

Missouri University of Science and Technology

General Education Program and Transfer Policy Approved By the Faculty Senate, April 2003
(Revisions made February, 2009 to reflect University name change)

Missouri S&T provides a limited “general education” curriculum or plan due to the discipline specific curriculum of many of the university’s academic programs. Since the late 1980’s, Missouri S&T has played an aggressive role in creating a transfer-student-friendly environment on the Rolla campus. Regularly updated program-to-program transfer articulation agreements, or “model programs” with over 50 two-year and four-year colleges and universities have served as the core to the transfer-student program.

In order to support the June 2000 Missouri CBHE guidelines for transfer of general education guidelines, Missouri S&T asked a faculty committee to outline a series of university courses to support the guideline’s learning objectives. The general education plan at the Missouri University of Science and Technology consists of a common core of curriculum offerings necessary to equip students for successful and fulfilled lives as educated and active citizens.

The required general education curriculum consists of a broad range of courses that assures that all baccalaureate-degree-seeking students acquire academic skills and knowledge necessary for understanding, communicating, and performing in a diverse and complex world. Students completing courses in the general education plan will be provided the opportunity to acquire the following knowledge and skill abilities:

- Write and speak clearly and effectively through exposure to intensive writing and speech courses. This course set will also assist the student in gaining a greater understanding and enjoyment of aesthetic and creative experiences.
- Locate, organize, evaluate, and synthesize information.
- Understand and appreciate ethical choices by reinforcing value concepts and a strong awareness of other cultures and times.
- Develop a knowledge and ability to apply fundamental quantitative concepts and their applications by reinforcing mathematical theory and skills. This course set will reinforce a student’s critical and analytical reasoning skills.
- Understand common phenomena in the physical and natural environment and understand the methods by which they are studied through reinforcement of high order thinking.

Courses meeting the above goals will concentrate on the development of basic learning skills such as communicating, higher order thinking, managing information and valuing. Other courses in the general education curriculum meet the remaining goals of knowledge acquisition in the areas of social and behavioral sciences, humanities, mathematics, and the physical sciences. In general, students earning a non-engineering baccalaureate degree may select from the following general education courses. There are a number of exceptions based on the bachelors degree the student wants to complete. All students should work closely with their assigned advisor and check the Missouri S&T catalog for course requirements in their specific degree.

Missouri S&T 42 Credit Hour General Education Block

State-Level Goals Skill Areas	Institutional Competencies	Course(s) and Credit Hours ¹	Associated Assessment(s)
Communicating			
To develop students' effective use of the English language and quantitative and other symbolic systems essential to their success in school and in the world. Students should be able to read and listen critically and to write and speak with thoughtfulness, clarity, coherence, and persuasiveness.	Conceive, generate and evaluate written and oral communication to demonstrate levels of mastery of basic knowledge and application suitable to topic, purpose and audience.	English 1120 (3) (a composition skills course) English 1160 and/or 3560 (3), and/or Speech & Media 1185 (3) as applicable 3 Hours – 6 Hours	APT, Capstone Course, Exit Interview Summary
Higher Order Thinking			
To develop students' ability to distinguish among opinions, facts, and inferences; to identify underlying or implicit assumptions; to make informed judgments; and to solve problems by applying evaluative standards.	Identify, synthesize and integrate critical thinking, writing and oral speaking skills toward strategic modes of inquiry and problem solving.	Communication Intensive skills courses ² 3 Hours Other Math/Life/Physical Sciences ³ 3 Hours	
Managing Information			
To develop students' abilities to locate, organize, store, retrieve, evaluate, synthesize, and annotate information from print, electronic, and other sources in preparation for solving problems and making informed decisions.	Apply information management technology to organize, manipulate and present information in multiple modes.	Other Math/Life/Physical Sciences ³ Other Humanities/Fine Arts or Social Behavior Sciences ⁴ 3 Hours	
Valuing			
To develop students' abilities to understand the moral and ethical values of a diverse society and to understand that many courses of action are guided by value judgments about the way things ought to be. Students should be able to make informed decisions through identifying personal values and the values of others and through understanding how such values develop. They should be able to analyze the ethical implications of choices made on the basis of these values.	Gain knowledgeable intercultural diversity perspectives, political and social insight to positively influence personal well-being and productively contribute to society.	HIST 1200 or 1300 or 1310, or Pol Sci 1200 Other social / behavioral science (excluding skills courses) Other 1000-level Humanities/Fine Arts or Social/Behavioral Sciences (requiring a pre-requisite course, excluding skills course)	

