 or ECON 122	Principles of Microeconomics or Principles of Macroeconomics	3
HST 120 or HST 130 or HST 102 or PLS 101	U.S. History I or U.S. History II or Western civilization II or American Government and Politics	3	HIS 175 or HIS 176 or HIS 112 or PS 090	American History to 1877 or American History since 1877 or Modern Western Civilization or American Government	3
Free Electives: See Other Required Courses* on back. Electives should be selected in consultation with your advisor. Free electives may not include remedial/deficiency courses, algebra, trigonometry, pre-calculus, or extra credits in required courses.				Free Electives: See Other Required Courses* on back.	
Total Hours		41	Total Hours		40

Humanities and Social Sciences Electives: Select 2 Additional Courses from the Academic Areas Below*

See your advisor and Missouri S&T Approved List of Humanities and Social Sciences for more options or email transfercredit@mst.edu for approval.

Students may also transfer one upper-level humanities/social sciences elective to Missouri S&T.

Humanities and Social Sciences Electives	OTC #	Title	Hours	S&T #	Title	Hours
	HST 120	U.S. History I	3	HIS 175	American History to 1877	3
	HST 130	U.S. History II	3	HIS 176	American History since 1877	3
	PLS 101	American Government and Politics	3	PS 090	American Government	3
	ART 110	Art and Experience	3	ART 080	Art Appreciation	3
	MUS 101	Music of the World	3	MUS 050	Music Understanding and Appreciation	3
	THR 101	Intro to Theatre	3	THE 090	Theatre Appreciation	3
	PSY 110	Intro to Psychology	3	PSY 050	General Psychology	3
	SOC 101	Intro to Sociology	3	SOC 081	General Sociology	3
	PHL 101	Intro to Philosophy	3	PHIL 005	Intro to Philosophy	3
					Literature Elective	
					Foreign Language	
					Speech and Media Studies	
					Economics	
Total Hours		6-8	Total Hours		6-8	

Additional Degree Requirements*

The following additional courses will satisfy Missouri S&T engineering degree requirements for some, but not all, engineering degrees. Check individual Missouri S&T degree requirements on back for your major.

Additional Courses (See Back Page for Individual Engineering Major Requirements)	OTC #	Title	Hours	S&T #	Title	Hours
	ENG 102	Composition II	3	ENG 060	Writing and Research	3
	ENG 150	Technical Writing	3	ENG 065	Intro to Technical Communication	3
	COM 105	Public Speaking	3	SPMS 085	Principles of Speech	3
	MTH 230	Linear Algebra	3	MATH 208	Linear Algebra I	3
	CHM 112	General Chemistry II	5	CHEM 003, 008	General Chemistry II and Qualitative Analysis	5
	CIS 120 or CIS 140	Problem Solving & Programming Concepts or Course Name	3	GNCR	General Credit (These courses are not required for the S&T degree.)	3
	CIT 140	C++ Programming I	3	CS 074, 078	Intro to Programming Method and Lab (C++)	3
	CIT 145	C++ Programming II	3	CS 53, 54	Intro to Programming and Lab (C++)	4
	BIO 160	General Biology I	4	BIO 110, 112	General Biology and Lab	4

Maximum Degree Requirements to be Transferred to Missouri S&T Degree***

68***

A grade of "C" or better is required in calculus and physics, as well as other courses depending on academic major.

*See notes for individual majors on second page.

**A passing grade on the Missouri S&T EE Advancement Exam I is required to receive credit for EE 151.

***Students must receive special permission from Missouri S&T to apply more than 68 credit hours (using Missouri S&T credit-hour totals) toward Missouri S&T degree. Students are not required to complete all courses on this guide before transferring to Missouri S&T.

This transfer guide is published under the joint agreement of Ozarks Technical Community College and Missouri University of Science and Technology and is in effect for the 2009/2010 academic year. Further information or updates are available from Missouri S&T Transfer Admissions at admissions.mst.edu/transfer, transfer@mst.edu, or 800-522-0938.