

Missouri University of Science and Technology

Undergraduate Catalog

2008-2009

Missouri S&T publishes two catalogs – undergraduate and graduate. Both are official publications of Missouri S&T and may be requested from the Office of Admission or Office of the Registrar.

All statements in this publication are announcements of present policies only and are subject to change at any time without prior notice. They are not to be regarded as offers to contract.

Missouri S&T is an equal opportunity/affirmative action institution.

Statement of Affirmative Action

Missouri University of Science and Technology

It is the policy of Missouri University of Science and Technology to provide full and equal employment opportunities to all qualified persons without regard to race, color, religion, sex, sexual orientation, national origin, age, disability, and status as Vietnam Era Veteran; to prohibit discrimination in recruitment, employment and conditions of employment, including salary and benefits related thereto; to promote equal employment opportunity and to take Affirmative Action in this regard. Affirmative Action means the elimination of existing discriminatory conditions whether purposeful or inadvertent. This nondiscrimination policy applies to all persons.

Title VI of the Civil Rights Act of 1964

"No person in the United States shall, on the ground of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."

Title IX of the Education Amendments of 1972

"No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance."

Section 504 of the Rehabilitation Act of 1973

"No otherwise qualified handicapped individual in the United States...shall, solely by reason of the handicap, be excluded from the participation in, be denied the benefits of, or be subject to discrimination under any program or activity receiving Federal financial assistance."

Section 303 of the Age Discrimination Act of 1975

"No person in the United States shall, on the basis of age, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."

The Americans with Disabilities Act of 1990 Section 102 Discrimination

General Rule. – No covered entity shall discriminate against a qualified individual with a disability because of the disability of such individual in regard to job application procedures, the hiring, advancement, or discharge of employees, employee compensation, job training, and other terms, conditions, and privileges of employment.

Missouri S&T conducts its programs and activities involving admission and treatment of students, employment, teaching, research, and public service in a non-discriminatory manner as prescribed by Federal law and regulation.

Inquiries concerning the above may be addressed to:

Chancellor, Missouri University of Science and Technology
Rolla, Missouri 65409-9957

Director, Office for Civil Rights
Department of Health and Human Services
Washington, D.C. 20201

Information on the World Wide Web

For the most current information regarding course descriptions go to: <http://registrar.mst.edu>

Students are also advised to consult the web sites of individual department offices.

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Educational Goals of Missouri S&T

As Missouri's technological research university, the Missouri University of Science and Technology's mission is to educate tomorrow's leaders. In a world growing increasingly dependent on science and technology, tomorrow's graduates must be prepared to be leaders in more than just their chosen professions. They must also be leaders in business, in government, in education, and in all aspects of society. Missouri S&T is dedicated to providing leadership opportunities for its students. The opportunity to receive an excellent technological education is only part of the educational experience received by students at Missouri S&T. Missouri S&T offers a full range of engineering and science degrees, coupled with business and liberal arts degrees and programs that are vital to the kind of comprehensive education that turns bright young men and women into leaders.

Missouri S&T is nationally recognized for its excellent undergraduate engineering programs, and is distinguished for producing cutting-edge research and key technologies vital to the economic success of Missouri and the nation. Missouri S&T has a distinguished faculty dedicated wholeheartedly to the teaching, research, and creative activities necessary for scholarly learning experiences and advancements to the frontiers of knowledge. Missouri S&T has excellent physical facilities, which support the best possible education in the liberal arts, engineering, science, applied science, and selected interrelated fields.

Missouri S&T's programs in science, engineering, and business, its technology transfer programs, its leadership opportunities, and its learning environment are all integral parts of the total educational package available to students who attend the Missouri University of Science and Technology.

Mission Statement

Missouri University of Science and Technology integrates education and research to create and convey knowledge to solve problems for our State and the technological world.

(Approved January 2008 Board of Curators' Meeting)

Vision

The vision of the Missouri University of Science and Technology is to be a top-five technological research university by 2011.

On Jan. 1, 2008, UMR became Missouri University of Science and Technology, or Missouri S&T. Our new name will not only help us gain broader national recognition, but will also give us an identity that fits our mission - to be the state's technological research university.

University of Missouri Board of Curators

Marion H. Cairns, 1-1-2009
 Cheryl D.S. Walker, 1-1-2009 (Chair)
 Don Walsworth, 1-1-2009
 John M. Carnahan III, 1-1-2011
 Doug Russell, 1-1-2011
 David G. Wasinger, 1-1-2011
 Warren K. Erdman, 1-1-2013
 Bo M. Fraser, 1-1-2013 (Vice Chair)
 Judith G. Haggard, 1-1-2013
 Kathleen Miller, (Secretary to the Board)
 Tony Luetkemeyer, (Student Representative to the Board)

Missouri University of Science and Technology Administrators

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 Warren K. Wray, Provost and Executive Vice Chancellor for Academic Affairs
 Connie Eggert, Vice Chancellor University Advancement
 F. Stephen Malott, Vice Chancellor Administrative Services
 Debra Robinson, Vice Chancellor Student Affairs
 Venkat Allada, Vice Provost, Graduate Studies
 Harvest L. Collier, Vice Provost, Undergraduate Studies
 K. Krishnamurthy, Vice Provost, Research
 Robert Schwartz, Vice Provost, Academic Affairs
 Jay W. Goff, Dean, Enrollment Management
 Henry A. Wiebe, Dean, Extended Learning

Missouri S&T Board of Trustees

Richard Arnoldy, ARCO Construction Company, Inc., St. Louis, MO
Keith Bailey, Williams Companies (retired), Tulsa OK
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Raymond Betz, The Betz Companies, Houston, TX
Robert G. Brinkmann, R.G. Brinkmann Const. Co., St. Louis, MO
Roger Dorf, Navini Networks Inc, Richardson, TX
Robert Garvey, Birmingham Steel (retired), Wayzata, MN

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Gary Havener, Havener Companies, White Settlement, TX
Jean Holley, Tellabs, Naperville, IL
Thomas Holmes, (retired) Ingersoll-Rand Co., Woodcliff Lake, NJ
Barry Koenemann, United Construction Enterprise Co, St. Louis, MO
John Mathes, John Mathes & Associates (retired), Columbia, IL
J. Ronald Miller, Procter & Gamble (retired), Cincinnati, OH
Zebulun Nash, Exxon Mobil Corporation, Baytown, TX
Darlene Ramsay, Missouri University of Science and Technology, Rolla, MO
Mike Richter, Anheuser Busch, St. Louis, MO
Perrin Roller, Devon Energy Corporation, Singapore
John Schneider, Boeing Company, St. Louis, MO
Richard Stegemeier, Unocal Corp (retired), Anaheim, CA
Geoffrey Steinhart, Anheuser Busch, St. Louis, MO
Cynthia Tang, Insight Industries Inc. (retired), Platteville, WI
Richard Vitek, Fotodyne Inc. (retired), Hartland, WI
Cheryl Walker, Obasi Enterprises LLC, St. Louis, MO
Theodore Weise, Federal Express Corporation (retired), Memphis, TN
Joan Woodard, Sandia National Laboratories, Albuquerque, NM

Missouri S&T Named Professorships

Mariesa Crow, *Fred W. Finley Distinguished Professorship of Electrical and Computer Engineering*
Samuel Frimpong, *Robert H. Quenon Missouri Professorship in Mining Engineering*
James Giglio, *Maxwell C. Weiner Missouri Distinguished Professorship in History*
Steven L. Grant, *Roy A. Wilkens Professorship*
Shubhender Kapila, *Missouri Soybean Research Professorship*
Robert Laudon, *Gulf Oil Foundation Professorship*
Ming Leu, *Keith & Pat Bailey Missouri Professorship in Mechanical Engineering*
Ann Miller, *Cynthia Tang Missouri Professorship in Computer Engineering*
Kent Peaslee, *F. Kenneth Iverson Chair of Steelmaking Technologies*
Von Richards, *Robert V. Wolf Missouri Professorship in Metallurgical Engineering*
J. David Rogers, *Karl F. Hasselmann Missouri Endowed Professorship/Chair in Geological & Petroleum Engineering*
Jay Switzer, *Castleman/FCR Missouri Endowed Professorship of Discovery in Chemistry*
Thomas Weigert, *Daniel St. Clair Endowed Chair in Computer Science*
Don Wunsch, *Mary K. "Jimmie" Finley Missouri Professorship in Computer Engineering*
Reza Zoughi, *Schlumberger Endowed Professorship of Electrical and Computer Engineering*

Curators' Professors

Harlin U. Anderson of Ceramic Engineering (Emeritus)
Bassem F. Armaly of Mechanical Engineering
Frank D. Blum of Chemistry
Richard Brow of Ceramic Engineering
K. Chandrashekhara, Mechanical and Aerospace Engineering
Ta-Shen Chen of Mechanical Engineering (Emeritus)
Franklin Yih Cheng of Civil Engineering (Emeritus)
Alfred L. Crosbie of Mechanical Engineering
Delbert E. Day of Ceramic Engineering (Emeritus)
Lokesh R. Dharani of Mechanical & Aerospace Engineering
James Drewniak of Electrical Engineering
Walter Eversman of Mechanical & Aerospace Engineering
Stig Friberg of Chemistry (Emeritus)
Richard D. Hagni of Geology & Geophysics (Emeritus)
Don H. Madison of Physics
Ronald E. Olson of Physics (Emeritus)
Michael Schulz of Physics
James O. Stoffer of Chemistry (Emeritus)
David A. Summers of Mining Engineering
Wei-Wen Yu of Civil Engineering (Emeritus)

Curators' Teaching Professorship

Donald R. Askeland of Metallurgical Engineering (Emeritus)
D.J. Belarbi of Civil Engineering
James J. Bogan of Arts, Languages & Philosophy
Lawrence O. Christensen of History & Political Science (Emeritus)
Nord L. Gale of Biological Sciences (Emeritus)
Larry Gragg of History & Political Science
Leonard F. Koederitz of Geological & Petroleum Engineering (Emeritus)
Roger A. LaBoube of Civil Engineering
Yinfa MA of Chemistry
O. Allan Pringle of Physics
Frances D. Haemmerlie Montgomery of Psychology
Kent Peaslee of Materials Science & Engineering
Jack B. Ridley of History & Political Science (Emeritus)

Introduction to Missouri University of Science and Technology

A college education offers you a number of options. It can be the foundation you'll need to pursue a challenging career or the background to further your studies in a graduate or professional school.

Selecting the college or university that will help you prepare for these options is a decision that requires careful consideration. You have to ask yourself what you want from an education and what your goals are. You

also should consider academic programs, location, and the availability of scholarships and financial assistance.

Before you make your decision, we would like you to know more about what Missouri University of Science and Technology has to offer you, including:

- degrees in engineering, science, and the humanities and social sciences
- annual ranking among the national leaders in the number of bachelor's degrees granted in engineering
- medium-sized campus of about 5,500 students located in the beautiful Missouri Ozarks
- financial assistance and scholarships for qualified individuals
- career assistance

In classes at Missouri S&T, you are encouraged to participate and explore the subjects that interest you. Technologically advanced laboratories help you understand the concepts learned in the classroom. Professors and advisors will help you plan your academic program so that you may attain your academic and career goals.

Co-curricular activities provide outlets for your interests and talents. There are intercollegiate athletics and intramural sports, musical groups and dramatic productions, and student publications. You also can explore the rivers, parks, and lakes of the nearby Missouri Ozarks and enjoy St. Louis and Springfield, each within approximately 100 miles of Rolla.

Missouri S&T offers opportunities to help you with your educational finances. If you are eligible, there are loans, grants, and scholarships available, or you can apply for a part-time job through the work-study program.

The Cooperative Training Program at Missouri S&T allows qualified students to alternate semesters of school with semesters of work in industry. When you are ready to graduate, the Career Opportunities Center offers job-finding assistance.

We invite you and your parents to take a closer look at the Missouri University of Science and Technology. The following pages will introduce you to the opportunities that await you. We encourage you to visit the campus. If you would like more information, or to arrange a tour of the campus, please contact the Office of Admissions, 106 Parker Hall, Missouri University of Science and Technology, Rolla, MO 65409-1060. Telephone: 1-800-522-0938.

About the Campus

One of the four campuses in the University of Missouri System, Missouri University of Science and Technology was founded in 1870 as the University of Missouri School of Mines and Metallurgy and was the first technological institution west of the Mississippi River. It became the University of Missouri-Rolla in 1964, Missouri University of Science and Technology in 2008, and remains one of the nation's best technological universities.

The 284-acre campus is located in Rolla, Mo., a town of 16,000 in the heart of the Ozarks. The university offers bachelor of arts and bachelor of science degrees in 30 fields of study, including engineering, sci-

ence, humanities, business and social sciences. Master of science degrees are offered in 27 disciplines, the doctor of philosophy in 20 and the doctor of engineering in nine.

The Missouri S&T campus is home to 46 research and academic support centers. Externally sponsored program expenditures have almost doubled since FY2001, from \$17.23 million to \$32.37 million in FY2007. In FY2007, Missouri S&T received a record \$37.23 million in new grant and contract awards. Missouri S&T will enhance its research activity and performance to establish its status as a top-five technological research university, distinguishing itself by interdisciplinary collaborations of national significance.

Missouri S&T enrolls more than 6,100 students from 47 states and 50 countries. More than 70 percent of students study in engineering, science or computer fields, but Missouri S&T also offers liberal arts, humanities, social science, and business degrees, as well as certification in select education fields. In 2007, Missouri S&T officially started offering an MBA. Many of the nation's top companies actively recruit graduates from all disciplines. In 2007-2008, more than 700 different employers recruited Missouri S&T students. The average starting salary for those earning undergraduate degrees exceeds \$53,000.

Campus Life

Missouri S&T offers a number of campus living options, including fraternity and sorority houses, traditional residence halls and the new Residential College. The university has more than 200 student organizations, including a dozen student design teams, a competitive NCAA Division II athletic program, student professional societies, a student radio station, and theatre and music programs. Each year, Missouri S&T students help to organize one of the largest St. Pat's celebrations in the nation.

University of Missouri Structure & History

The four University of Missouri campuses are located in Rolla, Columbia, Kansas City and St. Louis. Governing these campuses is the Board of Curators, whose members are appointed by the Governor of Missouri and confirmed by the Missouri Senate. The president of the university directs and coordinates programs of all four campuses with assistance from staff in finance, business management, academic affairs, research, extension, development, public information, and other university services. The activities of each campus are under the supervision of a chancellor, who directs campus affairs within policies established by the UM Board of Curators and the president.

The University of Missouri has a long and proud history. It was established at Columbia in 1839, only 18 years after Missouri became a state. A land-grant university, UM is recognized as the first state university west of the Mississippi River. The university remained a single campus institution until 1870 when the Universi-

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ty of Missouri School of Mines and Metallurgy (Missouri S&T's former designation) was established at Rolla. Campuses at St. Louis and Kansas City were added in 1963.

On July 1, 1964, the UM Board of Curators took action to rename the University of Missouri School of Mines and Metallurgy to the University of Missouri-Rolla.

Missouri University of Science and Technology

On Jan. 1, 2008, UMR became Missouri University of Science and Technology, or Missouri S&T. Our new name will not only help us gain broader national recognition, but will also give us an identity that fits our mission as the state's technological research university.

Accreditation

The University has been accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools, <http://www.ncahigherlearning-commission.org>, (800) 621-7440. Further information on specialized accreditation by department is available in the Missouri S&T Fact Book or at <http://ira.mst.edu/accreditation.html>.

For More Information

If you have additional questions, write or call the Director of Admissions, Missouri University of Science and Technology, Rolla, MO 65409-1060 (800) 522-0938. You also may wish to contact one of the following offices for specific information:

- Air Force ROTC (573) 341-4925
- Army ROTC (573) 341-4744
- Career Opportunities Center (573) 341-4343
- Counseling and Disability Support (573) 341-4211
- Disability Support and Services (573) 341-4222
- Extended Learning (573) 341-4132
- Freshman Engineering (573) 341-4977
- Honors Academy Program (573) 341-4131
- Intercollegiate Athletics (573) 341-4175
- International and Cultural Affairs (573) 341-4208
- Minority in Engineering and Science Program (573) 341-4212
- New Student Programs (573) 341-4025
- Registrar (573) 341-4181
- Residential Life and Student Support(573) 341-4218
- Student Diversity Programs (573) 341-4212
- Student Financial Aid (573) 341-4282
- University Police (573) 341-4300
- Vice Chancellor of Student Affairs (573) 341-4292
- Women in Engineering and Science Program(573) 341-4212

Calendar

Fall Semester 2008

International Student Orientation	August 12
Residence Halls Open for first-time Freshman only	August 16
Freshman Opening Week Orientation Begins	August 17
Transfer Student Orientation	August 21
Registration Period via Joe'SS ends	August 21
Classes Begin 8:00 a.m	August 25
Labor Day Holiday	September 1
Mid-Semester	October 11
Thanksgiving Vacation Begins 8:00 a.m	November 23
Thanksgiving Vacation Ends 8:00 a.m	December 1
Last Class Day	December 12
Reading Day	December 13
Final Exams Begin 8:00 a.m	December 15
Final Exams End 6:00 p.m	December 19
Semester Closes 6:00 p.m	December 19
Residence Halls Close	December 20
December Commencement 11:00 a.m	December 20

Spring Semester 2009

International Student Orientation	January 5
Registration Period via Joe'SS ends	January 8
Residence Halls Open for all residents	January 11
Classes Begin 8:00 a.m	January 12
Martin Luther King, Jr. Holiday	January 19
Mid-Semester	March 7
Spring Recess Begins 8:00 a.m	March 12
Spring Recess Ends 8:00 a.m	March 16
Spring Break Begins 8:00 a.m	March 22
Spring Break Ends 8:00 a.m	March 30
Last Class Day	May 8
Reading Day	May 9
Final Exams Begin 8:00 a.m	May 11
Final Exams End 6:00 p.m	May 15
Semester Closes 6:00 p.m	May 15
Residence Halls Close	May 16
May Commencement 11:00 a.m	May 16

Summer Session 2009

Registration Period via Joe'SS ends	June 5
Residence Halls Open for all residents	June 7
Classes Begin 8:00 a.m	June 8
Independence Day Holiday (observed)	July 3
Final Exams Begin 8:00 a.m.	July 30
Final Exams End 12:30 p.m.	July 31
Residence Halls Close	July 31
Semester Closes 12:30 p.m.	July 31

Academic Resources On Campus

LEAD “Learning Enhancement Across Disciplines” Program

The Learning Enhancement Across Disciplines (LEAD) program offers learning forums for students who wish to improve their understanding of concepts and their mastery of skills in a wide variety of foundational courses to achieve their full potential. LEAD sponsors learning centers and tutoring for courses listed at <http://campus.mst.edu/tutors>.

LEAD Learning Centers

The LEAD program sponsors open-environment Learning Centers for several large-enrollment introductory courses. Discipline-based faculty and undergraduate peer instructors staff the centers during fixed hours each week. Students are encouraged to work in interactive groups to solve problems and to develop strategies, guided and validated by the experts on duty. The centers are designed not only to help students with course content, but to also help them gain professional skills in communication, problem solving, and teamwork.

LEAD Peer Tutoring

Scheduled drop-in tutoring is available at fixed locations for a large number of introductory and foundational courses. It focuses on individual and small-group interactive assistance. The undergraduate peer tutors are accomplished in the course material, trained by professional LEAD staff, and communicate with LEAD faculty mentors in the associated disciplines.

For further information about LEAD, call 341-7070 or check the website at <http://lead.mst.edu>.

Sources of Academic Assistance at Missouri S&T

There are several sources of academic assistance at Missouri S&T that students can access to improve their understanding of and proficiency with course material and learning process.

•Professors

- Professors can clarify concepts or refer students to peers or resources that can provide academic assistance

•**Math Help Program**, Mathematics & Statistics Department, 341-4641, <http://math.mst.edu>

•**Writing Center**, 113 Campus Support Facility, 341-4436, <http://writingcenter.mst.edu>

- New facility with state-of-the-art computers, all the latest software, and a staff of highly trained, motivated, and friendly peer writing tutors.