State-Level Goals Knowledge Areas	Institutional Competencies	Course(s) and Credit Hours	Associated Assessment(s)
Social & Behavior Sciences			
To develop students' understanding of themselves and the world around them through study of content and the processes used by historians and social and behavioral scientists to discover, describe, explain, and predict human behavior and social systems. Students must understand the diversities and complexities of the cultural and social world, past and present, and come to an informed sense of self and others. (Students must fulfill the state statute requirements for the United States and Missouri constitutions.)	Acquire skills to conduct historical and social scientific modes of inquiry.	MO State Requirement (William's Law) HIST 1200 or 1300 or 1310, or Pol Sci 1200 (3 hours) Other social / behavioral science (excluding skills courses) (6 hours) 9 Hours	APT
Humanities & Fine Arts			
To develop students' understanding of the ways in which humans have addressed their condition through imaginative work in the humanities and fine arts; to deepen their understanding of how that imaginative process is informed and limited by social, cultural, linguistic, and historical circumstances; and to appreciate the world of the creative imagination as a form of knowledge.	Understand the aesthetic mode of human expression from personal, social and cultural/historical perspectives.	Other 1000-level Humanities/Fine Arts or Social/Behavioral Sciences (requiring a pre-requisite course, excluding skills course) 3 Hours	APT, Exit Interview Summary, Capstone
Mathematics			
To develop students' understanding of fundamental mathematical concepts and their applications. Students should develop a level of quantitative literacy that would enable them to make decisions and solve problems and which could serve as a basis for continued learning. (The mathematics requirement for general education should have the same prerequisite(s) and level of rigor as college algebra.)	Gain experience with mathematical reasoning from a fundamental and application perspectives based on algebra, trigonometric and calculus/statistics principles.	Mathematics (math, statistics and computer science) (3 hours) 3 Hours	EIT, APT, Exit Interview Summary, Capstone
Life and Physical Sciences			
To develop students' understanding of the principles and laboratory procedures of life and physical sciences and to cultivate their abilities to apply the empirical methods of scientific inquiry. Students should understand how scientific discovery changes theoretical views of the world, informs our imaginations, and shapes human history. Students should also understand that science is shaped by historical and social contexts.	Experience modes of scientific inquiry involving experimental design, data collection and analysis requiring the application of math and science/bio science principles.	Life and Physical Sciences (natural science) 6 Hours	EIT, APT, Exit Interview Summary, Capstone
Other Knowledge Areas			
Additional Courses that fulfill the General Education Requirement.		Additional courses (excluding skills courses). May include other humanities, management, math, natural sciences and/or social sciences courses. ^{1.5} 9 Hours	EIT, APT, Exit Interview Summary, Capstone

1. *Missouri S&T's catalog requirements can have mixed specification of the number of courses and credit hours depending on the discipline degree.*
2. *Communication Intensive(CI) course requirements may normally be met by other English composition courses (excluding skills courses) or other discipline specific CI emphasized courses as specified by the discipline degree requirements.*
3. *The additional Math/Physical Science/BioScience requirements may include 3 hours of engineering as specified by the discipline degree requirements.*
4. *Transferred humanities/Fine arts or social/behavioral science courses may only apply to specific discipline degree/program requirements.*
5. ***BA & BS degrees may require at least 3 hours of humanities courses. Students who are not engineering or business majors must take at least one literature course.***

Transfer students who have completed an AA degree still must complete additional courses required to meet specified prerequisites in their chosen major. Specific transfer equivalencies will continue to be evaluated on a course-by-course basis. A list of all previously transferred courses by institution is available on the Registrar's Office homepage.

The Vice Provost for Undergraduate Studies and the Registrar will evaluate these reports and will identify any areas of concern if they exist. Such areas of concern will be discussed with the academic departments to consider necessary changes in courses or programs.