Taking the Distance out of Distance Education

Tuesday, December 11, 2012
Presented by Dr. Henry Wiebe, Vice-Provost of Global Learning
Dr. Victor Birman, Professor and Director of EEC
Vicki Gibbons, Manager of Graduate Student Services

Missouri University of Science and Technology
Founded 1870 | Rolla, Mo. | mst.edu
Campus
• Missouri S&T is one of the nation’s premier technological research universities

• Founded 1870 as the Missouri School of Mines (MSM)

• Became University of Missouri-Rolla (UMR) in 1964 and Missouri University of Science and Technology (MST) in 2008

Locations
• 284-acre campus located in Rolla, Missouri, a town of 16,000 in the heart of the Ozarks

• Engineering Education Center located at 12837 Flushing Meadow Dr., St. Louis, MO 63131

Enrollment
• 7,522 total students

• 6,659 on-campus students; 863 distance students

• Students from 49 states and 77 foreign countries
Distance and Continuing Education

http://dce.mst.edu

Bringing Missouri S&T’s teaching, research and service capabilities to a global market.
Graduate Distance Education

Missouri S&T has a history of distance education dating back to 1964.

How we distinguish ourselves:

Academic Quality
Student Experience

“

“The highlight was how personal the overall experience was. I would definitely recommend distance education from Missouri S&T. The flexibility in the plan of study, the wide range of courses offered via distance, and the technology used for content delivery makes Missouri S&T an obvious choice.”

Jason Dauby
PhD SYSE’11
Graduate Distance Education - Academic Quality

Institutional Accreditation (since 1913)
  • Higher Learning Commission of the North Central Association of Colleges and Schools

ABET Accreditation (all BS engineering programs and computer science)

Course content and degrees are equivalent to on campus
  • Transcript and degree are not flagged as distance/online
  • Offering, on average, 120 distance classes each fall/spring semesters
  • Small Class Size (15 – 20 students)

Majority of courses are taught by tenured-track faculty
  • Student – faculty interaction
  • Over 15% of Faculty are Fellows of their Professional Society
Graduate Distance Education – Student Experience

You are a Missouri S&T student
- Personal attention
- Remote access to library, computer labs
- Flexibility of taking classes (Education That Fits)
- Career Opportunities and Employer Relations (COER) services

As a graduate, you become part of the Miner Alumni Association
- Network with Missouri S&T alumni in your area
- Join one of the 56 Miner Alumni Sections in the U.S.
- Stay connected through the Miner Alumni Online Community
Program Delivery Methods

Webex  
Blackboard  
Video Conferencing  
Streaming Media  
Virtual Office Hours  
Downloadable Video  
Streaming Video Archives

“I selected Missouri S&T for the convenience, affordability, and the quality of education. One of my favorite features about the distance program is the video communications service. The web delivery makes it very convenient for me to view and participate in live lectures from work or home.”

Mirna Palavric  
MS EngMgt’12
The Video Communications Center (VCC) provides video and web-based services in support of Missouri S&T’s teaching and research mission. YouTube
Graduate Degree Programs

Ten Courses *(Thesis Option Available)*
Dual MS Degree Option Available
PhD Degree – available on a limited basis
Transfer Up to 9 Credit Hours *(dept. approval required)*

- Aerospace Engineering (MS)
- Business Administration (MBA)
- Civil Engineering (MS)
- Computer Engineering (MS)
- Computer Science (MS)
- Electrical Engineering (MS)
- Engineering Management (MS)
- Environmental Engineering (MS)
- Explosives Engineering (MS)
- Geotechnics (ME)
- Information Science and Technology (MS)
- Manufacturing Engineering (MS/ME)
- Mechanical Engineering (MS)
- Mining Engineering (ME)
- Systems Engineering (MS/PhD)
- Technical Communication (MS)

* Mining Engineering requires 11 courses; MBA requires 12 courses
Why a Graduate Certificate?