•**Counseling Center**, 204 Norwood Hall, 341-4211, <http://counsel.mst.edu>

- Study skill reference material at the Van Matre Resource Center

•**Library**, 341-4227, <http://campus.mst.edu/library>

- Great study or meeting facility, and broad learning resources

Admission Requirements

Applications for the fall semester should be submitted by July 1, for the spring semester by Dec. 1, and for the summer session by May 1. All first-time applicants must submit an application fee of \$35, paid in U.S. currency only. An application, application fee, high school transcript and one appropriate test score (ACT or SAT) must be submitted. Acceptance is on a rolling basis.

The completed admission application (with supporting documents) serves as the scholarship application for most merit-based aid programs. The Priority scholarship deadline is December 1 and the final scholarship deadline is February 1 with scholarships awarded on a rolling basis.

Upon acceptance, new students are required to attend a Preview, Registration, and Orientation (PRO) session and comply with the Health Services Policy (see Student Health Services).

Regular Admission From High School

The following minimum requirements are established for general admission of first-time college students to the Missouri University of Science and Technology. Meeting the minimum requirements, however, does not guarantee admission. The Office of Admissions will notify applicants in a timely manner whether they have been accepted, rejected, or placed on a waiting list.

Effective as of the fall semester 1997, regular admission of first-time college students (entering freshman) requires completion of at least 17 units of credit (1 unit = 1 year in class) as follows:

- Four (4) units of English, one of which may be speech or debate. Two units emphasizing composition or writing skills are required.
- Four (4) units of mathematics (Algebra I or higher). This requirement may be satisfied by the completion of courses in middle school, junior high, or senior high.
- Three (3) units of science (not including General Science). The three units of science must include at least one laboratory course and must include units from at least two of the following areas: physical science, biology, physics, chemistry, and earth sciences. This requirement may be satisfied by the completion of courses in middle school, junior high, or senior high.
- Three (3) units of social studies.
- One (1) unit of fine arts, to be taken in visual arts, music, dance or theater.
- Two (2) units of a single foreign language. This requirement may be satisfied by the completion of courses in middle school, junior high, or senior high.

Students will also be evaluated on a combination of aptitude examination percentile (ACT or SAT test), class

rank and grade point average (GPA). If the sum of the high school class rank percentile and aptitude examination percentile is:

120 or greater: The student is generally directly admissible. However, the university placement process may require remediation and reduced schedules for some students.

100-120: Students in this range are frequently at high risk in successfully completing university level work. Students in this category may be admitted, but will receive advising, recommendations for remediation, and reduced academic schedules.

Less than 100: Students in this range are normally admissible only after additional academic development which is not available at Missouri S&T. Students in this category are encouraged to apply to Missouri S&T through the Transfer Assistance Program (TAP).

The University seeks a heterogenous student body reflecting diversity of race, gender, ethnicity, age, geography (including international students), and physical disability. Factors given prime consideration for admission to undergraduate study are an applicant's previous academic success and the quality of the records presented. Applicants who do not meet the criteria set forth for regular admission from high school may be considered by appealing to the Admissions Appeal Committee. Additional factors which may be considered for admissions include:

- extensive extracurricular activity
- personal statement of 200 words or less (optional)
- outstanding talents and/or abilities
- number and scope of college preparatory courses taken
- evidence of marked improvement, over time, in high school academic record
- significant work experience and/or family responsibilities

Special Admission Cases

1) Early Admission from High School. Superior high school students may be admitted before they have graduated from high school. There are two types of early admission:

A) If the student has completed all of the requirements for graduation from high school, eligibility for admission will be determined by the procedures established for regular admission from high school. Certification by the high school principal or counselor that graduation requirements have been met and a high school diploma will be issued is required.

B) If the student has not completed all requirements for graduation from high school, a test score and a high school class rank must be presented. The combination of test score and class rank will be evaluated on the basis of a standard that is higher than the standard for regular admission from high school. A GED will be required in lieu of a diploma.

In either case, an interview will be required and the following information is required from each applicant:

- application for admission
- high school transcript (sent by school)

- letter of recommendation from high school principal or counselor
- written parental approval

2) Dual High School-University Enrollment. Superior high school students may be admitted in a special student category for the purpose of taking university courses while in high school. Students from high schools in the local areas are served by this option. Students must submit a regular application for admission along with a special request that includes a high school recommendation and written parental approval. Admissions are limited and governed by space available in, and prerequisites for, the desired course or courses.

3) Trial Admission. Graduates of Missouri high schools who do not meet the standards for regular admission from high school may be admitted on a conditional basis, in the summer session, to any campus of the university. Typically, the enrollment is for six hours, and if "C" grades or better are earned in those six hours, the student is permitted to enroll the following semester.

4) Accredited High School Equivalency. An individual may apply for admission on the basis of scores on the General Educational Development (accredited) test after the individual's high school class has graduated. Applicants in this category are admitted on an individual basis.

5) Graduates of Accredited High Schools. Graduates who have been out of high school for a number of years or for similar reason do not have a record of rank in high school class are required to have a minimum ACT enhanced composite of 24 or equivalent SAT for direct admission.

6) Admission from Non-Accredited High Schools and Home Schooled Students. Graduates of high schools that are not accredited by recognized regional accrediting associations or approved by recognized state agencies; e.g., the University of Missouri Committee on the Accreditation of Non-Public Schools, are required to have a minimum ACT enhanced composite of 24 or equivalent SAT. This applies to home schooled students.

7) Admission from Non-Ranking High Schools. Graduates of high schools that do not rank their students are considered on an individual basis. A minimum ACT Composite score of 24 or equivalent SAT is normally required.

A Campus Admissions Committee will establish necessary policies for and oversee the administration of these regulations. The committee, or the director of admission acting under its direction, will determine which applicants will be admitted. The committee has the authority to establish standard application forms, to request interviews from an applicant, and to establish procedures for admission during the senior year while required courses are being completed. The committee has the authority to establish procedures for early admission from high school, dual high school-university enrollment, trial admission, and GED high school equivalency enrollment.

Admission of Transfer Students

The following minimal requirements are established for general admission of transfer students. They do not include more stringent requirements that may be established by the faculties of the individual campuses, or the requirements of special programs (most engineering degree programs require a higher GPA for admission). It is the responsibility of the transfer student to check with Missouri S&T transfer personnel regarding admission requirements.

- 1) A student who has completed fewer than 24 semester hours of college-level work must apply under the procedures for admission to the freshman class and must have at least a 2.0 overall grade point average (4.0 system) in all college-level courses attempted at previous institutions.
- 2) An applicant who has completed 24 or more semester hours of college-level work is eligible for admission if he or she is in good standing and has attained an overall grade point average of at least 2.0 (4.0 system) in all college-level courses attempted at previous institutions. (Each campus faculty governing group shall review the performance of transfer students and may recommend at that time a measure of performance which would indicate a reasonable chance of making a 2.0 grade point average at the university.) A 2.0 GPA does not guarantee admission to specific degree programs.
- 3) An applicant who does not meet these standards may apply by submitting to the Admissions Committee such data as the committee considers appropriate. The committee, or the director of admissions acting under its direction, may determine who shall be admitted.

Admission of International Students

International students who wish to enter the University of Missouri-Rolla are required to:

- 1) Demonstrate sufficient command of English to successfully pursue work at the Missouri University of Science and Technology. Departments normally require a TOEFL score of 213 (computer based score) or 79 (Internet-based scoring) or 550 (paper-based score) or an IELTS score of 6.0. Students may also submit proof of successful completion of a recognized ESL program.
- 2) Submit an application for admission, accompanied by a \$35.00 admission fee. Paid in U.S. currency. (No waivers.)
- 3) Submit at the earliest possible date official transcripts (mark sheets) for each year from all secondary schools attended, showing courses taken, grades earned, rank in class, grade point average, and class or division earned if applicable. The applicant will be notified when evaluation is completed. Please note the following condition:

Students transferring from another American college or university are required to complete at least one semester before transferring. With the application, students must submit a complete tran-

script. Official transcripts must be sent directly from all previously attended colleges or universities. A list of courses in progress must also be sent. Missouri S&T's international student School Transfer Eligibility form must be completed by the international student advisor from American institutions attended.

- 4) Submit a statement verifying ability to provide financial support:
 - A) Applicants: A bank statement made by the sponsor or bank indicating source and amount of funds available per year.

Note: Your application for admission will not be given consideration until items one through three (English verification, application fee, complete transcripts,) have been received. The I-20 cannot be processed without a bank statement. If your completed application materials are not received by the deadlines indicated below, admission may be delayed one semester.

- Fall semester – June 15
- Spring semester – November 15
- Summer session – April 1

Dual Enrollment of Missouri S&T Undergraduate Students in Graduate School

Undergraduates may apply for dual enrollment as both an undergraduate and a graduate student for the second semester of their senior year. A student who seeks dual enrollment must submit an application to the Director of Admissions. Admission for dually enrolled students is granted by the department chair and the Vice Provost of Graduate Studies. Admission is normally limited to those students who rank in the upper third of their undergraduate class. As an alternative to class rank, students who have at least a 3.0 GPA for the previous three semesters and at least a 3.0 mid-semester GPA in the semester prior to registering shall be permitted to dually enroll. Undergraduates in the honors program may be dually enrolled for two semesters of their senior year. A form for this purpose can be obtained at <http://registrar.mst.edu/documents/dualenrolled.pdf>. Students must declare which courses are to be taken for graduate credit within the first two weeks of the semester. A dually enrolled student must take at least three hours of undergraduate credit from Missouri S&T each semester.

Dually enrolled students are limited to sixteen total credit hours per semester, but petitions for additional credit hours will be considered by the Provost. Petition forms are available at <http://registrar.mst.edu/documents/dualenrolled.pdf>. If a dually enrolled student fails to meet minimum undergraduate scholastic standards, his or her resulting academic probationary status will be that of an undergraduate and will be evaluated without reference to the student's grades in his or her graduate course(s).

Transfer Credit Policy

Missouri S&T accepts college-level (not remedial) course credits. All grades, quality points and credit hours are transferred and computed in the cumulative GPA. Grades not included in the transfer institution's GPA due to a repeat or forgiveness policy may be removed from the Missouri S&T cumulative GPA upon verification to the Registrar's Office. No more than 15 semester transfer hours will be dropped from the calculation of the student's cumulative GPA.

College-level (not remedial) course credit earned while enrolled in high school (dual-credit) shall follow the same policy as transfer credit.

The last 60 hours of an undergraduate program must normally be taken in residence at Missouri S&T. A student may, with departmental approval, take up to 15 hours of this 60 hours off campus. If the student wishes to exceed 15 hours (of the last 60 hours) taken off campus, the student must obtain approval of the department chair of the student's major department.

Mathematics Placement Test

All new freshmen will take placement tests. These tests will be given during the spring and summer orientation sessions or during the fall registration (for those who do not preregister). A high level of performance is required on both these tests in order to place into Calculus with Analytic Geometry I the first semester. Therefore, it is strongly recommended that students have four years of high school mathematics courses and that algebra and trigonometry be thoroughly reviewed before taking these tests.

Credit by Examination

There are six different programs included in Missouri S&T's credit by examination policy. These programs include Advanced Placement, International Baccalaureate, subject exams in the College Level Examination Program (CLEP), Missouri S&T Placement Testing, military coursework/experiences (Commission on Accreditation of Services), and in some instances, departmental examinations. Contact Admissions at 1-800-522-0938 or <http://www.mst.edu> for Credit by Exam information. To inquire about Math Placement or CLEP testing, contact the Missouri S&T Testing Center at 1-573-341-4222 or at <http://testcenter.mst.edu>.

Transfer Assistance Program (TAP)

Missouri institutions of higher education welcome transfer students; however, you should be aware that actual requirements for degrees vary from institution to institution. This factor makes it particularly important for you to contact the campus where you eventually wish to graduate very early in your academic program. By arranging an advance understanding of the transfer of applicable courses, it is likely that problems can be minimized. Unresolved problems of credit transfer may be appealed to the Student Scholastic Appeals Committee.

The Transfer Assistance Program, TAP, is designed to assist entering students during their first two years of

college at another participating institution and then assist them in completing their education at Missouri S&T.

When students enroll in TAP, they will be provided with a model transfer program that is developed in conjunction with the participating local college. TAP provides a semester-by-semester course of study for the two years spent at a participating college.

Missouri S&T Transfer staff will assist transfer students with questions and make regularly scheduled visits to participating colleges. Specially trained Missouri S&T academic advisors assist with pre-advising programs that offer the same opportunity for course selection as currently enrolled students.

TAP students generally do well academically; however, the first semester at Missouri S&T can be a time of adjustment. The Admissions transfer personnel will help the student adapt to the campus.

Orientation programs designed specifically for the transfer student allow new transfer students to speak with students who have already made the transition from their two-or four-year local college to Missouri S&T and to discuss career and personal counseling, computer services, placement services, health services, student activities, and library instruction.

If you decide to become part of TAP, check the web site, <http://www.admissions.mst.edu>, or contact the Transfer Representative, Office of Admissions, Missouri S&T, Rolla, MO 65409-1060 or call 1-800-522-0938, email: transfer@mst.edu.

Fees

"The University reserves the right to modify by increase or decrease the fees charged for attendance and other services at the University, including but not limited to educational fees, at any time when in the discretion of the governing board the same is in the best interest of the University, provided that no increases can or will be effective unless approved by the governing board not less than thirty (30) days prior to the beginning of the academic term (semester, etc.) to which the fees are applicable, with all modification of fees to be effective irrespective as to whether fees have or have not been paid by or on behalf of a student prior to the effective date of the modification."

Electronic Billing Statements

Electronic billing is the official billing method for currently enrolled students at Missouri University of Science and Technology. Students will be notified by e-mail at their Missouri S&T e-mail account when monthly billing statements are available. Currently enrolled students will be able to view, print, and pay their student fee bill online at Joe'SS.

Currently enrolled students can also authorize others (parents, grandparents, guardians) to view and pay their student fee bill. Authorized users can be established and maintained on Joe'SS under Campus Finances, Billing Authorized Users. Authorized users have access to electronically view and print the monthly billing statement and make payment online. They are

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also notified when the statement is available at the e-mail address entered by the student during set-up. For further information, visit the Missouri S&T Cashier's Office web site at <http://cashier.mst.edu>

Educational Fees

All students enrolled at Missouri S&T are required to pay an educational fee.

Educational Fee per Credit Hour

Missouri Residents		Non-Residents
\$245.60	Undergraduate	\$615.30
\$298.70	Graduate	\$771.20

Courses audited and courses taken for reduced credit will be counted at their normal credit value in computing the amount of fees to be paid. Students enrolling in zero credit hours are required to pay fees according to the equivalent credit for the course. The difference between the educational fee for nonresident and Missouri resident students is waived for a graduate or first professional degree student who is a teaching, research or extension assistant holding a .25 or more FTE (full-time equivalent appointment).

The difference between the educational fee for nonresident and Missouri resident student is waived for a graduate or first professional degree student holding a fellowship that does not include payment of required fees.

Information Technology Fee

All students enrolled at Missouri University of Science and Technology are required to pay an Information Technology Fee of \$12.20 per credit hour.

Supplemental Fees

An additional Supplemental Fee will apply to the following and will be charged per credit hour:

An Engineering Supplemental Fee of \$54.50 per credit hour will be charged to all students enrolled in engineering courses, except for courses offered by the Department of Geology & Geophysics. Co-listed courses are subject to the Engineering Supplemental Fee.

A Science Supplemental Fee of \$54.50 per credit hour will be charged to all students enrolled in Computer Science, Biological Sciences, Chemistry, Geology, and Geophysics courses. Co-listed courses are subject to the Science Supplemental Fee.

A Science Supplemental Fee of \$27.30 per credit hour will be charged to all students enrolled in Physics courses. Co-listed courses are subject to the Science Supplemental Fee.

A Business, IS&T, and M&IS Course Fee of \$27.30 per credit hour will be charged to all students enrolled in Business, IS&T, and M&IS courses. Co-listed courses are subject to the Business Supplemental Fee.

Student Activity/Facility Fee

A student activity/facility Fee is charged to students each semester to pay for a variety of activities, services, and bonded debt on student fee funded buildings.

The activity/facility fee is determined and approved by the Student Council. The activity/facility fee includes fees for the Havener Center, intramural and recreational facilities and programs, campus events, the student newspaper, radio station and yearbook, and funding for a variety of student organizations. The activity fee for the fall semester is \$296.50, for the spring semester is \$296.50, and for the summer semester is \$124.35. The Rollamo Yearbook fee of \$10.00 will be charged to all undergraduate students enrolled for seven or more hours and will remain optional for all undergraduate students enrolled for fewer than seven hours and all graduate students. Graduate students pay \$3.30 to fund the Council of Graduate Students. The activity/facility fee is prorated for students enrolled in fewer than 10 hours.

The activity/facility fee is charged to all students, undergraduate and graduate. Students attending the Engineering Education Center in St. Louis pay the designated UMSL student activity fee.

Additional information concerning the Missouri S&T Student Activity/Facility Fee is available at: <http://studentlife.mst.edu>.

Health Service Fee

The Health Service Fee is charged to all students, graduate and undergraduate (full or part time enrolled.)

- Fall/Spring session: \$79.00 per session
- Summer session: \$39.50

Time of Payment of Fees

All fees must be paid in full, or payment arrangements made, at the time of registration at the opening of each semester or term as a condition of admission to classes. Consult the academic calendar for dates of registration and payment of fees.

Minimum Fee Payment Plan

The student's account (to include fees, housing, telephone, traffic violations, etc.) will be billed for the full amount each month with a minimum payment allowed. The minimum payment is derived by dividing the full account balance by the number of scheduled payments remaining in the semester. If a student chooses to pay the minimum amount, a 1% per month interest charge will be assessed on the remaining unpaid account balance.

Late Payment Fee

Student fee accounts will be subject to a late fee of \$10.00 for unpaid amounts billed when payment is not received by the scheduled due date as communicated on the student's monthly billing statement. If the minimum payment or billed balance due is paid on or before the scheduled due date, as it appears on the student's monthly billing statement, no late fees will apply.

Past due amounts owed the University must be satisfied by payment in full. Failure to pay may result in transcripts or diplomas being withheld. The University will pursue appropriate collections practices which may include referrals to a collection agency for accounts that remain past due. The account may be assessed an ad-

ditional collection charge of up to 50% of the balance if referral to a collection agency becomes necessary.

Fall Semester Payment Due Dates

Preregistered students: Five installments due July, August, September, October and November 15th.

Regular registration students: four installments with the first one due at registration and the remaining due September, October and November 15th.

Spring Semester Payment Due Dates

Preregistered students: five installments due December, January, February, March and April 15th.

Regular registration students: four installments with the first one due at registration and the remaining due February, March and April 15th.

Summer Semester Payment Due Dates

Preregistered students; 50% of fees due May 15th and 50% due June 15th. Regular registration students: total fees due at registration.

Financial Aid

Approved financial aid is applied directly to a student's account. The entry will appear as a credit on the billing statement and will reduce the current term balance due. The balance remaining after application of financial aid will be billed to the student and will be subject to the minimum payment process and interest charge calculation.

Personal Checks

Personal checks will be accepted only for the amount due from the student. A late registration fee will be assessed if a check presented in payment of student fees is returned unpaid and remains unpaid after the close of the regular registration period.

Credit Card Payments

The University of Missouri Cashier's offices do not accept Visa-branded credit cards for payments to the student account. If you choose to make payments on the student account using MasterCard or Discover cards, the third-party vendor will add a service charge of 2.75% to the transaction. To avoid the service charge, students are able to make payments directly from any checking account by using the web payment option (Electronic Funds Transfer) through Joe'SS, simply by entering the bank/financial institution routing and account number information at the time of online payment. The student will need his or her single sign-on and password in order to make payment. The student is the only one who should have this information. Parents are able to make a credit card payment by going to the cashier's office web site at <http://cashier.mst.edu> and clicking on the "Make a Parental Credit Card Payment." This option requires only the student ID number and the birth date of the student. Currently enrolled students can also authorize others (parents, grandparents, guardians) to view and pay their student fee bill. Authorized users have access to electronically view and

print the monthly billing statement and make payment online. Because of FERPA laws, financial information is not shown. The 2.75% service charge will apply to any credit card payments made.

Late Registration Fee

A student who registers later than the regular registration days for a semester will be charged the late registration fee of \$245.60. Also, by registering late, a student may find certain sections or entire courses closed to registration. Each department reserves the right to close sections of courses or even to close enrollment in a department, when the capacity of the class is reached.

International Student Sponsored Student Program

A full range of services for sponsored international students is provided through the Office of International Affairs (IA). International students sponsored by international agencies receive special services and are charged \$250 per semester per student. Details on the current Sponsored Student program and costs are available upon request from the Office of International Affairs, 103 Norwood Hall, Rolla, Missouri 65409-0160.

Mandatory Health Insurance for International Students

All international students, as a condition of their enrollment, are required to purchase mandatory health insurance. This includes all F-1 and J-1 visa students. In addition, J-1 visa students whose spouse and/or children are living in the U.S. are required to carry health insurance. An independent carrier, working through the International Affairs (IA) office, provides an insurance policy at a reasonable cost. Premiums must be paid within two weeks of the beginning of the Fall and Spring semester. (Summer premiums are included in the Spring Semester.)

For more information on the mandatory health insurance requirements for international students, contact the International Affairs Office, 103 Norwood Hall, 573-341-4208.

Offset of Missouri Income Tax

For those non-residents who pay Missouri income tax, the non-resident educational fee shall be credited in an amount equal to the actual Missouri income tax paid for the previous calendar year, except that the remaining obligation shall not be less than the amount of the resident educational fee. Unemancipated minor or adult dependent students are eligible for reason of payment of Missouri income tax by the non-resident individual or individuals having custody of said students. Students entering in January shall be regarded as entering in the fall for purposes of determining previous calendar year. For students entering after January, previous year means immediate past calendar year.

For those non-resident student's who have non-resident scholarships, the amount of this scholarship will be deducted first from their non-resident fee. If a student

qualifies, the remainder of the non-resident balance may be offset by Missouri income taxes paid (see above).

To effect an offset, the student shall furnish to the Cashier's Office satisfactory evidence that the tax was paid, the date of payment, and that the student is entitled to an offset. Ordinarily, evidence of payment and the date thereof will be confirmed by exhibiting to the Missouri S&T Cashier, a copy of the State Income Tax return, together with canceled check (if any) or photo copies thereof; or if all taxes were withheld, the MO-WH-2 form, or photo copy thereof, showing the amount of tax withheld must be presented. After reviewing the evidence submitted, the Cashier may request other evidence of payment of tax.

Tax credit thus established may be used only once as an offset against the non-resident educational fee, but any tax credit not used in a given term may be carried forward to be used in a subsequent term, subject to the time limitation stated above. If several students from the same family claim allowable tax credit, the tax credit shall be applied as the taxpayer directs. If the taxpayer does not direct application, the Cashier shall make such application. Tax credit may be offset against the non-resident educational fee only, and may not be offset against any other fees or obligations.

Refund of Fees

Fees subject to refund include: educational fees, information technology fees, engineering, science, and business supplemental fees, student activity/faculty fees, health service fees and any instruction-related miscellaneous fees that may be assessed.* Students who have registered for credit courses, and made payment of fees, and whose registration is subsequently

canceled, or who withdraw from the university or reduce their course load, will, subject to certain exceptions and upon written request to the Cashier's Office, receive a refund of the fees in accordance with the following schedule: class day of cancellation, withdrawal, or change of course load. The official Missouri S&T refund policy can be found from the Chancellor's Policy Memorandum site at: <http://chancellor.mst.edu/documents/III16.pdf>

Fall/Spring Semester – 16 weeks

Before the first day of classes: 100% refund, less an enrollment cancellation fee of \$20.00.
 Class days 1-5.....90% refund.
 Class days 6-10.....70% refund.
 Class days 11-25.....50% refund.
 After class day 25.....NO REFUND.

Summer Session – 8 weeks

Before the first day of classes: 100% refund, less and enrollment cancellation fee of \$20.00.
 Class days 1-3.....90% refund.
 Class days 4-5.....70%refund.
 Class days 6-13.....50% refund.
 After class day 13.....NO REFUND.

Class days are counted by excluding Saturdays, Sundays and holidays.

*Deductions may be made from any refund of fees for any financial obligation due the university.

**Aerospace Studies
(Air Force ROTC)**

The Air Force Reserve Officer Training Corps (AFROTC) is an educational program designed to give young men and women the opportunity to become Air Force officers while completing a bachelor's or master's degree. The mission of Air Force ROTC is to develop quality leaders for the Air Force. As the largest source of Air Force officers, AFROTC prepares officer candidates to assume positions of increasing responsibility and importance in today's Air Force. Leadership, communication, and basic military skills are the focus of the AFROTC program. In addition to helping students succeed during college, AFROTC also fosters self-confidence and self-discipline.

The Program:

The AFROTC program at Missouri S&T is a four-year program. However, some students may choose either a three or two year course of study, determined by personal circumstances. The first two years of the program, called the General Military Course (GMC), cover basic introductory military topics as well as communication and leadership. Each GMC class is a one-hour course. Students can enroll in the GMC by registering for aerospace studies just as they register for any other university course. There is absolutely no obligation incurred for service in the Air Force for taking GMC courses, unless the student has an active AFROTC scholarship.

The final two years of the program, called the Professional Officer Course (POC), cover topics such as leadership, management, doctrine, international events, quality, communication, and officership. Each POC class is a three-hour course. In addition to the academic GMC/POC ROTC class, all cadets attend up to a two hour leadership laboratory each week. Leadership laboratory provides cadets with the knowledge and practical command and staff leadership experience in preparation for active duty as Air Force officers. It is largely cadet planned, directed, and centered.

Students usually attend summer field training prior to their junior year, before elevation into the POC. Field training is either a four week, or six week encampment, depending on the individual's ROTC program length. Entrance into the POC is based on an extensive evaluation and selection process during the student's sophomore year. Selections are based on the "whole person" concept, which considers the results of an Air Force Officer Qualifying Test, a military physical examination, university grade point averages, and physical fitness performance, among other factors.

Scholarships

Students do not have to be on a scholarship to complete our program and be an Air Force officer. However, Air Force ROTC Scholarship, can include all tuition costs, incidental and lab fees, and a flat rate for text books. A monthly stipend is given during the academic year to each cadet on scholarship and also members of the POC. Students who receive an AFROTC scholarship also receive an annual \$2,000 supplement from Missouri S&T, which will currently cover most room costs, board not included. The university currently offers a limited amount of scholarship funding to be applied to dormitory rooms, which are awarded annually to AFROTC cadets based on scholarship status, financial need, and merit. Out-of-state Air Force 3-year scholarship winners could qualify for free tuition their first year through Missouri S&T's Loan-Forgiveness Program (call for further information).

Field Training

Air Force ROTC cadets' first extended exposure to a military environment comes with a Field Training Unit, usually at the end of the sophomore year. The cadets get a close look at Air Force life and activities and the Air Force simultaneously takes a close look at the cadets.

These FTUs include cadet orientation, survival training, junior officer training, physical training, organization and functions of an Air Force base, career orientation, drill and ceremony, small arms familiarization, and supplemental training.

As mentioned before, the length of field training, either a four or six-week unit, depends on the length of the ROTC program the cadet is taking. For a cadet with a typical four-year ROTC program, field training consists of a four-week unit.

Graduate Study

The Air Force realizes there is an increasing demand for graduate education among its personnel and has established several programs to provide this training. The Air Force Institute of Technology is available to AFROTC graduates and offers advanced degree training in college curricula that are related to Air Force career fields, including engineering, meteorology, the physical sciences, mathematics, languages, logistics, and business administration.

Qualifications

All students who desire to enter Air Force ROTC must be citizens of the United States, be of sound physical condition, and be of the highest moral character. Pilot and navigator candidates must be no older than 29 at commissioning; other age restrictions may apply for non-rated commissionees.

Physical Requirements

Detailed information on physical requirements is available at the detachment on campus located on the second floor of Harris Hall, or at www.afrotc.com.

Military Obligation

Upon graduation and commissioning as an officer in the U.S. Air Force, students fulfill their military obligation by agreeing to retain their commission for a period of eight years, serving at least four years on active duty, depending on their selected Air Force career field. Pilots incur a ten-year active duty service commitment after completing undergraduate pilot training. Navigators incur a eight-year active duty service commitment after completing undergraduate navigator training. Aircraft Battle Management Officers incur a six-year active duty service commitment after completing A&M Training.

Opportunities

Opportunities in the Air Force are excellent, with over 100 possible career fields available. Career field availability depends on academic discipline, medical condition, desires of the individual, and needs of the Air Force. As newly commissioned Second Lieutenants on active duty, Air Force ROTC graduates can serve rewarding duties in highly technical, scientific, and operational areas such as design, research, engineering, systems development, space operations, computer science, procurement, flying, management, acquisition, and maintenance.

The Corps of Cadets

The Air Force ROTC unit at Missouri S&T is organized as an objective wing, with associated groups, squadrons, and flights. Freshmen and sophomore cadets are assigned to one of the flights. They receive instructions from POC cadets in basic military customs and courtesies, drill movements, and many other facets of Air Force operations. Additionally, they are offered the opportunity to visit Air Force bases and discuss career opportunities with Air Force members. Junior and senior cadets are assigned and rotated through various leadership positions, gaining experience in management procedures.

If you are interested in the Air Force ROTC program here at Missouri S&T or have any questions, please call or visit the detachment. We are on the second floor of Harris Hall. Our phone number is (573) 341-4925, or you can also find us at <http://campus.mst.edu/airforce>.

Assessment Requirements

All students at Missouri S&T are required to participate in appropriate assessment activities. The requirement to assess students originates from a directive at the Governor's Office and from the legislature of the State of Missouri. Public universities are accountable to the state, and are expected to prove, by demonstrating student performance outcomes, that funds are being spent appropriately and learning objectives are realized. The Board of Curators has supported that directive, and the campus faculty assessment committees have developed Missouri S&T's assessment policy in order to implement the directive.

Assessment involves the systematic process of gathering and using data for evaluating and improving programs and services. Standard educational research methods are used to gain concrete evidence about how well Missouri S&T is achieving its mission goals.

With the advent of the performance funding initiative in recent years, Missouri S&T's level of funding depends in part on the performance of students on assessment exams.

Student results: In cases where individual student scores are available, they will be distributed to interested students. Individual results will be used for research purposes only. The Office of Institutional Research and Assessment guarantees complete confidentiality for all students.

Missouri S&T Policy

All graduating seniors must fulfill the assessment requirements, as determined by the major field department and consistent with Office of Institutional Research and Assessment, campus and the Board of Curators' guidelines, before graduating.

All other full-time students must fulfill Office of Institutional Research and Assessment, and the assessment requirements as determined by the campus consistent with the Board of Curator's guidelines, before registering for further course work.

Compliance is important to Missouri S&T students, programs, and the entire institution. Specifically, students must cooperate in the following manner, which is subject to change:

General Education

1) Freshmen complete various surveys such as needs, satisfaction, and state wide surveys.

2) Students who have completed a sufficient number of credit hours will be scheduled to take a general education test such as the Measure of Academic Proficiency and Progress (MAPP), which measures several general education skills.

Students will be notified the semester they are expected to fulfill the requirements. Should a student fail to meet the requirements as scheduled, registration for future courses will be withheld.

Assessment requirements affect enrolled students immediately. Assessment requirements are not linked to catalog year and may change during a student's undergraduate career.

Major Field

Seniors take a major field test, such as the Fundamentals of Engineering (FE) test or the Major Field Test (MFT), before being approved for graduation.

Students receive MFT notification from their department. Information about FE test dates and requirements is available through engineering departments.

Participation in the assessment program ensures continuous improvement and a quality education for current and future generations of students.

Assessment requirements affect enrolled students immediately. Assessment requirements are not linked

to catalog year and may change during a student's undergraduate career.

Career Opportunities Center (COC)

The Career Opportunities Center, located on the third floor of Norwood Hall, provides many services to assist Missouri University of Science and Technology students and graduates in their job search for professional full-time, summer and co-op employment.

The COC is an effective link between Missouri S&T students and employers, and its goals are two-fold: first, to PREPARE students for conducting a successful job search, and second, to PROVIDE opportunities for employment.

I. JOB SEARCH PREPARATION

<http://career.mst.edu>

The COC webpage is accessible on the Internet and contains information on services, career fairs, events, on-campus interviews, and job listings, as well as on-line copies of the COC Career Guide.

Individual Advising

Appointments are available with career advisors who work one-on-one with students to review their resume and cover letter and to discuss job search concerns.

Workshops & Events

Workshops on Resume and Cover Letter Writing, Conquering the Career Fair, Professionalism & Interviewing Skills, Plant Trips and Evaluating a Job Offer are presented both semesters at convenient times for students.

An Etiquette Dinner is provided each semester to review dining and business etiquette.

"Life after Missouri S&T" is presented each spring for graduating students. This is a series of seminars to help students make a smoother transition to the real world and includes tips from business and industry experts.

Practice Interviews

Practice interviews are available for students who would like to assess their interviewing skills. Students are evaluated by a career advisor and given feedback on their strengths and areas that need improvement.

II. JOB SEARCH OPPORTUNITIES

Career Fairs

Two career fairs are sponsored each year to provide students direct access to hundreds of employer representatives. Students have the opportunity to meet face-to-face with recruiters, hand out resumes, and collect

employer information. These contacts often lead to full-time, summer, and co-op interviews and employment.

On-Campus Interviews

Full-time, summer and co-op interviews are conducted by employers in the COC's professional interview suites, located on the 3rd floor of Norwood Hall. Students must be registered with the COC to upload their resume into InterviewTRAK and participate in on-campus interviews. Students should check the system daily for information about employers coming to interview, job requirements, and important dates. Each student is responsible for submitting his or her resume electronically and for signing up for interviews by the stated deadlines.

Resume Referrals

When a student registers with the COC, his or her resume can be referred to employers who are interested in hiring Missouri S&T students even though the employer may not necessarily be coming to campus to interview. The employer will then contact the student directly if he or she are interested.

Resume Drops

Some employers will list their job opportunities and request a "Resume Drop" from students. Interested students are responsible for submitting their resume to the employer through InterviewTRAK by a designated date. Resumes submitted are reviewed and students in whom the employer is interested will be contacted.

Alumni

Missouri S&T alumni may also register with the COC. Once registered, they will receive password access to InterviewTrak to search job listings. In addition, alumni resumes are uploaded in the system and will be sent to employers requesting resume referrals if they match their hiring qualifications.

Cooperative Education Program (Co-op)

The Missouri University of Science and Technology's Cooperative Education Program, administered by the COC, is designed to provide students with an employment opportunity to gain practical degree-related, work experience prior to graduation. The program is set up so that students can take a break from studies and work full-time for one or for a combination of semesters such as spring/summer or summer/fall, allowing 8-9 months of work experience vs. the 3 summer months allowed for internship positions. Students may also obtain parallel co-op jobs in which they work and study on a part-time basis simultaneously. Approximately 100-150 employers hire Missouri S&T co-op students annually, and students apply for those positions through the traditional resume/interview job search process that is facilitated by the COC. The COC also helps to create new student co-op opportunities with employers who have not previously hired co-ops at Missouri S&T.

Co-op Benefits

- Gain future employment advantage
- Earn a higher starting full-time salary
- Validate your career plans
- Option to earn academic credit
- Network with professionals and other college students
- Apply your textbook knowledge
- Learn corporate recruiting strategies
- Help finance college - the average monthly co-op salary is approximately \$2,600.00

Co-op Eligibility

To be eligible to participate in the Co-op Program, a student must be enrolled full-time when applying for and while participating in the Co-op Program. (Full-time is defined as satisfactorily carrying and passing a minimum of 12 credit hours in a fall or spring semester and a minimum of 6 hours in a summer session.)

A student must have a cumulative GPA of at least 2.0 out of 4.0 to apply to and participate in the program. The student must not be on any type of probation. Students in all majors at Missouri S&T may participate in co-op.

The actual amount of academic work that must be completed before being selected for the program or before beginning a work period is up to the employer, but a freshman must have completed at least two semesters. Other eligibility requirements may be established by the sponsoring company with the concurrence of Missouri S&T. Financial need is not a determining factor as to which students are employed.

A transfer student may register for co-op as soon as he or she begins classes at Missouri S&T. A transfer student who is participating in a co-op program through another institution may transfer and continue the co-op affiliation subject to Missouri S&T's guidelines.

Missouri S&T Registration during Co-op

Students participating in the Co-op Program register each work term (Summer, Fall, and/or Spring) with the COC. To register with the University, students pay the educational fee of one in-state credit hour, regardless of residency. Registration includes:

- Retaining scholarship(s) which require that the student be registered with the University.
- Maintaining continuously enrolled status for insurance and loan purposes.
- Not having to apply for readmission to Missouri S&T to attend classes following the co-op work term.
- Receiving pre-registration information.
- Documentation of co-op participation on the student transcript.

Credit for co-op is awarded at the discretion of the student's academic department. Students must be registered with the university for work terms when academic credit is to be earned.

International Students

International students are required to register for co-op at the COC in order to be legally eligible to obtain work authorization. This applies to both co-op and summer internships. International students must complete paperwork with the International and Cultural Affairs office first and then with the COC. After completion and approval of paperwork, international students will receive work authorization and the necessary documentation to provide to their employer. International students are eligible for co-op after 9 months of studies, with academic department approval.

More Information

For additional information concerning the COC please contact:

Career Opportunities Center
1870 Miner Circle
Third floor Norwood Hall
Missouri University of Science and Technology
Rolla, Missouri 65409-0240
(573) 341-4343

Counseling and Disability Support Services

The Counseling Center

The Counseling Center offers a variety of services to the Missouri S & T campus community, including individual, group, and crisis counseling; consultation; programming for organizational development; presentations on many topics; the Van Matre Resource Center of self-help materials; and the Faculty and Staff Assistance Program.

Missouri S&T's Disability Support Services ensure that students with disabilities have equal access to academic classrooms and curriculum by coordinating services and academic support. Accommodations can make a difference in academic success.

Personal, academic, and career counseling is provided on a time-limited basis to Missouri S & T students and benefit-eligible employees. Services, which are provided by professionally trained counselors and/or psychologists, are free and confidential within ethical and legal limitations. Concerns commonly addressed in personal counseling include self-exploration, college adjustment, family issues, feelings of depression and anxiety, interpersonal issues, communication skills, and self-esteem. Relaxation strategies and methods to cope with the many stressors of daily living may also be addressed.

Individuals wondering about their majors and career options may benefit from career counseling, which typically explores personal and professional goals and how to achieve them. Academic counseling involves as-

sistance with test anxiety, time management, and other skills related to success at Missouri S & T.

Group counseling is an interactive, supportive, and interpersonal form of therapy. Counseling Services offers several groups based on campus need and interest. Some current and past groups are Family Issues, Graduate Student Support Group, and Career Exploration.

The Counseling Center actively promotes student learning and professional development through its learning enhancement and outreach programming services. The staff offers programs to campus groups on topics such as teamwork, stress management, academic success, test anxiety, conflict resolution, and time management.

The Van Matre Resource Center, a self-help library, contains excellent audio, video, and reading materials. Topics range from communication skills to parenting, career exploration issues to dealing with depression, anxiety, and abuse. Materials are available for checkout.

The Faculty Staff Assistance Program (FSAP) offers a variety of services such as counseling, consultation, organizational development, and programming for faculty and staff.

For more information contact Counseling and Disability Support Services, 204 Norwood Hall, 341-4211 or visit our web site at <http://counsel.mst.edu> and <http://dss.mst.edu>.

Disability Support Services

This policy statement relating to otherwise qualified persons with disabilities outlines the roles and responsibilities of students, faculty, staff, and the Coordinator of Disability Support Services (Coordinator/Advisor) in making Missouri University of Science and Technology programs and services available to all persons. The University places specific emphasis on accommodating the needs of matriculated students with a disability, providing related services, and ensuring the academic integrity of Missouri S&T. This policy statement is in accordance with Section 240.040 E, Policy Related to Students with Disabilities, Collected Rules and Regulations of the University of Missouri, the Missouri Human Rights Act, Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act of 1990.

I. Confidentiality

- A)** In accordance with the requirements of the Family Educational Rights and Privacy Act, medical information concerning a disability will be treated with utmost confidentiality. It will be:
- 1)** treated like other medical information,
 - 2)** maintained in secure files under the jurisdiction of the Coordinator/Advisor, and
 - 3)** released only on a need-to-know basis within the university community.