GRE is Not Required for Admissions

Transfer in 3 Semester Credit Hours *(department approval required)*

Four Courses Required

Company Project May Count for One Course

Achieve Cumulative GPA of 3.0 to Receive Certificate

Achieve “B” or Better in Four Courses for Entry into Corresponding Graduate Degree Program *(waives GRE requirement)*

Courses Count Toward Degree

*Check with department for program specific details and requirements.*

* Mining Engineering Certificate requires five core courses
FEATURED: PROJECT MANAGEMENT CERTIFICATE

This program is offered by two different departments:

- Engineering Management
- Information Science & Technology

Will give students the ability to:

- Identify operations problems and implement solutions for improved strategic competitiveness
- Make sound decisions, plan, and control the key resources of an organization – money and people
- Critically analyze, evaluate, improve, or adapt existing technical and/or managerial systems
- Organize and manage complex projects
Project Management: Engineering Management

Required Courses:

**Eng Mgt 308: Economic Decision Analysis**
Comprehensive treatment of engineering economy including effects of taxation and inflation; sensitivity analysis; decisions with risk and uncertainty; decision trees and expected value, normally includes solutions on personal computer and student problem report. Prerequisite: Graduate students without previous course in engineering economy because of partial overlap.

**Eng Mgt 361: Project Management**
Organization structure and staffing; motivation, authority and influence; conflict management; project planning; network systems; pricing, estimating, and cost control; proposal preparation; project information systems; international project management. Prerequisite: Graduate Standing.

**Eng Mgt 458: Case Studies in Project Management**
Includes the main components of the Project Management Institute (PMI) Body of Knowledge; case studies in project management including project implementation, organizational structures, project estimating, project scheduling, project risk management and conflict management. Prerequisite: EMgt 361 or equivalent.

**Eng Mgt 461: Global Project Management**
In depth and advanced topics in project management including project management methodologies, strategic planning for excellence, project portfolio management, integrated processes, culture, and behavioral excellence; normally includes a hands-on group project. Prerequisite: EMgt 361 or equivalent.
Required Courses:

Eng Mgt 361: Project Management
Organization structure and staffing; motivation, authority and influence; conflict management; project planning; network systems; pricing, estimating, and cost control; proposal preparation; project information systems; international project management. Prerequisite: Graduate Standing

Eng Mgt 458: Case Studies in Project Management
Includes the main components of the Project Management Institute (PMI) Body of Knowledge; case students in project management including project implementation, organizational structures, project estimating, project scheduling, project risk management and conflict management. Prerequisite: EMgt 361 or equivalent

Eng Mgt 461: Global Project Management
In-depth and advanced topics in project management including project management methodologies, strategic planning for excellence, project portfolio management, integrated processes, culture, and behavioral excellence; normally includes a hands-on group project. Prerequisite: EMgt 361 or equivalent

IST 461: Advanced Information Systems Project Management
Project management principles, first from a general perspective, and then focused specifically on information system application development are explored. Topics include requirements analysis, project scheduling, risk management, quality assurance, testing and team coordination. Report writing and research literature searches are required
Distance Graduate Programs

- **Business (MBA)**
  - Management for Sustainable Business

- **Chemical & Biological Engineering**
  - Safety Engineering

- **Civil (MS) and Environmental Engineering (MS)**
  - Contemporary Structural Engineering
  - Geoenvironmental Engineering
  - Geotechnical Earthquake Engineering
  - Infrastructure Renewal
  - Project Engineering and Construction Management

- **Computer Science (MS)**
  - Computational Intelligence
  - Information Assurance & Security Officer Essentials
  - Information Systems & Cloud Computing
  - Software Design & Development
  - Systems and Software Architecture
  - Wireless Networks and Mobile Systems
Distance Graduate Programs

- Electrical (MS) and Computer Engineering (MS)
  - Computational Intelligence
  - Electric Machines and Drives
  - Electric Power Systems Engineering
  - Information Assurance & Security Officer Essentials
  - Network Centric Systems

- Engineering Management (MS)
  - Engineering Management
  - Financial Engineering
  - Human Systems Integration
  - Leadership in Engineering Organizations
  - Lean Six Sigma
  - Project Management
  - Project Engineering and Construction Management
  - Quality Engineering
  - Safety Engineering
Distance Graduate Programs

- English & Technical Communication (MS)
  Technical Communication

- Geotechnics (ME)
  Geotechnics

- Information Science & Technology (MS)
  Business Intelligence
  Enterprise Resource Planning
  Human-Computer Interaction
  Human Systems Integration
  Project Management
  Psychology of Leadership

- Manufacturing Engineering (MS/ME)
  CAD/CAM & Rapid Product Realization
  Manufacturing Systems
Distance Graduate Programs

- Mathematics
  Psychometrics

- Mechanical (MS) and Aerospace Engineering (MS)
  Composite Materials and Structures
  Control Systems
  Energy Conversion & Transport
  Engineering Mechanics
  Manufacturing Automation