II. Responsibilities of the Student

- A)** All disabled students seeking reasonable accommodations and provision of disability-related services must:
 - 1)** identify himself or herself to the Coordinator/Advisor as desiring accommodations,
 - 2)** provide current and adequate documentation of his/her disability and of appropriate accommodations to the Coordinator/Advisor, and
 - 3)** request needed classroom accommodations and related services of the Coordinator/Advisor.
- B)** All of the above requirements must be met by the student in a timely manner to ensure full resolution of accommodations and related services prior to the student's entrance into the program or course of study. The student should provide the necessary documentation at least six weeks prior to the first semester for which accommodations are being requested, and should provide the Coordinator/Advisor with a copy of his/her class schedule as soon as it is available for each semester during which s/he is seeking accommodations. Waiver of these deadlines may be made by the Coordinator/Advisor on a case by case basis. Failure to meet the specified deadlines and requirements may result in a denial of accommodations.

III. Documentation Procedure

- A)** Documentation of a specific disability provided to the Coordinator/Advisor must be adequate and up to date. Diagnosis and evaluation costs shall not be the responsibility of the university.
 - 1)** Current medical or other diagnostic documentation of a disability must be provided by a qualified physician or other qualified diagnostician.
 - 2)** Current documentation of the need for reasonable accommodations and related services must also be provided to the Coordinator/Advisor.
 - 3)** If existing documentation is incomplete or outdated, the Coordinator/Advisor may require the student to provide additional documentation at the student's expense.

IV. Collaborative Responsibilities of the Coordinator, Faculty, and Staff

- A)** The Coordinator/Advisor shall review the documentation provided by the student and discuss the accommodation and related services requested.
- B)** The Coordinator/Advisor shall make an initial determination as to whether requested accommodations and related services are required.
- C)** The Coordinator/Advisor shall provide the student with a letter describing recommended accommodations and related services.
- D)** The faculty or staff member responsible for a specific class, program, or service shall then determine accommodations of the disability and provision of related services in consultation with the Coordinator/Advisor, if necessary.

- E)** Any disagreement relating to accommodations shall be described in writing and submitted to the Chancellor or his/her designee for resolution in a prompt manner. This appeal must specify why the accommodation request is considered unreasonable or unworkable.
- F)** In any disagreement related to IV.E, the Chancellor or his/her designee shall take into consideration all relevant factors including but not limited to:
 - 1)** current documentation of the specific disability,
 - 2)** the need for the requested services or accommodations,
 - 3)** the essential elements of the academic program or course of study being pursued, and
 - 4)** the fact that no applicable law requires Missouri S&T to substantially alter essential elements of its academic program or course of study or to otherwise compromise its academic standards.
- G)** The written judgement of the Chancellor or his/her designee shall be presented to the faculty member or department administrator within ten working days following receipt of the written notice of disagreement.

V. Specific Responsibilities of the Faculty

- A)** It is the responsibility of the faculty to:
 - 1)** establish curriculum requirements and uphold the academic standards of Missouri S&T,
 - 2)** determine that the essential elements of these curricula, as well as those of an individual course, are being fulfilled,
 - 3)** work with the Coordinator/Advisor to determine the provision of reasonable accommodations and related services for disabled students when requested by the Coordinator/Advisor, and
 - 4)** follow applicable rules with respect to individual privacy and confidentiality.
- B)** If the faculty member concerned opposes the determination made by the Coordinator/Advisor, s/he should proceed as follows:
 - 1)** S/he initiates a review of this determination with the Coordinator/Advisor.
 - 2)** If after this review the faculty member or department administrator still does not agree with the Coordinator's/Advisor determination, s/he may have recourse to the procedures outlined by Section IV, subsections E and F.

VI. Grievance & Complaint Process

- A)** A student who believes that the determination of the Coordinator/Advisor for the provision of reasonable accommodations and related services is not being fulfilled by a faculty or staff member must contact the coordinator in a timely manner to discuss the concerns.
- B)** A student who is not satisfied with the accommodation plan or the initial determination of the Coordinator/Advisor may file a grievance under the University of Missouri Discrimination Grievance Proce-

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ture for Students (Section 370.010). A copy of this policy can be obtained from the following sources:

- 1) The UM system web page at <http://www.system.missouri.edu:80/uminfo/rules/grievance/390010.htm> and
- 2) The Affirmative Action/EEO office in 106 Harris Hall (573) 341-6314
- 3) Office of the Vice Chancellor for Student Affairs 106 Norwood (573) 341-4292.

Contact Information

Coordinator/Advisor of Disability Support Services:
Counseling & Disability Support Services
203 Norwood Hall
Phone: (573) 341-4211; TTY: (573) 341-6645
Fax: (573) 341-6179
Email: dss@mst.edu

Distance and Continuing Education

University Center

This is a campus-based department which administers and coordinates a wide variety of credit and non-credit programs for Missouri S&T students and other audiences: local, national and international. Programming is available both live or on-line using the Internet and streaming video technology, and provides access to programs at a time convenient to the users.

Credit courses can lead to a Certificate of Completion in a specific area of interest. Certificates can also serve as a way to qualify for subsequent admission to an appropriate master's degree program.

Credit courses are supplemented by a wide variety of activities and educational opportunities through non-credit short courses, conferences, and technical seminars. Descriptions of currently available programs may be found on the web site: <http://dce.mst.edu>.

For further information, contact:
Distance and Continuing Education
Missouri University of Science and Technology
216 University Center
1870 Miner Circle
Rolla, MO 65409-1560
Phone: (573) 341-6222
Fax: (573) 341-4992
e-mail: dce@mst.edu

Financial Assistance

Our Mission

The Student Financial Assistance Office is dedicated to helping families obtain financial funding to pay for a college education at the Missouri University of Science and Technology. The Student Financial Assistance Office also has the responsibility to coordinate many federal,

state, and agency sources, facilitate a vast number of university awards based on performance, and provides debt management and credit card counseling to interested parties.

The Student Financial Assistance Office continually strives to provide high quality service to all students, families, faculty, and staff while using automated systems for timely delivery of financial aid funds.

To help you put yourself through school, Missouri S&T has a vast number of ways for you to get financial assistance. Freshman university scholarship applicants must complete the Missouri S&T Undergraduate Application for Admission & Scholarships and be accepted to the university for scholarship consideration.

For other financial aid (grants, loans, work-study), you must complete a Free Application for Federal Student Aid (FAFSA). Preference will be given to those students whose Free Application for Federal Student Aid (FAFSA) has been received by March 1. If you apply at any other time of the year, Missouri S&T will attempt to fill your financial needs to the extent that funds or opportunities are available.

You will be notified as to the types of aid available to you. To give you a general idea, they are outlined here. Federal and state agencies and alumni, business firms, foundations, trusts, and friends of Missouri S&T have provided funds for student financial assistance in Missouri S&T's departments. A more detailed list of financial aid can be found in the Missouri S&T Financial Assistance brochure. Please contact the Student Financial Assistance Office for more detailed information.

You can apply for a loan or a grant. You can work at a part-time job – maybe with the Federal Work-Study Program. In the Cooperative Training Program, you can alternate semesters of school at Missouri S&T with semesters of work in industry. You can test out of some courses to get through faster. You may want to look into Missouri S&T's Minority Engineering and Science Program and Women in Engineering and Science Programs. Army and Air Force ROTC each offer scholarships. The athletic department offers many grants in various sports.

There's assistance for you if you're from Kansas, Michigan, Minnesota, Nebraska, North Dakota, or Wisconsin. (More details on the Midwest Student Exchange Program are available from the Director of Student Financial Assistance.)

The Student Financial Assistance Office strongly encourages students to keep their expected graduation date current. Having an incorrect expected graduation date could affect a student receiving financial aid for a given semester. Contact the Registrar's Office if you wish to change your expected graduation date.

Missouri S&T Curators' Scholarship Program

You must be from a Missouri high school. You must be a Missouri resident and an undergraduate student to qualify.

- 1) Freshman Scholar. You should rank in the top five percent of your graduating class and have ACT composite test scores of 28 or better. The value of the Missouri S&T Curators Freshman Scholarship is

\$3,500.00. Renewal is considered automatically and is based on a cumulative GPA of 3.25 or better. If renewed, you are a Freshman Scholar – Renewal.

- 2) Freshman Scholar-Renewals. You must have a cumulative grade point average of 3.25 or better and have completed at least 24 credit hours during the previous academic year.

University Scholarships

To be considered for the majority of university scholarships (i.e. Excellence, Trustees, and Miner) offered by the Admissions and Student Financial Assistance Offices, you must be accepted for admission to Missouri S&T by Dec. 1 (for early awards) and Feb. 1 (final deadline) if you're an incoming freshman, or March 1 if you're a transfer student.

We will consider you for University scholarships based on information on your admission application (i.e. ACT/SAT test scores, high school class rank, and high school grade point average).

Currently enrolled students are considered automatically and a list of all qualified students is provided by the Admissions Office.

University scholarships include funds provided by the Alumni Association, business firms, foundations, trusts, and friends of Missouri S&T. A faculty committee is responsible for determining which scholarships are available each year.

Generally, early awards are made by December, the final freshman scholarship recipients are selected in February. Transfer selections are made in March. Scholarship amounts vary from \$1,000 to \$10,000 per year. Repayment is not required; however, recipients are encouraged to support future students by contributing to the scholarship program when they are financially able. Most scholarships are renewable and that renewal is based on the recipient's academic performance. Renewal is automatically reviewed by the scholarship committee.

The Missouri Higher Education Academic "Bright Flight" Scholarship Program

The "Bright Flight" Scholarship Program will provide awards in the amount of \$2,000 to eligible entering freshman students. To be eligible for this scholarship, a student must:

- Be a Missouri resident.
- Have a test score in the top 3% of Missouri residents. (2007-2008 is ACT enhanced composite score of 31 or better or an SAT score of verbal 770 and math 770 or better)

National Merit Scholarships

Missouri S&T offers a number of National Merit Scholarships, ranging from \$1000 to \$2,000 each year to students who are classified as "finalists" in the National Merit Scholarship competition. For more information on National Merit Scholarships, contact your high school counselor.

Alumni Sons/Daughters Scholarship Program (For Non-Missouri Residents)

The Alumni Sons/Daughters Scholarship Program is for non-Missouri resident students whose parents graduated from Missouri S&T. To qualify, students must be freshman who are in the upper 25 percent of their high school graduating class and have an ACT composite score of 24 or better. Non-Missouri resident transfer students are eligible, as are non-Missouri resident Missouri S&T upperclass students who have completed 30 hours of university-level course work and have a cumulative grade point average of 3.2 or higher. A student must complete an application to be considered for this scholarship. Alumni Sons/Daughters Scholarship applications may be received from Missouri S&T's Student Financial Assistance Office.

Alumni Grandchildren Scholarship Program (For Non-Missouri Residents)

The Alumni Grandchildren Scholarship Program is for non-Missouri resident students whose grandparents graduated from Missouri S&T. To qualify students must be freshmen who are in the upper 25 percent of their high school graduating class and have an ACT composite score of 24 or better. Non-Missouri resident transfer students are eligible as are non-Missouri resident Missouri S&T upperclass students who have completed 30 hours of university-level course work and have a cumulative grade point average of 3.2 or above. A student must complete an application to be considered for this scholarship. Alumni Grandchildren Scholarship applications may be received from Missouri S&T's Student Financial Assistance Office.

Excellence II, Trustees II & Miner II Scholarship Programs (For Non-Missouri Residents)

The Excellence II, Trustees II and Miner II Scholarship Programs will provide a scholarship toward non-Missouri resident fees. Qualifications for consideration: Complete the Missouri S&T Undergraduate Application for Admission & Scholarships.

The application priority deadline is Dec. 1 preceding the academic year of enrollment. This scholarship is renewed each academic year for a total of eight semesters as long as the student maintains a cumulative GPA of 3.25 or higher.

Federal Pell Grant

The source of funding is the federal government.

- **Eligibility:** You must have a financial need, be a half-time student, be a U.S. citizen or permanent resident, and have never received a bachelor's degree.
- **Amount:** Up to \$4,731 (during the 2008-2009 academic year)
- **Repayment:** None
- **Renewal:** Must re-apply, if eligible, each year.

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- **Applications:** Complete a Free Application for Federal Student Aid.

Federal Perkins Loan

This source of funding is from the federal government to the university. You must have an established financial need, be at least a half-time student, and a U.S. citizen or permanent resident.

- **Amount:** Varies to a maximum of \$3,000 per year for undergraduate study.
- **Repayment:** The Federal Perkins Loans must be repaid. The repayment begins nine months after leaving school with five percent interest starting at that time.

University Loans

The source of funding is gifts to Missouri S&T from the Alumni Association, business firms, foundations, trusts, and friends of Missouri S&T.

- **Eligibility:** You must have an established need, be at least a half-time student, and a U.S. citizen or permanent resident.
- **Amount:** Varies depending on the stipulations of the loan guidelines.
- **Repayment:** Repayment begins after you leave Missouri S&T.

Federal Supplement Educational Opportunity Grant

The funds for this program are awarded to students with an extreme need.

- **Amount:** Varies from \$200 to \$1,500 per year.
- **Eligibility:** You must be at least a half-time student, a U.S. citizen or permanent resident, and never have received a bachelor's degree. Must complete FAFSA.

Federal Work-Study (FWS)

The source of funding is from the federal government to the university. All students who have completed a FASFA and have an established need will be considered automatically for the FWS program, with special consideration given to students from low-income families. The FWS program is financial aid that the student must earn through work. The student is paid above the current minimum wage and usually works an average of 10 hours per week. The student must be a U.S. citizen or permanent resident.

Access Missouri Program

Full-time Missouri resident undergraduates with expected family contribution between \$2,001 - \$12,000.

- **Amount:** Varies. To apply, complete FAFSA annually by the April 1 deadline.

FFELP Stafford Loans

The source of funding for the FFELP Stafford Loan program is provided by lending institutions. The amount can vary depending on the individual student's need, up to a maximum of \$3,500 as a dependent freshman, \$4,500 as a dependent sophomore, and \$5,500 as a dependent junior, senior, or fifth-year student. Graduate

students may receive up to \$8,500 per year. A student must be enrolled at least half-time.

A FASFA must be completed in order for a student to receive a FFELP Stafford Loan. Interest does not start to accrue on Subsidized FFELP Stafford Loans until 6 months after a student graduates or ceases to be at least a half-time student.

Interest on Unsubsidized Ford Direct Loans begins as soon as the student receives his loan. Interest rate for first-time borrowers after 10/01/92 will be variable (T-Bills + 3.1%), capped at 8.25%.

Other Possibilities

Alumni Educational Assistance Program

The source of funding is the Alumni Association.

- **Eligibility:** normally advanced standing and approval of a special committee.
- **Amount, repayment, renewal and limitations:** same as work-study employment.

Student Diversity Programs Minority Engineering and Science Scholarship (MEP)

This scholarship is designed to encourage and support underrepresented minority students (African American, Hispanic American, and Native American) who desire to pursue an engineering or science degree. MEP offers a variety of freshmen and transfer scholarships (\$1,000-\$4,000) and services to students to help foster academic, professional, and personal growth. For more information on MEP scholarships and programs please contact us at (573) 341-4212, via email at asksdp@mst.edu or visit our site at <http://sdp.mst.edu>.

Women in Science and Engineering (WISE)

The mission of the WISE program is to meet the needs of female students within the university community, with the aim of increasing the number of female graduates entering the engineering and science workforce. The WISE office provides a variety of services including: \$1,000 scholarships for incoming freshmen and transfer students, student socials, professional/technical workshops, and mentoring/networking programs. The WISE office also houses a women's social lounge, the Society of Women Engineers student office, resource library, computer center, and conference room for student meetings. To apply for scholarships and obtain more details, contact the WISE office at: 212 ERL, 573-341-4212, women@mst.edu, www.mst.edu/~women.

Athletic Grants

For information on athletic programs at Missouri S&T, contact: Missouri S&T Athletic Department, Gale Bullman Multi-Purpose Building, Missouri S&T, Rolla, MO 65409-0740. Telephone: (573) 341-4175.

Music/Theatre Awards

For more information on music and theatre awards available at Missouri S&T, write: Music/Theatre, 127 Castleman Hall, Missouri S&T, Rolla, MO 65409-0670.

Cooperative Training Program

For information on the co-op program at Missouri S&T, contact: Cooperative Training Program, 303 Norwood Hall, Missouri S&T, Rolla, MO 65409-0240. Telephone: (573) 341-4309.

Transfer Scholarship Program

Missouri S&T offers a vast number of scholarships to new transfer students who will be enrolling at Missouri S&T. For more information on this scholarship program, contact: Transfer Coordinator, Office of Admission, 106 Parker Hall, Missouri S&T, Rolla, MO 65409-0250. Telephone: (573) 341-4165.

Kansas Scholarship (For Kansas Residents Only)

Missouri S&T has a scholarship for Kansas residents to cover non-resident fees for students majoring in ceramic engineering, geological engineering, mining and metallurgy. For more information, contact Mr. Robert W. Whites, Director, Student Financial Assistance, G-1 Parker Hall, Missouri University of Science and Technology, Rolla, MO. 65409-0930 or call (573) 341-4282.

Missouri Income Tax Deduction (For Non-Missouri Residents Only)

Non-Missouri residents who pay Missouri income tax get a deduction on the non-resident fees up to the amount of Missouri income tax they pay in conjunction with any non-resident scholarship. For more information contact the Cashier's Office, G-4 Parker Hall, Missouri S&T, Rolla, MO. 65409-1160 or call (573) 341-4194.

Departmental Scholarships

Various departments within the university offer a number of scholarships to students majoring in that area. Interested students should contact the department in which they are majoring.

ROTC (Army or Air Force)

For more information on the ROTC programs at Missouri S&T, contact Army ROTC, 301 Harris Hall, Missouri S&T, Rolla, MO 65409-0310. Telephone: (573) 341-4744 or Air Force ROTC, 206 Harris Hall, Missouri S&T, Rolla, MO 65409-1450. Telephone: (573) 341-4925.

Graduate Student Aid

Federal Work Study, Federal Perkins Loans, University Loans and Ford Direct Loans are available for graduate students through the Missouri S&T Student Financial Assistance Office. Graduate students should contact the department in which they are majoring for other possibilities for scholarships, grants, fellowships or assistantships.

Scholarship Reinstatement Policy

Students who lose a renewable scholarship due to not earning the required renewal cumulative grade point average, and are able to raise their cumulative grade point average after the completion of the next academic year (i.e. spring semester) to the renewal cumulative grade point average, could have their scholarship reinstated for the following academic year.

It is the scholarship recipient's responsibility to inform the Student Financial Assistance Office that he or she meets the renewal cumulative grade point average to receive their scholarship for the next academic year. This notification must be received in writing by the Director of Student Financial Assistance prior to the end of the fourth week of classes in the fall semester.

Once the fourth week of classes in the fall semester has passed, a student can not receive scholarship funds retroactive for the current or previous semesters based upon meeting the renewal cumulative grade point requirement.

This policy only applies to general operating scholarships. Departmental, Alumni, donor (non-general operating), and state scholarships will not be affected by this policy.

Financial Aid Satisfactory Progress Policy

Federal regulations require financial assistance recipients to make satisfactory academic progress toward their degree in order to continue to receive federal financial assistance (i.e. Federal Pell Grant, Federal Supplemental Educational Opportunity Grant, Federal Perkins Loan, Federal Work Study, and Federal Direct Student Loans.) Students who enroll full-time (12 or more hours undergraduate, 9 or more hours graduate) and do not "pass" 18 hours full-time enrollment during the academic year will jeopardize future federal financial aid eligibility. Federal regulations also require federal assistance recipients to receive their degree in 150% of the time required to receive a degree.

Information Technology (IT)

Getting Started

Missouri S&T's Information Technology (IT) Department provides a variety of computing tools and resources to assist with academic and administrative work done at the university. Faculty, staff and students use computers daily to register for classes, communicate with friends, send e-mail, collaborate on group projects and research, publish web pages, write reports and find course schedules.

Computer Accounts

Computer accounts are assigned to students and are used to access various resources at Missouri S&T,

such as the computing network and the computers and software in Computer Learning Centers (CLCs). Most Missouri S&T IT services require an authorized computer account (User ID and password) to gain access. The following services are available through IT computer accounts.

- E-mail
- Network file storage
- Personal website storage folders
- Access to the campus network, including wireless networks on campus

Setting up Computer Accounts

New computer accounts can be activated by visiting the Help Desk website at <http://helpdesk.mst.edu> and clicking the New Students menu.

Leaving Missouri S&T

Assigned computer accounts remain active and available for use as long as a student is enrolled in classes at Missouri S&T. Additional information regarding account maintenance may be found at <http://it.mst.edu/policies/index.html> by clicking the "User ID Maintenance" link.

Students who leave Missouri S&T still retain access to their university email accounts for twelve months. Students who leave the university should notify all email contacts of their pending Missouri S&T email account deactivation.

Systems and Software

Missouri S&T IT provides a wide variety of computing and networking facilities and support. These facilities include, but are not limited to the following:

- Windows-based PCs
- Macintosh systems
- Linux systems
- Computer Learning centers (CLCs)
- General Purpose Cluster computing

Computer Learning Center

Computer Learning Centers (CLCs) are computing sites provided to support academic computing and teaching methodologies. More than 40 CLCs are located in various buildings around campus. Use of computers and technology in these locations is restricted to Missouri S&T faculty, staff and students.

Additionally, IT provides maintenance and support for classrooms that use other types of specialized learning technology, such as smart boards, cameras and clickers.

A list of CLC locations, hours of operation and equipment is available online at <http://helpdesk.mst.edu/generalinfo/about/tlss.html>.

Privileges and Responsibilities

Missouri S&T IT provides access to computing, networking and information resources in support of teaching, research and other official duties of the university. Access to the computing resources and facilities is a privilege, not a right. The "Missouri S&T Computing and

Network Facilities Acceptable Use Policy" describes the ethical and legal responsibilities regarding computing resources.

Other computing policies and procedures, including the University of Missouri policies, can be found at <http://it.mst.edu/policies/index.html>.

Individually Owned Computers

Missouri S&T IT, in conjunction with the Missouri S&T Bookstore, provides recommendations for supported hardware and software to those wishing to purchase for personal use.

Academic discounts are available for personally owned computers and software purchased through the Missouri S&T Bookstore. Software on university-owned machines is provided through licensing agreements with various vendors.

Missouri S&T IT provides Microsoft Outlook to students free of charge (available from the IT Walk-In Center on the first floor of the library). McAfee Anti-Virus is also available for free download at <http://helpdesk.mst.edu/generalinfo/security/antivirus.html> (login required).

Please visit <http://www.mstbookstore.com> and click MinerTech for more information on supported technology and recommended systems.

Connecting to the Network

Computers in campus residence halls and fraternities or sororities connect to the network through an Ethernet connection or via wireless connection. Wireless coverage currently extends to over 70 percent of the campus (including the Residential College, providing great flexibility and convenience for members of the campus community.

To register a machine on the campus network, simply plugin to an available Ethernet jack and open a web browser. An online registration page will load. Complete the online form and you are ready to access the network. Detailed instructions on connecting to the network, using either wired or wireless Ethernet, are available at <http://helpdesk.mst.edu/generalinfo/networkingindex.html>.

Virtual Private Network (VPN) connections are available, which allow members of the campus community to connect to the network while away from campus or traveling.

Special usage policies apply to network connections. For more information, see the "Policies and Procedures" web page at <http://it.mst.edu/policies/index.html>. In addition, Ethernet cards (both wired and wireless) and cables may be purchased through the Missouri S&T Bookstore, which is located in the Havener Center.

Emergency Alert System

Missouri S&T has a system in place to alert the campus community in the event of a campuswide emergency. An email is automatically sent to every university email account, but students, faculty and staff can enter additional contact information and register to re-

ceive emergency alerts via cell phone voicemail or text message.

For more information, or to register for the Emergency Alert System, visit <http://it.mst.edu/generalinfo/emergencyalert.html>.

Getting Help

The Missouri S&T IT Help Desk and the IT Walk-In Center are available to assist the students, faculty and staff of Missouri S&T in using the different computing systems on campus.

Help is available on a wide range of items, including Windows-based PCs, Macintosh systems and Linux workstations and the supported software on these systems.

Members of the campus community may call 573-341-HELP or access the online Help Request system at help.mst.edu. Hours of operation are available by visiting <http://helpdesk.mst.edu/generalinfo/about/index.html>.

Internet Resources

- IT Press Blog (breaking IT news, updates, etc.) – <http://itpress.mst.edu>
- Online Help Request – <http://help.mst.edu>
- Missouri S&T campus gateway – <http://www.mst.edu>
- IT Help Desk – <http://helpdesk.mst.edu>
- IT Department Homepage – <http://it.mst.edu>
- IT Security – <http://helpdesk.mst.edu/generalinfo/security/index.html>
- Campus Library – <http://library.mst.edu>
- Joe'SS (student web portal) – <http://joess.mst.edu>

University Communications to Students

Each student, once initially registered for classes, will be issued a Missouri S&T e-mail account with an address on the mst.edu domain. This is the account used for official University business and official University communications to students. Students are expected to regularly check their Missouri S&T e-mail account for University communications and are responsible for communications sent to this account. Therefore, communications sent to this account will be considered to have fulfilled any University obligation for notification.

The Honors Academy

The Missouri S&T Honors Academy offers students the opportunity to be a part of a community of outstanding scholars who are seeking an enhanced educational experience.

At Missouri S&T, Honors Academy students are recognized for their academic excellence and are provided with individualized attention and opportunities to establish leadership development skills, interact with faculty members, and participate in special projects including undergraduate research, service learning, and other beneficial experiences.

Qualifications

Incoming freshmen are eligible to apply if:

- 1) Their ACT score is 29 or higher/SAT is 1440 or above, &
- 2) They rank in the top 10% of their high school class or have a minimum GPA of 3.5.

Incoming transfer students and students currently enrolled at Missouri S&T are eligible to apply if:

- 1) They have a minimum GPA of 3.5 and
- 2) A minimum of 24 graded, college-level credits.

New Student Honors Seminar

To participate in Honors Academy, students participate in New Student Honors Seminar their first year at Missouri S&T. During the fall semester, participating students have the opportunity to meet the Curator's Teaching Professors and are provided an introduction to research opportunities at Missouri S&T. During the spring semester, students have the opportunity to attend a leadership development conference and presentations by invited speakers. In addition, students have the opportunity to participate in social activities with faculty members and other Honors Academy scholars.

To participate, students enroll for "HONORS SEMINAR" during their PRO session. (Transfer students may join New Student Honors Seminar during either the Fall or Spring semester.)

Honors Academy (Sophomore-Senior Year)

Following their first year, Honors Academy students must maintain a minimum GPA of 3.5 to continue their participation in the program. Honors Academy students will enroll in and complete 15 credit hours of "Honors" course work to include 12 hours of "Honors" course work and 3 hours of Senior Project. The "Honors" course designation is based on extra work conducted in regular Missouri S&T courses wherein the instructor agrees to approve and oversee the effort.

Course requirements: One course must be outside of the major field of study. During the senior year, Honors Academy students will complete 3 hours of Senior Thesis/Project. No more than 3 credit hours may be individual study courses (300, 302 & 390).

Honors Distinctions

Honors Academy students who graduate with a 3.5 GPA or better and have at least 15 credit hours of "Honors" course credits will earn the distinction of "Honors Academy Fellow" at graduation. This distinction will be noted on their diploma, transcript, and commencement program. For more information, please contact the Office of Undergraduate Studies at (573) 341-7276.

International Affairs

The Office of International Affairs (IA) coordinates international activities, administers all matters involving immigration for international students and scholars, and

provides advisement services to the University's international population.

The Office of International Affairs is responsible for the recruitment of international students, and serves as a direct contact with U.S. government agencies, embassies, consulates, and the private sector concerning international activities. The office serves as the campus home for international student exchange programs and the majority of study abroad activities (see section on Study Abroad Programs). In addition, the Office assists faculty wishing to travel or work overseas, and offers special educational and training programs, both domestically and abroad.

The Office of International Affairs coordinates and administers Missouri S&T's Applied Language Institute, which houses the University's Intensive English Program. The Office is also responsible for the organization of international protocol activities, and monitors the status of Missouri S&T international linkage agreements.

International Student Sponsored Student Program

A full range of services for sponsored international students is provided through the Office of International Affairs. International students sponsored by international agencies receive special services, and are charged \$250 per semester per student administrative fee. Individual students desiring to take advantage of these special services may apply for sponsored student status.

Details on the current sponsored student program and costs are available upon request from the Office of International Affairs, 103 Norwood Hall, Rolla, Missouri 65409-0160.

Mandatory Health Insurance for International Students

All international students are required to purchase Missouri S&T international student health insurance as a condition of their enrollment. This includes all F-1 and J-1 visa holders. In addition, the J-2 dependents of the J-1 visa holders are required to purchase international student health insurance. Student insurance premiums are charged to the student's Missouri S&T Cashier's account.

For more information on the mandatory health insurance requirement, contact the Office of International Affairs, 103 Norwood Hall, 573-341-4208.

Study Abroad Programs

The Office of International Affairs coordinates study abroad opportunities for Missouri S&T students. Students may choose from a variety of exchange programs. Credit toward the student's Missouri S&T degree program may be awarded for study abroad experience with pre-approval. The following provides a sample listing of institutions with which Missouri S&T has current study abroad agreements:

- Hautes Etudes Commerciales Liege (Belgium)
- Provinciale Hogeschool Limburg (The Netherlands)
- Satakunta Polytechnic (Finland)

- Fachhochschule Aachen (Germany)
- Kutaisi State Technical University (Republic of Georgia)
- University of the Western Cape (South Africa)
- Harbin University of Technology (China)

See "Missouri London Program" section for other study abroad opportunities.

Intensive English Program (IEP)

The Intensive English Program (IEP) at the Missouri University of Science and Technology provides intensive instruction in the English language for international students whose proficiency in the language is insufficient for full-time academic admission to Missouri S&T.

The IEP offers 20 hours of non-credit course work per week in all aspects of language learning – pronunciation, reading comprehension, vocabulary development, grammar, writing, listening comprehension, speaking interaction, and note-taking. The program provides instruction at four proficiency levels: Beginning English, General English, Introduction to Academic English, and English for Academic Purposes.

All international students who have not satisfied the University's language-proficiency requirements are required to complete IEP's assessment testing, which is comprised of four parts:

Michigan Test of English Language Proficiency (MTELP) A standardized test that evaluates abilities in grammar, reading comprehension, and vocabulary.

Test of Writing Proficiency (TWP) A locally developed test that evaluates abilities to write clear, well-organized English based on nationally developed guidelines.

Oral Proficiency Evaluation (ORE) A locally developed test that evaluates abilities to speak English clearly based on nationally developed guidelines.

Test of Listening Proficiency (TLP) A locally developed test that evaluates abilities to understand spoken English, especially in a classroom setting.

Students who perform well on all tests may be approved immediately for academic course work at the University. Other students are enrolled in IEP course work, and may then complete the series of tests again at the end of the semester. Recommendations for promotion into a higher level of the IEP or for advancement into university course work are made by the IEP's academic coordinator based on student testing and faculty input.

Students who enroll in the IEP must complete that program to the satisfaction of its director and academic coordinator (i.e. satisfy all completion requirements) before being allowed to enroll full-time in university course work. A student may enroll in a reduced university load (in conjunction with IEP course work) with the approval of both his/her academic department and the director of the IEP.

Ordinarily, the IEP is open only to students who intend to pursue study at Missouri S&T, and who have been conditionally admitted to the University. If space exists, international students already admitted to Missouri S&T and already taking course work may enroll in IEP courses to improve their English. In addition, international persons with no academic affiliation with the University may be considered for admittance for Inten-

sive English Students.

Testing fees and program costs can be obtained by contacting the number below. For more information on the IEP, contact the Office of International Affairs (IA), 103 Norwood Hall, Missouri University of Science and Technology, Rolla, MO 65409-0160. Phone: (573) 341-6328 Fax: (573) 341-6356. E-mail address is ia@mst.edu.

Curtis Laws Wilson Library: Gateway to Information

As the primary learning resource center for the Missouri S&T Campus, Wilson Library provides services and materials to support the University's academic programs. In addition to providing students with access to research resources, the library is a place where students can develop the information seeking and management skills that are necessary to excel in an information-based society.

Missouri S&T is known as Missouri's premier technological research university; Wilson Library is equally well known for its strong science and technology collection. The humanities and social science collections have also grown to support programs in those areas. The print collection consists of approximately 467,000 volumes and around 760 scholarly and popular journals. Print resources are supplemented by many other materials, including DVDs, videos, CDs, and CD-ROMs. Numerous online resources are also available via the Web from the library homepage.

Wilson Library makes every effort to provide Missouri S&T students with access to state-of-the-art library technologies. In 1983, Missouri S&T was the first campus in the University of Missouri system to implement an online public access catalog. The current catalog, called MERLIN, shows the library's holdings and links to electronic full-text items. The library catalog not only lets students look at Missouri S&T's holdings but also allows them to search, view, and borrow from the collections at the three other University of Missouri campuses. In addition to the MERLIN library catalog, patrons can access MOBIUS (Missouri Bibliographic Information User System), in which they are able to browse and borrow from over 60 Missouri libraries which are linked by a daily courier service that speeds the exchange of materials within the consortium. These catalogs are complemented by databases that cover a wide range of subject areas. They are available through the library's webpage or in the library.

In the library's Multimedia Center, which was made possible by a grant from the Emerson Electric Company, the library ceases to be a repository for information and becomes a laboratory where students are active participants in the creation and manipulation of information. Students have access to state of the art technologies, including non-linear video editing, scanners, illustration

packages, graphics manipulation programs, poster printing, and laminating.

Missouri S&T is a selective depository for United States and Missouri government documents. The library receives a wide selection of print, microform, and electronic materials from the Government Printing Office and other agencies. A large percentage of all new government publications are now available online. Links to government sources can be found on the library's government publications web page. The full text of many online government documents is also accessible through the library catalog.

Through interlibrary loan, the Missouri S&T collection is supplemented by materials owned by other libraries throughout the United States. Wilson Library is usually able to borrow those materials needed by students from other libraries.

Yesterday's library was a collection of books, and the information universe was fairly static. Today's library has become a dynamic resource center, where books and journals coexist with online databases and Web-based resources. The information universe is no longer limited to Missouri S&T's physical campus. As student and faculty information skills become more critically important, Wilson Library will continue to be Missouri S&T's gateway to the ever-expanding world of information. Students are encouraged to explore the library's homepage at <http://library.mst.edu>.

Maastricht Center for Transatlantic Studies Maastricht, The Netherlands

Missouri S&T, along with sixteen universities from the United States, Europe and Mexico, work together to send qualified students for a period of study in Maastricht, The Netherlands. Maastricht is the southern most city of The Netherlands and has served as a crossroads between the Netherlands, Germany, Belgium and France. Courses are taught in 3-1/2 week blocks, allowing ample opportunity for travel to surrounding areas of Europe. Students and faculty live in a centralized community that contributes significantly to their intercultural experience. Students may attend the program for the fall semester, spring semester, or the entire year.

You are eligible for the program if you have a cumulative grade point average of 2.50. All courses offered in the MCTS can be used for credit toward graduation. Courses from a variety of subjects are available, and can be generally divided into the social sciences, humanities and business. Each course is designed to reflect a comparative, transatlantic perspective that allows for insight for students from the different nationalities.

Cost of the program includes regular Missouri S&T fees plus a non-academic program fee that includes room, food, computer lab, books, and field trips. Stu-

dents eligible for financial aid at Missouri S&T may be able to apply this aid to the MCTS.

For more information, contact the Director of MCTS, G-4 Humanities/Social Sciences Building, Missouri S&T, Rolla, MO 65409-0570, Telephone (573) 341-4869.

Military Science

(Army ROTC)

Reserves Officers' Training Corps

Army ROTC is the primary source of officers for the U.S. Army, the Army Reserve, and the Army National Guard. Army ROTC has been a part of the MSM/Missouri S&T campus since 1919. Over 2,700 officers have earned their commissions as lieutenants in the U.S. Army through ROTC at Missouri S&T. Eleven of these have become generals. Thousands of other students have received leadership training provided by the Department of Military Science, and applied it to their civilian careers.

Army ROTC is a four-year program divided into two parts – the Basic Course and the Advanced Course. The Basic Course is normally taken during the freshman and sophomore years, although these classes are open to any student on campus. No military commitment is incurred in the Basic Course unless students are contracted on our scholarship. Subjects taught include leadership and management development, communications, land navigation, military history, small unit tactics, survival techniques, marksmanship, drill and ceremonies, military courtesy, discipline, and customs. Students may only enter the advanced courses if they have contracted to do so.

All students enrolled at Missouri S&T can take any of the Basic Military Science classes without further enrollment or obligation to ROTC or the Army.

After completing the Basic Course, selected students may enroll in the Advanced Course during the final two years of college. Instruction in this program includes further leadership development, ethics and professionalism, principles of war and military justice. During the Advanced Course, cadets are provided hands-on leadership experience in various kinds of leadership positions within the cadet chain of command. Campus and laboratory instructions are reinforced with weekend field training exercises (usually one per semester). Cadets in the Advanced Course receive uniforms and a subsistence allowance of up to \$5,000 each year, in addition to other potential benefits to help defray the cost of their education.

Cadets in the Advanced Courses must attend a five-week Leader Development and Assessment Course (LDAC) normally held during the summer between their junior and senior years. This camp permits cadets to further refine and put into practice the principles, theories, and skills they have acquired. LDAC includes leadership, tactics, marksmanship, land navigation, physical training, and many other leadership and military skills. Cadets receive a salary during LDAC, as well as free

room, meals, and transportation to and from camp. Successful completion of the LDAC is required prior to commissioning.

Army Schools

There are summer opportunities for selected students to attend the following Army schools:

Airborne School – A three-week school that teaches the fundamentals of Army parachute jumping. After initial training, students make at least five actual jumps (two Hollywood jumps, two full combat jumps, and one night jump).

Air Assault School – A physically and mentally demanding two-week school that teaches the fundamentals of employing Army helicopters in support of front line units. In addition to helicopter rappelling, students learn various techniques to balance loads in a helicopter and to configure various sling loads for large equipment. Training and testing are done in a stressful environment.

Mountain Warfare School – A challenging three-week school in which students learn and practice the principles of military operations in mountainous terrain. Safety, climbing, rappelling, stealth, survival, communications, and physical conditioning are emphasized.

Northern Warfare – An invigorating three-week school in Alaska where students learn and practice the techniques of military operations in extremely cold climates. The course emphasizes safety, survival, transportation, and communications.

Two Year Program

There is a special two-year program for community and junior college graduates and students at Missouri S&T who have not taken part in Army ROTC during their first two college years. Students can enter this program and qualify for the Advanced Course by successfully completing a four-week Leader's Training Course (LTC), for which they receive pay. The LTC replaces and is the equivalent to the Basic Course (the first two years of the regular four-year ROTC program).

Scholarships

Army ROTC offers scholarships for four, three and two years. Four-year scholarships are awarded on a nationwide competitive basis to U.S. citizens who will be entering college as freshmen. Four-year scholarship applications are available from April 1 to December 1. Four-year scholarship applications can be obtained by applying online at <http://armyrotc.com/>.

Three and two-year scholarships are awarded competitively to students who are already enrolled in college. Students who attend the LTC before entering the two-year program may also compete for two-year scholarships while at camp. Four, three, and two-year scholarships are available for active duty Army enlisted personnel on a competitive basis.

All ROTC scholarships pay full college tuition and mandatory educational fees, plus \$900.00 per year for miscellaneous fees, textbooks, supplies, and equipment. Each scholarship also provides a subsistence allowance of up to \$5,000 each year the scholarship is in

effect. All students who receive a scholarship through the (Army) Reserve Officer Training Corps Program at the Missouri University of Science and Technology will receive an additional \$2,000 scholarship from Missouri S&T their first academic year, and each following year they retain their ROTC scholarship.