- Mining Engineering (ME) and Explosives Engineering (MS)
  Explosives Engineering
  Mining Engineering
Distance Graduate Programs

- Psychology
  - Leadership in Engineering Organizations
  - Psychology of Leadership
  - Psychometrics

- Systems Engineering (MS/PhD)
  - Computational Intelligence
  - Network Centric Systems
  - Systems Engineering
Distance and Continuing Education

Distance Class Schedules

Summer Semester 2012 (June 4 - July 27)
Distance Education
Engineering Education Center in St. Louis (EEC)

Fall Semester 2012 (Aug. 20 - Dec. 14)
Distance Education
Engineering Education Center in St. Louis (EEC)

Spring Semester 2013 (Jan. 22 - May 17)
Distance Education
Engineering Education Center in St. Louis (EEC)

For more information on class offerings and course descriptions, please visit the Registrar's website.

Please Note: Class times listed are for CDT Central Daylight Time USA observed from March 11, 2012, through Nov. 3, 2012. CST Central Standard Time USA is observed from Nov. 4, 2012, through March 9, 2013.
Application Process
Download forms at — http://dce.mst.edu/admissions/index.html

1. **Complete DCE Application Form** – Complete form, sign and return - application fee waived.

2. **Obtain unofficial copies of transcripts** from all universities previously attended for admission processing. When accepted for admission, you will be required to provide official transcripts.

3. **Provide Supporting Documentation**
   3a. **Graduate Degree Program**: submit GRE scores, a statement of purpose and three letters of recommendation.
   3b. **Graduate Certificate Program**: submit a statement of purpose.

4. **Complete the First Time Registration Form** indicating class(es) in which you wish to enroll. You must also sign and date the Statement of Financial Responsibility Form.

5. **Fax these documents to Vicki Gibbons**, Manager of Graduate Student Services at 573-202-2396, or mail them to Distance and Continuing Education, 216 Centennial Hall, 300 West 12th Street, Rolla MO 65409-1560.
Distance and Continuing Education

Admissions and Enrollment

Schedule of Classes  Rate Schedule  Admissions and Enrollment

Returning Students

- Please register for classes through Joe'SS.
- If you haven't been enrolled for three or more consecutive semesters, you must complete and submit the Former Graduate Student Refresh Registration Eligibility Form to update your records.

New Students

Admission application and acceptance rules for distance students are the same as those of traditional on-campus students with only slight variations in required forms. Students complete the appropriate forms according to their program choice and submit to Distance and Continuing Education along with payment information for the application fee ($55.00 graduate; $50.00 undergraduate).

Undergraduate Application – Currently DCE does not offer undergraduate degree programs at a distance. However, we do present a number of individual courses that can apply to undergraduate programs and are important to specific audience groups. If you're interested in this approach, please apply for admission as an undergraduate, non-candidate for degree when you complete the DCE Application Form. If you later wish to obtain your degree, complete undergraduate admission and application requirements must be met.

Graduate Application – Students may apply for admission to several graduate-level degree and certificate programs. There are currently 16 graduate degree programs and more than 45 graduate certificate programs from which to choose.
Uniqueness/Value of Programs

Graduate Certificates – Pathway to Graduate Degree

- Waives GRE Requirement
- Courses Count Toward Degree
- Special Problems Course Combines Theory and Practical Application

Technical Fellows Provide Some Lectures

Faculty/Research Expertise

Research centers, labs and institutes include:

- Center for Aerospace Manufacturing Technologies (CAMT)
- Center for Infrastructure Engineering Studies
- NSF/University Cooperative Research Center on Intelligent Maintenance Systems
- Trustworthy Systems Lab, Smart Engineering Systems Lab
Academic Calendar

Spring Semester (Jan. – early May )
Summer Semester (June – July )
Fall Semester (late Aug. – mid-Dec.)

Spring Semester starts Jan. 22, 2013

Checklist for Applying:
- DCE Application
- Transcripts
- GRE Scores*
- Statement of Purpose (2-3 paragraphs)
- Three Letters of Recommendation*

*not needed for graduate certificate program

Fax or scan your materials and send to:
Vicki Gibbons
Fax: 573-202-2396
Email: vgibbons@mst.edu

Applications for Admissions may be accepted up through the second week of the start of the semester

How-tos for Apps/Admits Webinar TBD
Questions?

Contact Vicki For Admissions and Enrollment Information

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