Four-year scholarship recipients incur a military obligation at the beginning of their sophomore year. Three and two-year scholarship recipients incur an obligation concurrently with the commencement of their scholarship benefits. After commissioning and graduation, Army ROTC scholarship recipients serve in the military. This is normally fulfilled by serving on active duty up to four years, followed by service in the Army National Guard, Army Reserve or Individual Ready Reserve for the remainder of the eight year obligation. It may also be fulfilled by serving eight years in the ARNG or USAR, which includes a three to six-month active duty period for initial training.

Reserve Forces Duty

Under the ROTC-Reserve Forces Duty Scholarship Program, a limited number of two and three-year scholarships are also available to students who desire to serve with the Army Reserve or the Army National Guard in lieu of extended active duty.

The Simultaneous Membership Program permits a cadet to combine service in the Army Reserve or National Guard as an officer trainee with participation in ROTC, and be paid for both. Federal and State Tuition Assistance, as well as other Financial benefits, are available to qualified Guard and Reserve members.

Details about the Army ROTC program may be obtained at the Miner ROTC Battalion, 301 Harris Hall. (341-4744).

Missouri Consortium for International Studies (MOCON)

The Missouri University of Science and Technology is a member of the Missouri Consortium for International Programs and Studies (MOCON). As a member of MOCON, Missouri S&T is able to offer its students several unique study abroad opportunities.

Missouri London Program

Semester in London

Missouri S&T has joined eight other Missouri universities in offering qualified students a semester of study in London, England. The Missouri London Program (MLP) offers a core of courses taught by faculty from the participating universities.

You are eligible to participate in the program if you have a cumulative grade point average of 2.50. Some parts of the MLP require higher grade point averages. All courses offered in the MLP can be used for credit toward graduation. The MLP offers you the opportunity to deep-

en your appreciation of literature, drama, history, art, and historical roots of the American political system through direct contact with British culture.

Cost of the program includes regular Missouri S&T fees plus a non-academic program fee that includes accommodations in London, a weekly program of cultural and social activities, membership in the Student's Union of the Imperial College, membership in the Kensington Public Library, and subsidized course-related excursions. Students eligible for financial assistance at Missouri S&T may be able to apply this aid to the MLP. For information, contact the Director of the Missouri London Program, G-4 Humanities-Social Sciences Building, Missouri S&T, Rolla, MO 65409-0570, Telephone (573) 341-4869.

Missouri London Program Business Internship

Students entering today's corporate world need to be more prepared than ever to deal with current international issues. While many of these issues can be discussed at a certain level in the classroom, future employers recognize the necessity of hands-on experience to truly understand the role these issues play in business. The Business Internship in London program is run in conjunction with the Missouri London Program. The Internship is supervised field experience in a British business or organization. Projects include a variety of tasks such as market research, product promotion, analysis/system design, feasibility studies, cost/benefit analysis, strategy evaluation, business plan development, and others. All internships are non-paying positions.

Cost of the program includes regular Missouri S&T fees plus a non academic program fee which includes accommodations in London, a weekly program of cultural and social activities, membership in the Student's Union of the Imperial College, membership in the Kensington Public Library, and subsidized course-related excursions. Students eligible for financial assistance at Missouri S&T may be able to apply this aid to the MLP Business Internship.

For more information contact the MLP Director, G-4 Humanities/Social Sciences Building, Missouri S&T, Rolla, MO 65409-0570. Telephone 573-341-4869.

New Student Programs

New Student Programs, an office of Enrollment Management, is responsible for the campus orientation programs, which includes Preview, Registration and Orientation (PRO); Opening Week Orientation; Transfer Orientation; Student Mentors; and PRO Leaders. New Student Programs serves to orient and welcome new students to Missouri S&T; facilitates the transition to college life through interactions with faculty/staff members, peers and upperclassmen; provides information concerning resources on campus; builds the foundation

for future success; and introduces the concepts of professional development and leadership.

During a one-day PRO session in the spring or summer, incoming students take placement exams, learn more about student success, campus resources, living options, obtain Missouri S&T ID cards, open computer accounts, and meet with an academic advisor to determine their fall class schedules. Opening Week Orientation takes place the week before fall classes. This program includes New Student Convocation, participation in student mentor groups, academic workshops, team projects, and activities that focus on academic, professional, personal, and social development.

PRO Leaders are a selected group of students for the New Student Programs Office with primary duties consisting of, assisting with planning and executing programs for new students during PRO and Opening Week.

New Student Programs office also operates the University's "Miner Card" ID system services.

Nuclear Reactor

The Missouri S&T Nuclear Reactor is a Nuclear Regulatory Commission (NRC) licensed 200 kilowatt pool-type reactor that is used to support the engineering and science activities on campus. Using the facility, the reactor staff provides hands-on laboratory, research and development, and project opportunities. The reactor itself uses uranium fuel and is cooled by natural convection in a pool containing approximately 30,000 gallons of water. The reactor generates a brilliant blue glow (Cerenkov radiation) when operated at higher powers.

The open pool design allows access to the reactor core where experiments and samples to be irradiated can be positioned. The facility is equipped with a pneumatics sample irradiation system, a neutron beam port that provides a collimated neutron beam, a thermal column that provides a diffused thermal neutron source, gamma spectroscopy system, and computer data acquisition and control systems.

The reactor is open to the greater campus community and offers an active (operations) licensure program for interested students and others. The facility hosts numerous projects that actively engage students of various backgrounds: some recent projects include activities in: 1) applied robotics, 2) applied biometrics, 3) photolytically induced material development, 4) radiation tolerance of electronic chips, 5) instrumentation and sensors, 6) convective heat transfer and multiphase flows and so on. We encourage you to contact the facility for additional information.

Oak Ridge Associated Universities (ORAU)

Since 1981, students and faculty of the Missouri University of Science and Technology have benefited from its membership in Oak Ridge Associated Universities (ORAU). ORAU is a consortium of 91 colleges and universities and a contractor for the U.S. Department

of Energy (DOE) located in Oak Ridge, Tennessee. ORAU works with its member institutions to help their students and faculty gain access to federal research facilities throughout the country; to keep its members informed about opportunity for fellowship, scholarship, and research appointments; and to organize research alliances among its members.

Through the Oak Ridge Institute for Science and Education (ORISE), the DOE facility that ORAU operates, undergraduates, graduates, postgraduates, as well as faculty enjoy access to a multitude of opportunities for study and research. Students can participate in programs covering a wide variety of disciplines including business, earth sciences, epidemiology, engineering, physics, geological sciences, pharmacology, ocean sciences, biomedical sciences, nuclear chemistry, and mathematics. Appointment and program lengths range from one month to four years. Many of these programs are especially designed to increase the number of under-represented minority students pursuing degrees in science- and engineering- related disciplines. A comprehensive listing of these programs and other opportunities, their disciplines, and details on locations and benefits can be found at: <http://www.ornl.gov/orise/educ.htm>, or by calling either of the contacts below.

ORAU's Office of Partnership Development seeks opportunities for partnerships and alliances among ORAU's members, private industry, and major federal facilities. Activities include faculty development programs, such as the Ralph E. Powe Junior Faculty Enhancement Awards, the Visiting Industrial Scholars Program, consortium research funding initiatives, faculty research, and support programs as well as services to chief research officers.

For more information about ORAU and its programs, contact: K. Krishnamurthy, Vice Provost for Research, Sponsored Programs, ORAU Counselor for Missouri University of Science and Technology (573) 341-4154; Monnie E. Champion, ORAU Corporate Secretary (865) 576-3306; or visit the ORAU Home Page (<http://www.ornl.gov>).

Office of the Registrar

Mission Statement

The primary mission of the Office of the Registrar is to insure the accuracy, integrity, and security of the academic records of the Missouri University of Science and Technology. In addition, the Office will strive to provide quality service to students, alumni, faculty, staff, and other constituents of the University. To this end, the Office will attempt to utilize available technology to deliver services and information in an efficient manner. Further, the Office will seek to interpret and apply the academic policies and regulations of the University for the benefit of the institution and its constituents.

Absence from Class

Work missed due to absence from class must be made up to the satisfaction of the instructor concerned. Excessive absences from class may result in the student

being dropped from the course at the request of his or her instructor.

Application for Graduation

Students planning on graduating must do the following:

- Fill out an Application for Graduation form at the Registrar's office.
- Submit this application to the Registrar's Office for processing.
- Check application deadlines for the semester in which you are applying for graduation.

Certification of Enrollment Status

Certifications of enrollment status to lending agencies should be requested through the Registrar's Office either by visiting 103 Parker Hall or using the form located at: <http://registrar.mst.edu/documents/cert-let.pdf>. Certification of full-time or half-time status is based on the number of credit hours for which the student is enrolled and includes courses in which the student is enrolled as a hearer, with one exception. Hearer courses are not included for international student status, as defined by SEVIS.

For undergraduate students, full-time is based on at least 12 credit hours; half-time is at least six credit hours during the regular fall and spring term. For the summer term: full-time is six credit hours and half-time is at least three credit hours.

Confidentiality Policy: The Family Educational Rights and Privacy Act of 1974 (FERPA)

These statements are set forth as guidelines and procedures to implement the University of Missouri Policy on student records developed from The Family Educational Rights of Privacy Act 1974.

The Missouri University of Science and Technology as charged in the Act will annually inform its eligible students by including in the Academic Regulations and the General Catalog the following information:

- 1) "Educational Records" are those records, files, documents, and other materials which contain information directly related to a student and are maintained by the university. Those records made available under The Family Educational Rights and Privacy Act of 1974 are student financial aid, the student's mutative advisement file, student health records, disciplinary record, the admissions file, and the academic record. The Missouri University of Science and Technology "Educational Records" do not include:
 - A) Records of instructional, supervisory, and administrative personnel and educational personnel ancillary thereof which are in the sole possession of the maker thereof and which are not accessible or revealed to any other person except a substitute.
 - B) The records and documents of the University of Missouri Police Department that are maintained solely for law enforcement purposes and are not

available to persons other than law enforcement officials of the same jurisdiction.

- C) In the case of persons who are employed by the university but are not in attendance at the university, records made and maintained in the normal course of business which relate exclusively to such person and person's capacity as an employee where the records are not available for any other purpose.
 - D) All records on any university students which are created and maintained by a physician, psychiatrist, psychologist, or other recognized professional or paraprofessional acting in his or her professional or paraprofessional capacity, or assisting in that capacity, and which are created, maintained, or used only in connection with the provision of treatment to the student, and are not available to anyone other than persons providing such treatment, provided, however, that such records can be personally reviewed by a physician or other appropriate professional of the student's choice.
- 2) The Missouri University of Science and Technology recognizes "Directory Information" to be the student's name, e-mail address, address, telephone listing (including local and permanent address), date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, the most recent previous educational agency or institution attended by a student, student level, and full- or part-time status. All students must inform the Registrar's Office before the end of the two-week period following the first day of classes that this information should not be released without the student's prior consent. The information listed above will become directory information as of the first day of classes following the end of the one-week period during the summer session.
 - 3) Missouri University of Science and Technology students have access to the educational records identified in Paragraph 1 above. In accordance with Pub. L. 93-380, as amended, the Missouri University of Science and Technology will not make available to students the following material:
 - A) Financial records of the parents of students or any information contained therein.
 - B) Confidential letters and statements of recommendation which were placed in the education records prior to January 1, 1975, if such letters or statements are not used for the purpose other than those for which they were specifically intended.
 - C) Confidential recommendations respecting admission to the university, application for employment, and receipt of an honor or honorary recognition, where the student has signed a waiver of the student's rights of access as provided in 6.0404 the University Policy on Student Records.

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- 4) The director of financial aid, the appropriate academic department chair, the director of the student health service, the vice chancellor for student affairs, the director of admissions, and the registrar are the officials responsible for the maintenance of each type of record listed in Paragraph 1.
- 5) Any student may, upon request, review his or her records and if inaccurate information is included, may request the expunging of such information from his or her file. Such inaccurate information will then be expunged upon authorization of the official responsible for the file.
- 6) Students desiring to challenge the content of their record may request an opportunity for a hearing to challenge the content of his or her educational record in order to ensure that the record is not inaccurate, misleading or otherwise in violation of the privacy or other rights of the student, and to provide an opportunity for the correction or deletion of any such inaccurate, misleading, or otherwise inappropriate data contained therein and to insert into such records a written explanation respecting the content of such records.
- 7) The university official charged with custody of the records will attempt to settle informally any disputes with any student regarding the content of the university's educational records through informal meeting and discussions with the student.
- 8) Upon request of the student or the university official charged with custody of the records of the student, a formal hearing shall be conducted, as follows:
 - A) The request for a hearing shall be submitted in writing to the campus chancellor who will appoint a hearing officer of a hearing committee to conduct the hearing.
 - B) The hearing shall be conducted and decided within a reasonable period of time following the request for the hearing. The parties shall be entitled to 10 days prior written notice of the item and place of the hearing.
 - C) The hearing shall be conducted and the decision rendered by an appointed hearing official or officials who shall not have a direct interest in the outcome of the hearing.
 - D) The decision shall be rendered in writing within a reasonable period of time after the conclusion of the hearing.
 - E) Either part may appeal the decision of the hearing official or officials to the campus chancellor. Appeal from the chancellor's decision is to the president of the Board of Curators.
- 9) The Missouri University of Science and Technology may permit access to or release the educational records without the written consent to a school official with legitimate educational interest. A school official is determined to have legitimate educational interest if the information requested is necessary for that official to (a) perform appropriate tasks that are specified in his or her position or by a contract agreement; (b) perform a task related to a student's education; (c) perform a task related to the discipline of a student; (d) provide a service or ben-

efit relating to the student or student's family, such as health care, counseling, job placement or financial aid.

- 10) If any material or document in the educational record of a student includes information on more than one student, they may inspect and review only such part of such material or document as relates to him or her or to be informed of the specific information contained in such part of such material.
- 11) Students desiring reproduction of copies of educational records will be charged \$.10 per page. Official copies of transcripts are \$7.00 per copy for currently enrolled students and alumni.

Schedule of Classes

The most current information regarding the schedule of classes is located at <http://registrar.mst.edu/classofferings/index.html>.

Course Information

The number in parentheses following the name of the course indicates the number of credit hours given for successfully completing the course. It also reflects the section type; for example, (LEC 3.0) designates a lecture course of three hours credit; (LAB 1.0) designates a laboratory course of one-hour credit and (IND 0.0-15.0) designates independent study or research with variable hours. A lecture credit hour is usually the credit granted for satisfactorily passing a course of approximately 15 classroom hours. A laboratory course of one-hour credit would normally meet three classroom hours per week for 15 weeks.

Three credit hour courses normally meet 50 minutes three times per week, or 75 minutes twice a week, for 15 weeks. The time in class is the same in each case. If you have two classes in succession, there should be at least 10 minutes between classes. Classes meeting Monday-Wednesday-Friday will normally begin on the hour. Classes meeting Tuesday-Thursday will normally alternate between the hour and half hour, beginning at 8:00 a.m. In addition, there is an Academic Free hour 12:00-1:00 on Monday, Wednesday, and Friday.

Students must have completed the stated prerequisite(s) for the course for admission to the course or obtain the 'Consent of the Instructor' of the course.

Course Numbers

This section has been prepared to give you a listing and description of the approved undergraduate courses at the Missouri University of Science and Technology. Courses listed are those approved at the time this publication went to press. Changes are made at regular intervals. Electronic catalog descriptions, which are updated during the academic year, are available through Joe'SS at <http://registrar.mst.edu>. This will enable you to keep abreast of new course additions. For current information on when courses are available, consult class offerings available through the Office of the Registrar website at: <http://registrar.mst.edu/classofferings>.

0-99 Courses normally taken by freshman and sophomores. May not be used as any part of a graduate degree program.

100-199 Courses normally taken by upper-class students. May not be used as any part of a graduate degree program.

200-299 Upper-class and restricted graduate courses. Courses so numbered do not give graduate credit for an advanced degree in the field of the department offering the course.

300-399 Upper-class and graduate courses. Not restricted as to the major subject of the student.

Student levels

0-29 hours	Freshman
30-59 hours	Sophomore
60-89 hours	Junior
90 hours	Senior

Degree Requirements/Catalog Year

The semester (term) that you enter college, after graduation from high school, is stored in the Missouri S&T Student Information System database. This permanent record is referred to as your catalog year and provides the definition of the catalog of graduation that describes the degree requirements that you should follow to reach your degree goal. Your catalog year can change if you do not remain continuously enrolled. The Academic Council, on April 26, 1990, addressed the issue of students who discontinue enrollment with the following regulation:

Students are responsible for knowing and meeting degree requirements stated in the Undergraduate Catalog, current at the time of their initial enrollment as freshmen. Transfers from community colleges and other universities are permitted to complete degree requirements in effect at the time of their enrollment as freshmen at the community college or university. Students may elect to graduate under the most recent degree requirements.

Students who interrupt their enrollment for two consecutive semesters, excluding summer sessions, must meet the degree requirements in effect at the time of readmission. Students who interrupt their enrollment for extenuating circumstances may appeal this regulation to the chair person of the degree-granting department. The chair person will notify the Registrar's office if the student's original catalog of graduation is reinstated.

Non-enrolled students who intend to complete the degree requirements by transferring work from another institution or through correspondence courses must do so within a year of leaving Missouri S&T. Otherwise, students who exceed this time limitation must meet the degree requirements in effect at the time of graduation. The person may appeal to the chair person of the degree granting department to reinstate the catalog in effect during the last term enrolled.

In order to meet accrediting standards and to upgrade course offerings, the degree requirements specified by your catalog can be changed by the faculty under certain conditions. On October 29, 1992 the Academic Council approved the following regulations specifying these conditions:

Students are responsible for knowing and meeting degree requirements stated in the current Undergraduate Catalog at the time of their initial enrollment as freshmen. A student whose initial enrollment is in the summer will use the catalog current the following fall. A student whose initial enrollment is in the spring will use the catalog current the previous fall. Because of the rapid changes in the world today, the Faculty may feel it is in the best interests of the University's students to make changes in their degree requirements. In the event of such changes after a student enters Missouri S&T, that student will be required to satisfy the new degree requirements, provided the following conditions are met:

- 1) The total hours required to graduate cannot be increased for a continuously enrolled student, without that student's permission.
- 2) The total number of semesters needed to graduate cannot be increased for a continuously enrolled student, without that student's permission.
- 3) A new course cannot be substituted for an old course which a continuously enrolled student has already satisfactorily completed, without that student's permission.

Transfer students from community colleges or other universities will complete the Missouri S&T degree requirements in effect at the time of their initial enrollments at their community colleges or universities. If there are changes in Missouri S&T degree requirements after such students' initial enrollments at their community colleges or universities, the rules stated above apply.

Missouri S&T Grade Reports on the Web

Students may obtain their grades on the web through Joe'SS. Students who desire a paper copy of their grade report should contact the Registrar's office.

Grading System

The following system of grades is used:

A-Excellent	.4	Grade Points per Credit Hour
B-Superior	.3	Grade Points per Credit Hour
C-Medium	.2	Grade Points per Credit Hour
D-Inferior	.1	Grade Points per Credit Hour
F-Failure	.0	Grade Points per Credit Hour
I-Incomplete		

S-Satisfactory (Indicates credit has been earned for course scheduled)

U-Unsatisfactory (Indicates credit has not been earned for course scheduled)

Grades of "S" and "U" are permitted only for orientation courses, seminars, special problems, special readings, independent study courses (numbered 200, 300, 350, and 390), and pass/fail courses. Standard grades also may be used for all of the above courses except the pass/fail courses.

Effective Spring of 2001 the incomplete grade time limit will require the student to complete the course work in which they are deficient within one calendar year from the close of the semester in which the "I"

grade was recorded. Incomplete grades recorded prior to Spring Semester 2001 must be removed by the tenth week (five weeks of summer school) of the next term enrolled or they will be changed to "F" grades by the Registrar's Office

Pass/Fail Courses

Grading options cannot be changed after the end of two weeks of class. "S" and "U" grades are used for pass/fail courses and are not used in GPA calculations. Only one pass/fail course per semester is permitted. Degree requirements specified by discipline cannot be taken pass/fail. Graduate students cannot take courses pass/fail. See departmental policy in the Student Academic Regulations handbook for other possible restrictions.

University Communications to Students

Each student, once initially registered for classes, will be issued a Missouri S&T e-mail account with an address on the mst.edu domain. This is the account used for official University business and official University communications to students. Students are expected to regularly check their Missouri S&T e-mail account for University communications and are responsible for communications sent to this account. Therefore, communications sent to this account will be considered to have fulfilled any University obligation for notification.

Residential Life

The Missouri S&T Residential Life housing is composed of three separate residence hall complexes, Thomas Jefferson Hall, the Quadrangle Complex; and the Residential College; and one apartment complex: Nagogami Apartments. The Residential Life Department's intention in operating all of these facilities is to provide students with a living environment that is best designed to meet the academic and personal needs of the individual student. Each residence hall complex is administered by a professional live-in resident director and is staffed by paraprofessional students called resident assistants (RAs). The apartments are administered by an apartment manager. All residence hall staff members work to develop academic living environments and are trained to help students cope with the challenges associated with college. Their efforts are supervised by the Residential Life staff and they work closely with the Counseling Center staff and other members of the Student Affairs Division.

The Residential Life Department strives to provide students with facilities and services that will best serve the lifestyle needs of Missouri S&T students. Various living arrangements are available to students, including quiet floors, specialized learning communities and interest area communities, upperclassmen housing, double rooms, suite-style housing, cooperative living units, and married housing. All rooms are furnished with beds, closets or wardrobes, desks, chairs, bookshelves, and study lamps. Students have the option of bringing per-

sonal items to give their room their own individual touch. Each community has its own study room and TV lounge. Other facilities in the residence hall include laundry facilities, computer learning centers, fitness rooms, meeting areas, game rooms, and vending machines, depending on the complex.

The residence hall communities are administered with input from students. Each complex has its own governing body and the Residence Hall Association (RHA) is a representative group of all residence hall students. These groups play a major role in defining the policies that govern the residence halls and sponsor a significant number of social, diversity, community service and educational programs. Representatives for these groups are selected in community or complex elections.

Being a residential university, Missouri S&T requires freshman and sophomores to reside in campus-approved housing: the residence hall complexes, an approved fraternity house, an approved sorority house, or Christian Campus Fellowship house. Exceptions may be granted for married students, students whose parents reside in the Rolla area, military veterans, students over 21 years of age, or other justified situations.

Thomas Jefferson Hall, the largest residence hall complex, is located at the north end of the campus. This is a co-ed facility that is capable of housing up to 720 residents in two high-rise towers. Although this community is comprised of a predominantly undergraduate population, graduates have chosen to live in this area. Thomas Jefferson also houses the Voyager Learning Community.

The Quadrangle residence hall complex is located on the south end of the campus. It houses approximately 350 residents in four halls; McAnerney, Farrar, Holtman and Kelly. All of these halls are co-ed facilities with Farrar Hall providing cooperative living environments and Holtman Hall being designated to house students over age 21 in single rooms and students interested in the Holistic Community. The facilities and the environment in Holtman Hall are administered with the intent of trying to meet the unique needs of its special population.

The Residential College houses approximately 530 students and provides commons areas to host gatherings, teach learning communities, or showcase speakers. Additional amenities include faculty and staff residences, a reception and service area, and a computer learning center. Living accommodations will vary between four-person single-deluxe suites with a semi-private bath to four-person double suites with two semi-private half baths. To live in the Residential College complex, students must be enrolled in one of the eight courses directly connected to the Residential College Learning Community: Women as Global Leaders, Entrepreneurial Scholars, Experiential Design, Global Research, Honors Academy, Seeds of Success, Global Village, and Achieving a Life of Art.

Nagogami Terrace, located on the west side of the campus, includes 36 two-bedroom apartments that have outside exits that face directly into a courtyard setting. While both married and single graduate and undergraduate students are housed in this community, priority is given to students who are married or with

family, graduate students, and then undergraduate students.

Meals are served in dining halls located in or near each complex. Dining halls offer full-meal service on the weekdays and partial-meal service on the weekends when school is in session. Throughout the year special meals are served to provide more variety in the cafeteria service. Seven meal plans are available that can be used at all on-campus retail and dining locations. These plans are designed to allow students the opportunity to select the meal plan that is best tailored to meet their needs. Students who live in the residence halls are required to contract for one of these seven plans. Students who live in the University's apartments or who live off campus have the option of purchasing a dining plan if they so choose.

How to Apply

Applications and information regarding university housing are sent, beginning in October, to students who are accepted for admission. If you are interested in more information about university housing, contact the Residential Life Office, 107 Norwood Hall, Missouri University of Science and Technology, 1870 Miner Circle, Rolla, MO 65409-0510, email reslife@mst.edu, visit online at campus.mst.edu/reslife, or call (573) 341-4218.

Housing Expenses by Semester

Residence Halls

	TJ	QUAD	RES COLLEGE
Fall	\$3,517	\$3,317	\$4,066
Spring	\$3,517	\$3,317	\$4,066
Total	\$7,034	\$6,634	\$8,132

Several factors influence the cost of affiliating with fraternities and sororities. Consequently, the cost varies from chapter to chapter, but compares favorably with other types of student housing. To obtain the most accurate information, contact an individual fraternity or sorority or the Student Life Office. Meals are available by each fraternity or sorority and additional meal plans are available through Residential Life.

Additional information about the housing and food services offered by the University is available through the Residential Life Office, 107 Norwood Hall, Missouri University of Science and Technology, 1870 Miner Circle, Rolla, MO 65409-0510, email reslife@mst.edu, visit online at campus.mst.edu/reslife, or call (573) 341-4218.

Student Conduct

A student enrolling in Missouri S&T assumes an obligation to behave in a manner compatible with the university's function as an educational institution. The University's "Standard of Conduct" and "Rules of Procedures in Student Conduct Matters" are printed in the "Student Handbook" and the "Student Academic Regulations" and can be found on the web. Other departments and organizations, such as Residential Life and Computer Services, have specific policies and standards for their residents and/or users, as well as procedures for handling violations. See: www.mst.edu/~stu-aff/discipline.html.

Student Design and Experiential Learning Center (SDELIC)

The Student Design & Experiential Learning Center (SDELIC) was established in 2000 (as the UMR Student Design Competition Center) with the specific purpose of consolidating support and management of the multi-disciplinary, student design teams that existed independently at the Missouri University of Science and Technology (formerly University of Missouri-Rolla). In 2004, a successful UM System Strategic Initiative proposal expanded the Center's mission to provide experiential learning in academic courses, identify and support student service learning projects within the curriculum, and support ad-hoc student teams in specialty academic events supporting multi-disciplinary student research.

Under the new mission the Center took steps to better fund our ten nationally competitive student design teams that involve over 600 students from all campus departments. We also began offering support and resources to special project teams that were multi-disciplinary in nature and had a research base to their activities. The SDELIC began to offer academic credit opportunities in the form of three one-hour classes on design, leadership and communication. The Center also offers a half-credit course through the Residential College (RC) program on experiential design. The RC program currently has an enrollment of over 100 students (each semester) actively engaged in hands-on learning projects. In summary, the SDELIC supports four major types of experiential learning today: 1) student design teams, 2) course implementation of experiential learning, 3) service learning and 4) multi-disciplinary design research projects.

Visit our website at: design.mst.edu; call 573-341-7546, or E-mail: sdelic@mst.edu.

Student Diversity Programs (SDP)

The mission of Student Diversity Programs (SDP) is to actively recruit and retain academically talented students from ethnic populations that are historically under-represented in Higher Education. In conjunction with the university's mission, SDP's ultimate goal is to create an environment that provides the development/guidance and academic support needed to be successful at Missouri S&T; while equipping our students with the knowledge and skills needed to transition effectively into society.

SDP through its programs, partnerships and ongoing assessments of the learning, styles and personality traits will foster an academic environment that will ensure our students success. Through execution of these initiatives, the university will develop a pool of commit-

ted and gifted Missouri S&T's ambassadors which could be utilized to recruit other underrepresented minority students to the campus.

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Activities include (but are not limited to) academic recognition events, off and on campus recruitment programs, mentoring, leadership and professional development and scholarships. Such scholarships as the Minority Engineering and Science scholarships are to increase minority representation in math, engineering, science or technology degree programs.

For more information about SDP and its events, programs and scholarships, visit our website at www.sdp.mst.edu. Also, you may contact us directly at (573) 341-4212 or via email at asksdp@mst.edu.

Student Health Services

Any currently enrolled student can be treated at Student Health Services (SHS). The cost is supported by health fees paid each semester by all students. SHS offers a wide range of primary health-care services to meet students' needs and is designed for care of acute and intermittent health problems.

Insurance is recommended, since hospital care and specialists are not covered by the SHS fee. An optional student group plan of accident and sickness insurance is available to all students. Information on this plan may be obtained at the Cashier's Office.

Measles and Rubella Immunization Policy

No incoming student born after 1956 shall be registered for classes at the Missouri University of Science and Technology without documented proof of two doses of live measles vaccine. Students matriculating only in off-campus or continuing education/extension courses are excluded.

The incoming student shall present acceptable documentation of immunization before registration to the Missouri University of Science and Technology is complete. Acceptable documentation shall be defined by the campus and may include a measles immunization record signed by a physician, or a health record from a high school or a branch of the military.

Students not in compliance with this policy will be notified of the need to provide acceptable documentation in order to register for classes. In addition, a hold will be placed on the records of students not in compliance.

Exemptions from immunization are permitted for medical, religious, or philosophical reasons. Students who exempt themselves from immunization for religious or philosophical reasons must sign the Missouri University of Science and Technology measles/rubella form (parents must sign for persons under the age of 18). For medical exemptions, the Missouri University of Science and Technology measles/rubella form must be signed by a physician. This form will be on file in the student health clinic or other office designated by the Chancellor. For their own protection, students who have an exemption may be required to leave campus in the case of a measles or rubella outbreak.

Meningitis Immunization

Beginning with the 2004-2005 school year and in compliance with State Law (SB 686), all students living in Missouri S&T approved housing shall provide documented proof of the Meningococcal vaccine or be required to sign a waiver stating that the institution of higher education has provided the student, parent or guardian with detailed written information on the risks associated with the meningococcal disease and the availability and effectiveness of the meningococcal vaccine. These records will be maintained at the SHS and will be available to the Resident Halls, Greek Housing, and other University housing.

Proof of meningitis vaccine or a signed waiver must be provided by the student to SHS before he or she will be allowed to move into university approved housing.

Other Immunizations

The following immunizations are recommended by the American College Health Association:

- Diphtheria/Tetanus (in past 10 years)
- Hepatitis B (series of 3 injections)
- Hepatitis A (series of 2 injections)
- PPD (tuberculosis test - n past year)
- Varicella (series of 2 injections)
- Human Papillomavirus Vaccine (HPV) (series of 3 injections)

Policy for Tuberculosis Testing Adopted 4-04

The Missouri S&T campus takes reasonable steps to protect students from exposure to infectious diseases. Students from endemic areas account for 95% of the risk of a tuberculosis (TB) outbreak on campus. Untreated TB can result in serious health problems for the student and for other people who come in contact with him or her. In order to ensure a healthy campus, beginning with the fall semester 2004 and every semester thereafter, all **international students** shall be required to have a Mantoux skin test for tuberculosis administered in the United States and a reported reading in millimeters.

Testing with the Mantoux two - step skin test must be done or verified, at no charge, at Missouri S&T Student Health. If a skin test is positive, a further test involving a chest X-ray must be administered to determine if active tuberculosis is present.

All students who test positive for tuberculosis shall be offered tuberculosis medication and must be directly observed taking their medicine at Student Health for the designated time period.

Enrollment is contingent upon completion of TB testing and possible treatment as described above.

Cultural Programs

Cultural Programs promotes and supports diversity and cultural education within the University and Rolla community. Our mission is to educate Missouri S&T students about differences and similarities. We provide advocacy for African American, Native American, international and other minority groups, bringing people of all races together and facilitating their participation in campus organizations and programs such as Student Council and the Student Union Board. Various inter-cultural programs are provided for the student body in celebration of diversity.

In addition, Cultural Programs contributes to student retention and satisfaction with high quality co-curricular opportunities and excellent customer service. Our goal is to be an active and visible partner in the campus and community. Furthermore, we provide safe, clean, and affordable facilities for student and campus events. Cultural Programs is part of the Office of Student Life in the Havener Center.

Student Organizations

Academic Departmental

American Association of Petroleum Geologists/C. L. Dake Society, American Ceramic Society, American Concrete Institute, American Foundry Society, American Indian Science & Engineering Society (AISES), American Institute of Aeronautics & Astronautics, American Institute of Chemical Engineers, American Nuclear Society, American Society for Engineering Management, American Society for Quality Control, American Society of Civil Engineers, American Society of Heating, Refrigeration and Air-Conditioning Engineers, American Society of Mechanical Engineers, Architectural Engineering Institute, Association for Computing Machinery, Association for Computing Machinery-Women, Association of Engineering Geologists, American Society of Mechanical Engineers, Architectural Engineering Institute, Association for Computing Machinery, Association for Computing Machinery-Women, Association of Engineering Geologists, Associated of General Contractors, Earthquake Engineering Research Institute, El Club de Espanol, Epsilon Mu Eta, FBLA-PBL, Financial Management, Helix Life Science Club, History Club, Institute of Electrical & Electronic Engineers, Institute of Transportation Engineers, International Society for Explosives Engineers, Mathematical Association of America at Missouri S&T, National Sand, Stone & Gravel Association, National Society of Black Engineers, Society of Exploration Geophysicists, Society of Hispanic Professional Engineers, Society of Manufacturing Engineers, Society of Metallurgical Engineers, Society of Mining Engineers, Society of Petroleum Engineers, Society of Physics Students, Student Missouri State Teachers Association

W. T. Schrenk Society, Water Environment Federation, Women in Mining

Governing and Programming

Associated Students of the University of Missouri, Council of Graduate Students, Interfraternity Council (IFC), Panhellenic Council, Residence Hall Association (RHA), St. Pat's Celebration Committee, Student Council (Stu-Co), Student Union Board (SUB)

Honor and Professional

Alpha Chi Sigma, Alpha Iota Delta, Alpha Nu Sigma, Alpha Sigma Mu, Blue Key, Chi Epsilon, Eta Kappa Nu (HKN), Kappa Kappa Psi, Kappa Mu Epsilon (KME), Keramos, National Residence Hall Honorary (NRHH), Omega Chi Epsilon, Omicron Delta Kappa, Order of Omega, Phi Alpha Theta, Phi Eta Sigma, Phi Sigma, Pi Epsilon Tau, Pi Tau Sigma, Psi Chi, Sigma Gamma Epsilon, Sigma Gamma Tau, Sigma Tau Delta, Society of Women Engineers (SWE), Tau Beta Pi, Tau Beta Sigma, Upsilon Pi Epsilon

Intercultural

African Student Association, Association of Black Students (ABS), Chinese Students & Scholars Association, Chinese Students Association, India Association, International Students Club, Korean Students Association, Saudi Students Association, Thai Students Association, Turkish Students Association

Media and Publication

KMNR Radio Station (89.7 FM), Mineshaft, Missouri Miner, Rollamo, Southwinds,

Recreation and Sports

Aikido (freestyle martial arts), Ballroom Dancing Club, Chess Club, Cycling Club, Fencing Club, Gaming Association, In-Line Roller Hockey Club, Intramural Managers Association, Juggling Club, Lacrosse Club, Racquetball Club, Rugby Club, Skydiving Club, Spelunkers Club, Table Tennis Club, TaeKwonDo Club, Tennis Club, Trap and Skeet Club, Ultimate! Club, Volleyball Club, Yoga Fitness Club, Youn Wha Ryu Club

Religious

Baptist Student Union (BSU), Catholic Newman Center, Chi Alpha, Christian Campus Fellowship (CCF), Common Call Campus Ministry, Fellowship of Christian Athletes, Koinonia (Student Fellowship of Church of Christ), Latter-Day Saint Student Association, Lutheran Student Fellowship, Muslim Students Association (MSA), Vine, The Voices of Inspiration, Wesley House

Residence Hall

Quadrangle Hall Association (QHA), Residential College Association (RCA), Thomas Jefferson Hall Association (TJHA)

Service

Alpha Phi Omega (APO), Circle K, Engineers Without Borders, Gamma Alpha Delta (GAD), Habitat for Humanity, Intercollegiate Knights (IK), Lambda Sigma Pi, Omega Sigma, Rotaract

Social and Special Interest

Academic Competition Team, Actuarial Science Club, BBQ Club, Black Man's Think Tank, Blue Sabres, College Democrats, College Republicans, Collegiate Eagle Scout

Association, DaVinci Society, Fraternal Order of Leaders, Independents, Delta Omicron Lambda, John Marshall Society, M-Club, Military Aerospace Society, Perfect 10 Improv, Radio Club (Amateur), SCRUBS (health sciences), Show Me Anime, Society of Flight Test Engineers, STAT-Students Today Alumni Tomorrow, Technical Innovators & Entrepreneurs, Toastmasters

Student Design Groups

Advanced Aero-Vehicle Group, Baja Club, Concrete Canoe Team, Formula SAE Racing Team, Human Powered Vehicle Team, Material Advantage, Miners In Space, Robotics Competition Team, Solar Car Team, Solar House Team, Steel Bridge Team

Greek Social Fraternities

Alpha Epsilon Pi, Alpha Phi Alpha, Beta Sigma Psi, Delta Lambda Phi, Delta Tau Delta, Kappa Alpha, Kappa Alpha Psi, Kappa Sigma, Lambda Chi Alpha, Phi Kappa Theta, Pi Kappa Alpha, Pi Kappa Phi, Sigma Chi, Sigma Nu, Sigma Phi Epsilon, Sigma Pi, Sigma Tau Gamma, Tau Kappa Epsilon, Theta Xi, Triangle

Social Sororities

Chi Omega, Phi Sigma Rho, Kappa Delta, Zeta Tau Alpha

For more information contact the Department of Student Life 341-6771 or email stulife@mst.edu
<http://studentlife.mst.edu>

Teacher Education Program

Secondary Teaching Majors

If preparing for secondary school teaching, you are required to have a teaching major. The major may be in one of the following areas: Biological Science, Chemistry, Economics, English, History, Mathematics, Physics, and Psychology. By careful program planning, it is possible to earn your certificate in more than one area.

While your program of study may be strengthened by taking certain elective courses, such electives should be taken after consultation with your academic program advisor, the coordinator of education and/or looking on website mst.edu/~tchreduc.

General Education Requirements

General education requirements are intended to provide you with the intellectual knowledge and skills for basic education. This body of knowledge and skills is arranged according to two broad categories: systems of symbolic thought and communication represented by linguistic and mathematical studies, and systems of intellectual inquiry represented by basic academic disciplines. In addition, you must complete one course in cultural diversity, and the general education requirements may be fulfilled at the same time.

The following are generic requirements for all education students. However, any degree requirement not included in these general education requirements must be included in the professional requirements or subject matter requirements for each degree program.

1) Symbolic Thought & Communications

- A) Linguistic Studies** (9 semester hours): You are required to take two courses in written communication and one course in oral communication. You must have a grade of "C" or above in each course.
- B) Mathematical** (3 semester hours). The course must be college algebra or above with a "C" or above in each course.

2) Systems of Intellectual Inquiry

- A) Humanities:** At least one course each from two of the following areas required: art, music, philosophy, literature, and theater.
- B) Natural Science:** One course in biological sciences and one in physical science is required. One of these two courses must include a laboratory.
- C) Social and Behavioral Science:** One course in each of the following areas is required: (1) American History, (2) American Government and (3) General Psychology.

Secondary Education

In addition to the prescribed general education courses, if you are preparing to become a secondary school teacher you must complete the following secondary professional education courses (40-Perspectives In Education, 104-Teacher Field Experience, 164-Aiding Elementary, Middle and Secondary Schools, 174-School Organization & Adm For Elementary Schools, 216-Teaching Reading In Content Area, 251-Historical Foundation of American Education, 280-Teaching Methods And Skills In The Content Areas, 298-Student Teaching Seminar, and 299-Student Teaching) and the required courses of at least one teaching major.

You may major in English with English Certification (9-12); Economics, History or Psychology with Social Studies Certification (9-12); Mathematics with Mathematics Certification (9-12); Biological Sciences with Biology Certification (9-12); Chemistry with Chemistry Certification (9-12); or Physics with Physics Certification (9-12).

You must meet Missouri S&T degree requirements and, in addition, course requirements for certification. (Those having a degree prior to certification must check with the education office for clarification of requirement procedures.)

The necessary course requirement arrangements will be coordinated through the education office. Please pick up a sheet from the education office for your discipline area.

Elementary Education

All the courses are offered for elementary education that are required by the State Department of Education. It is imperative that you contact the coordinator of the education office for details prior to enrollment for Elementary Education courses for an endorsement.

Dr. Evalee Lasater, lasater@mst.edu, 573-341-4692.

Missouri State Board of Education Approved Programs

The following professional education programs have been approved by the Missouri State Board of Education for the purposes of teacher preparation and certification. The approval date for the Missouri University of Science and Technology is December 1998 through 2010, in the following areas:

- Middle School 5-9 endorsement
- Elementary Education 1-6 endorsement
- Secondary Education:
 - English 9-12
 - Mathematics 9-12
 - Social Science 9-12
 - Biology 9-12
 - Chemistry 9-12
 - Physics 9-12

NOTE: If changes occur at the state level, then those education requirements will supercede the catalog year and DO NOT Fall under the grandfather clause.

University Police Office

Parking

All student-operated vehicles in the Rolla area should be registered with the University Police Department and should have either a valid campus parking permit or student registration decal affixed properly to the vehicle. Missouri S&T Parking, Security and Traffic Safety Regulations, as adopted by the Parking, Security and Traffic Safety Committee and approved by the Chancellor, provide for the payment of established fees for parking privileges and set fees for violation of those regulations. The University Police Department has the responsibility of enforcing parking regulations at Missouri S&T.

The size of the student body, faculty, and staff, coupled with the fact that a large number of students live off-campus, leads to a relatively large number of motor vehicles on and near the campus. This traffic load, in turn, complicates parking for the campus citizen and creates a hazard for vehicles and pedestrians. The Committee has prescribed the rules governing the classification and use of parking lots, the qualifications for parking on those lots, and the rules for application, issuance, and use of parking permits.

Specific information on current regulations and other details pertaining to parking can be obtained at the University Police Department, G-10 Campus Support Facility, 341-4303. The regulations may also be found at: <http://police.mst.edu/parking/parking.html>

Missouri S&T Parking: Rules in Capsule Form

- 1) All parking on campus requires either a purchased permit or payment at a meter. Decals (permit and registration stickers) must be affixed to the outside

of the rear window or bumper on driver's side of the vehicle. Temporary tags shall be affixed to the inside rear window on the driver's side of the vehicle.

- 2) All vehicles shall be parked **HEADING** into the parking spaces. (Do not back into or pull through the space.)
- 3) A visitor is anyone **OTHER THAN** an employee, student or member of their family.
- 4) Regulations pertaining to area permits and metered parking are enforced **YEAR ROUND** from 7:30 a.m. to 4:30 p.m. except on Saturdays, Sundays and Official University holidays. Other regulations are enforced at all times as noted below.
- 5) Permit and metered parking at Thomas Jefferson Residence Hall and the Multi-Purpose Building shall be enforced 24 hours a day 7 days a week.
- 6) Employees and students lending their vehicle to a visitor will be responsible for any violations occurring on campus.
- 7) Parking permit owners shall park only in the area to which the purchased permit allows access.
- 8) Employees and students without parking permits shall use only metered spaces.
- 9) Specially marked disabled parking, driveways, yellow curbs and zones, spaces marked for 24 hour enforcement, fire lanes, vehicle types and areas not designated as a parking area, etc., shall be enforced 24 hours a day 7 days a week
- 10) University driveways, yellow curbs and zones, and any other area not specifically designated as a parking area shall not be used at any time.
- 11) The Director of University Police, with the concurrence of the Parking Committee Chair, shall have the authority to suspend all or part of the parking regulations for specific periods of time.

The full and complete set of Missouri S&T Parking Rules and Regulations can be found on our website:

<http://police.mst.edu/police/parking/parking.html>

Lost and Found

The University Police Department is the central "Lost and Found" repository for the campus. Any lost and found items should be turned in to University Police for reclamation purposes. If an item is lost, information should be filled out with University Police, 341-4308, or can be reported by accessing: <http://police.mst.edu/lost.html> in case the item is turned in at a later date.

Campus Security

Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act Statement.

The Missouri University of Science and Technology is committed to the safety and welfare of the campus community. This annual security report is intended to heighten awareness of crime and security on campus. Campus safety and security at Missouri S&T is a shared responsibility.

Missouri S&T's annual security report includes statistics for the previous three years concerning reported crimes that occurred on campus; in certain off-campus buildings owned or controlled by Missouri S&T; and on

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public property within the city limits of Rolla, MO. The report also includes institutional policies concerning campus security, such as policies concerning alcohol and drug use, crime prevention, the reporting of crimes, sexual assault, and other matters. You can obtain a copy of this report at: <http://police.mst.edu/security-act/index.html> or by contacting University Police, G-10 Campus Support Facility, Rolla, MO 65409.

University Police

The mission of the University Police, as a vital part of the administrative staff, is to support the academic and campus community in fulfilling its commitment to teaching, research, and service. The responsibilities of the University Police, as set forth in Chapter 172, Missouri Revised Statutes, are:

“To protect and preserve peace and good order in the public buildings and upon the campuses, grounds, and farms, over which they may have charge and controls.”

Chapter 172 also provides University Police with:

“The same power to maintain order, preserve the peace, and make arrests as is now held by police officers.”

Duties include, but are not limited to, crime prevention through active campus involvement, individual interactions, and public educational endeavors, preventative patrols, service to students and others in emergencies, maintenance of peace and order, special event coverage, control and supervision of traffic, the enforcement of state laws and university rules and regulations, and the investigation of crimes.

University Police to be Notified

The University Police Department is to be notified as soon as practical of incidents involving alleged violation of state statutes that occur on campus property and other circumstances requiring police service, including health or safety emergencies.

The University Police shall be responsible for the maintenance of peace and order, and the investigation of crimes occurring on University property. To help insure that this is accomplished, the campus community must report incidents in a timely manner.

The University Police Department shall attempt to monitor and record, in cooperation with local police agencies, criminal activity at off-campus student organizations with off-campus housing facilities.

The Student Affairs Division at Missouri S&T has developed a “Protocol for Responding to Survivors of Sexual Assault” for Student Affairs personnel which outlines the options for support and services available to the victim during a time of crisis caused by a sexual assault.

Reporting options include direct reporting, where the victim speaks directly with law enforcement officers, whether it be Missouri S&T Police or Rolla Police. If the victim does wish to participate in the prosecution of the offender, direct reports are required and should be made as soon as possible.

Reporting by third party involves law enforcement being contacted by someone other than the victim, such as University personnel, who reports the details of the assault. This option should only be used when the vic-

tim is unwilling to report the assault directly. However, it is unlikely any prosecution of the assault will be made unless the victim agrees later to make a direct report.

Through an anonymous report the victim contact authorities and reports the details of the assault but does not disclose her/his identity. Again, although this type of reporting may be useful in preventing additional assaults on campus, it cannot be used for investigation and prosecution of the assault.

Security of Campus

Accountability of the security of campus facilities originates with the department chair. Areas of responsibility include, but are not limited to, both interior and exterior entryways, exits, and windows, and items of value within the department. Areas not under a specific department shall be under the responsibility of the next higher level within the division.

The department chair is ultimately answerable for security problems existing within his/her area of control, but can designate a dependable and reliable individual(s) areas of security responsibility.

A particularly sensitive area in building access control is the issuance of keys by departments to faculty, staff, and students. Department key issuance and control shall comply with guidelines set forth in section 07-13, under the title, “Property & Capital Equipment, Keys To University Buildings (Missouri S&T).”

Buildings shall be secured during the evening hours at the earliest reasonable time. Any facility open for an extended period after normal operating hours for that building shall require a permit to be open for the hours specified on the permit.

During the academic year in which residence halls are open, those halls shall be secured during the evening hours according to Housing Department regulations. Faculty, staff, and students are encouraged to prevent access by unauthorized personnel, in both residence halls and other campus buildings, by verifying any door entered or exited has closed and locked.

Maintenance of campus facilities involving security problem areas, such as broken locks, windows, door, etc., shall involve reporting the security problem as soon as possible to the Physical Facilities department, who shall rectify the security breach in a timely manner.

Notification of Agencies

Local law enforcement agencies (i.e., Rolla Police Department, Phelps County Sheriff’s Office, State Highway Patrol) are routinely notified of violations of law and other incidents occurring on campus that appear to affect the off-campus community.

The Director of University Police or his representative will act as liaison between the University and local law enforcement agencies and make the determination as to when they should be notified of an incident occurring on campus.

Police Reports

Police reports involving criminal activity will be turned over to the County Prosecutor for his/her dispo-

sition. The Director of University Police shall review each report and make every effort to establish a procedural relationship to permit campus disciplinary procedures to be implemented for minor infractions.

Certain University officials, because of the nature of their responsibilities, will be informed in cases involving students, faculty, and staff. Information concerning student conduct not required is referred to the office of the prosecutor and will be forwarded to the University Student Conduct Officer.

Compilation of Crime Statistics

The University Police will compile crime statistics and prepare annual reports for dissemination according to University, state, and/or federal guidelines. These annual reports shall be reviewed by the Director of Residential Life and, upon his or her review, be made available for public examination.

Timely reports shall be made to the campus community on crimes considered to be a threat to other students and employees. Those crimes include murder, rape, robbery, aggravated assault, burglary, and motor vehicle theft.

Missouri S&T Crime Statistics

The crime statistics for the University of MO-Rolla can be found at: <http://police.mst.edu/securityact/index.html> or by contacting the University Police Department, 341-4300.

Alcohol/Illegal Drugs Policies:

Alcoholic Beverages

The use or possession of any alcoholic beverage is prohibited on all University property, except in the President's residence and the Chancellors' residences, and the sale, use, or possession may, by appropriate University approval be allowed in approved University Alumni Centers or Faculty Clubs, and for single events and reoccurring similar events in designated conference, meeting, or dining facilities provided by University food services, subject to all legal requirements. Further information pertaining to alcoholic beverages can be obtained from the Missouri S&T Alcohol Handbook.

Illegal Drugs

University of Missouri regulations prohibit the unlawful possession, use, distribution and sale of alcohol and illicit drugs by University students and employees on University-owned property and at University sponsored or supervised activities. Local, state, and federal laws also prohibit the unlawful possession, use, distribution, and sale of alcohol and illicit drugs. Violation of the University of Missouri regulations and federal and state laws can result in disciplinary action up to and including expulsion for students and discharge for employees.

A variety of resources exist for drug and/or alcohol counseling, treatment, or rehabilitation program. For detailed information concerning University and community resources, students and employees may contact the Substance Abuse Prevention Program, 106 Norwood

Hall, 341-4292. Confidential consultation, assessment, short term counseling, and referral services are available free of charge to faculty, staff, and students. A variety of prevention and education programs are also offered.

Sexual Assault Programs and Procedures

Educational Programs

- Rape/sexual assault prevention
- Burglary/theft prevention
- Room or building security surveys
- Property engraving programs
- Campus watch
- Floor security programs
- Alcohol/liquor law programs
- Drug violation programs

There is no set agenda for giving these programs, but they are presented at least once a year and some of them numerous times during the school year. Any or all of them can be given upon request by any student, faculty, staff, or university related group. It is preferable that arrangements be made as far in advanced as possible to assure the program you may be interested in can be arranged at your convenience.

Possible Sanctions For Sex Offenses

Possible sanctions for rape, acquaintance rape, or other sex offenses following an on-campus disciplinary procedure includes disciplinary probation, suspension, or expulsion. Information involving any crimes committed on campus and investigated by the Missouri University of Science and Technology Police Department will be submitted to the Phelps County Prosecutor for his or her disposition and possible prosecution of the alleged assailant(s).

Preserving Evidence if a Sex Offense Occurs

Receiving medical care immediately following a rape, attempted rape, or sexual assault is extremely important for the victim's well being. It is essential that the victim of the crime obtain:

- 1) an emergency medical exam if the victim has serious injuries;
- 2) a general medical exam to ensure that she/he hasn't obtained injuries that she/he's unaware of or unable to determine;
- 3) a medical/legal examination for the collection of evidence if she/he thinks there is any possibility she/he will want to pursue legal charges.
- 4) testing for Sexually Transmitted Diseases, AIDS, and possible pregnancy (as part of follow-up treatment).

For medical emergencies, call Missouri S&T Police (341-4300) who will subsequently have an ambulance dispatched. It is strongly encouraged that a report to the Missouri S&T Police be made as soon as possible after the sexual assault. A report can be made at the hospital or the police department.

Successful apprehension and/or prosecution of the offender depends greatly on a rapid and accurate report of the crime. Information about the assault can assist

law enforcement authorities in providing and improving prevention strategies for the protection of the victim and others in the community.

Making a report assists the police in protecting the community. While the actual prosecution of the offender is pursued by the Phelps County Prosecutor (not by the victim), prosecution is unlikely to occur without the consent and assistance of the victim. University Police services are **STRICTLY CONFIDENTIAL**, and in no way does contacting this support unit obligate the victim to take any further action.

If the victim is considering a medical/legal exam, the only resource in this area is the Phelps County Regional Medical Center Emergency Room. To obtain physical evidence that will be useful, the medical/legal exam must be conducted within 48 hours of the assault.

If the victim pursues this course of action the Missouri S&T Police and the Rolla Police will be contacted by Phelps County Regional Medical Center. The police will be notified by the Emergency Room personnel who will arrive at the hospital to begin their investigation upon completion of the exam. The Director of Residential Life will be contacted by Missouri S&T Police and informed of the assault and the identity of the victim. The Director of Residential Life is subsequently responsible for coordinating the University response to the assault.

Other sources of emergency medical exams for victims include Missouri S&T's Health Services, whose services are available 24 hours a day (341-4284), and Planned Parenthood, where appointments are required (364-1509).

Sexual Assault On-Campus Disciplinary Action Procedures

There are two possible situations which may arise as a result of an accusation of sexual assault or rape. The policy/procedures for dealing with the situations are defined in the Collected Rules and Regulations of the University of Missouri, Section 200.020, Part C: RULES OF PROCEDURES IN STUDENT DISCIPLINARY MATTERS, approved by the Board of Curators. The situations which may arise are:

- 1) The victim has reported a rape or sexual assault to a law enforcement agency. The Director of Residential Life is then notified by the Missouri S&T Police.
- 2) The victim does not report the rape or sexual assault to a law enforcement agency, but wishes the University to take action against the alleged perpetrator under Section 200.010 of the Collected Rules and Regulations of the University of Missouri: STANDARD OF CONDUCT. The campus judicial officer will inform the victim that an investigation may take place, and that action may be taken without the victim's consent, if it is deemed in the best interest of the University community.

The accused will be contacted by the judicial officer immediately after initial information has been gathered. Both the accuser and the accused are entitled to the same opportunities to have others present during a campus disciplinary proceeding, and both will be informed of the outcome of any campus disciplinary proceeding involving a sexual assault complaint.

Counseling, Mental Health Services For Sexual Assault Victims

The Missouri S&T resource for crisis intervention is the Missouri S&T Center for Personal and Professional Development (341-4211). Missouri S&T counselors are trained professionals who will assist victims of rape, attempted rape, or sexual assault in coping with the trauma or long standing victimization issues. There is no cost to the student for these services. The victim has the right to decline an immediate interaction with the Center for Personal and Professional Development. These services are **STRICTLY CONFIDENTIAL** and contacting this support service does not obligate the victim to take any further action. Other counseling or mental health services in the community include Central Ozarks Mental Health Services, 364-7551, and the Phelps County Regional Medical Center Stress Center, 341-2350.

Changing Academic, Living Status After Alleged Sexual Assault

If the accused and the victim may be in close contact with each other because of class schedules and/or living arrangements, two situations may arise:

- 1) The Director of Residential Life has the authority to give the victim and/or accused the option of changing living arrangements. If the victim and the accused refuse to change living arrangements, the Director has the authority to change the living arrangements of either person. Contact should be made with the Director of Residential Life office, 341-4218, for assistance in this area.
- 2) The judicial officer shall give the parties the option of changing class schedules to avoid contact. However, change of class schedules cannot be required until after disciplinary proceedings have concluded. Contact can be made with the judicial officer in the Student Affairs Office, 341-4292, for assistance in this area.

Video Communications Center

The Video Communications Center located in G-8 Library offers a variety of video production services to the campus community. This is achieved through several specialized video-equipped classrooms, tele-conferencing rooms and a selection of recording and transmitting technologies.

For the student - especially those pursuing advanced degrees -- the VCC offers an array of communication tools for extending the traditional classroom and laboratory out into "the real world." Services include:

- Multimedia classroom use for thesis defense and project presentation
- Tape, DVD or web-streaming video recording of the above
- Video teleconferencing for project presentation to sponsoring companies, for student organizations meeting between campuses, and for job interviews

- Conversion of video tapes to and from the several international formats so the tapes can be played in the US, or sent overseas
- Assistance in set up, capturing and converting research lab project videos for documentation and presentation
- Participation in advanced coursework carried over and stored on the Web for later access
- The opportunity to take courses “at a distance” while away from or after leaving Missouri S&T

For more information on these and other services, contact the Video Communications Center at (573) 341-4526; or e-mail: vcc@mst.edu or visit our website at: <http://vcc.mst.edu>

Women’s Leadership Institute (WLI)

Women In Science and Engineering (WISE)

The mission of the WLI/WISE program is to promote diversity and support the needs of female graduates entering our nation’s engineering and science workforce, and to serve as an Educational and Professional Development Resource Center for all Missouri S&T students. The program provides a number of activities and programs for students to learn about leadership from the female perspective. Its goals encourage student involvement and strategic leadership in campus and community organizations through involvement in the following areas: Classes, Residential College Learning Communities, Guest Lecturers, Workshops, Scholarships, WISE, Student Organizations, Resource Center, Mentoring/networking programs, Social Activities. For more information contact the WLI/WISE office at: 212 Engineering Research Lab, 573-341-7286, woli@mst.edu, women@mst.edu, <http://wli.mst.edu>; <http://wise.mst.edu>.

Writing Across the Curriculum

Missouri S&T’s Writing Across the Curriculum (WAC) Program is designed to help students improve their writing abilities and communication skills. In addition to required and elective courses in the English Department, Writing Intensive and Emphasized courses in all disciplines give students writing experience in their academic and professional fields and satisfy the General Education Communication requirements. Missouri S&T graduates report that, in order to advance in their professions, they have had to refine their communication skills much more than they ever anticipated. Drawing on this information, WAC puts into practice the idea that writing proficiency develops over time, through practical experiences in writing various kinds of documents for various audiences. Writing is seen not as a simple skill that can be learned in a single semester or in a single course,

but as a process that develops over the course of one’s college years and throughout one’s career.

The Writing Center

The Writing Center, housed in the Dr. Beverley Bowen Moeller Writing Studio, was established to help undergraduate students become effective writers in their chosen majors and professions. The Center is staffed by peer writing tutors who are trained both to teach general writing skills and to offer help with specialized forms of writing, such as research papers and laboratory reports. Tutors can help students with all phases of the writing process, from understanding assignments and organizing ideas to revising drafts. The Center maintains a collection of handbooks and other writing resources (in both print and digital format) for student use. The Center staff periodically offers workshops and presentations related to writing. Writing Center facilities and services are available to all Missouri S&T students free of charge.

The Writing Center is located in 113 Campus Support Facility. Tutoring hours are published early each semester on the Writing Center web site at <http://writingcenter.mst.edu/>. Students should feel free to drop in whenever the Center is open, but making an appointment in advance will ensure a tutor’s availability.

The Center for Writing Technologies

The Center for Writing Technologies is located in 114 Campus Support Facility, adjacent to the Writing Center. This is a Computer Learning Center equipped with writing, editing, and desktop publishing software. It is available for student use during Writing Center office and tutoring hours, when not occupied by classes or workshops.

The Writing Across the Curriculum Program is committed to providing opportunities for Missouri S&T students in all majors to develop their writing proficiency to the fullest. For further information, contact the Director of Writing Across the Curriculum at the WAC office, Monday-Friday 8:00 to 4:00, 113 Campus Support Facility, Missouri S&T, Rolla, MO 65409; call 341-4436; e-mail wac@mst.edu.

