Degree Programs, Emphasis Areas, Minors and Certificates
Missouri University of Science and Technology
(Degree programs are in capitals. Emphasis areas are lower case subheads followed by degree abbreviation if restricted to that degree.)

AEROSPACE ENGINEERING (BS, MS, PhD) MI
APPLIED AND ENVIRONMENTAL BIOLOGY (MS)
APPLIED MATHEMATICS (BS, MS) MI
  Actuarial Science (BS)
  Algebra (MS)
  Algebra/Discrete Mathematics (BS)
  Applied Analysis
  Computational Mathematics
  Secondary Education (BS)
  Statistics
ARCHITECTURAL ENGINEERING (BS)
  Construction Eng & Project Mgt
  Construction Materials
  Environmental Systems for Buildings
  Structural Engineering
BIOLOGICAL SCIENCES (BA, BS) MI
  Pre-Medicine (BA)
  Secondary Education (BA)
BUSINESS ADMINISTRATION (MBA)
BUSINESS AND MANAGEMENT SYSTEMS (BS)
CERAMIC ENGINEERING (BS, MS, PhD)
  Biomaterials (MS)
CHEMICAL ENGINEERING (BS, MS, PhD, DE)
  Biochemical Engineering (BS)
CHEMISTRY (BA, BS, MS, MST, PhD) MI
  Biochemistry (BS)
  Polymer & Coatings Science (BS)
  Pre-Medicine Chemistry (BS)
  Secondary Education (BA)
CIVIL ENGINEERING (BS, MS, PhD, DE)
  Construction Engineering
  Environmental Engineering
  Geotechnical Engineering
  Materials Engineering
  Structural Engineering
  Transportation Engineering
  Water Resources Engineering
COMPUTER ENGINEERING (BS, MS, PhD)
  Computational Intelligence (BS)
  Computers and Architecture (BS)
  Embedded Computer Systems (BS)
  Integrated Circuits and Logic Design (BS)
  Networking and Software Engineering (BS)
  Security and Reliability (BS)
COMPUTER SCIENCE (BS, MS, PhD) MI
  Critical Infrastructure Protection (MS)
  Software Engineering (MS)
ECONOMICS (BA, BS) MI
  Economics/Business (BS)
  Secondary Education (BA)
ELECTRICAL ENGINEERING (BS, MS, PhD, DE)
  Circuits and Electronics
  Communications and Signal Processing
  Computer Engineering
  Controls and Systems
  Electromagnetics
  Optics and Devices
  Power and Energy
  Solar Energy (MS)
ENGINEERING MANAGEMENT (BS, MS, PhD) MI
  Industrial Engineering (BS)
  Management of Technology (BS)
  Manufacturing Engineering (BS)
  Packaging Engineering (BS)
  Public Works (MS)
  Quality Engineering (BS)
ENGLISH (BA)
  Secondary Education
ENVIRONMENTAL ENGINEERING (BS, MS)
EXPLOSIONS ENGINEERING (MS)
GEOLOGICAL ENGINEERING (BS, MS, PhD, DE) MI
  Engineering Geology and Geotechnics (BS)
  Environ Protect & Haz Waste Mgt (BS)
  Groundwater Hydro & Contaminant Transport (BS)
  Petroleum, Energy and Natural Resources (BS)
  Quarry Engineering (BS)
  Hazardous Waste Engineering & Science (MS)
GEOLOGY AND GEOPHYSICS (BS, MS, PhD)
  Exploration Geochemistry (MS, PhD)
  Exploration Geophysics (MS, PhD)
  Geochemistry (BS)
  Geology (BS)
  Geophysics (BS)
  Groundwater & Environmental Geochemistry (BS)
  Petroleum Geology (BS)
GEOTECHNICS (ME)
HISTORY (BA) MI
  Secondary Education
INFORMATION SCIENCE & TECHNOLOGY (BS, MS) MI
  Enterprise Resource Planning
  Human Computer Interaction (BS)
MANUFACTURING ENGINEERING (MS, ME)
MATERIALS SCIENCE AND ENGINEERING (MS, PhD)
MATHEMATICS (MST, PhD) MI
  Computational and Applied Mathematics (PhD)
  Statistics (PhD)
MECHANICAL ENGINEERING (BS, MS, PhD, DE)
  Aerospace Engineering (PhD, DE)
  Control Systems
  Energy Conversion
  Environmental Systems
  Instrumentation
  Manufacturing Processes
  Materials Science
  Mechanical Design and Analysis
  Thermal Science
METALLURGICAL ENGINEERING (BS, MS, PhD)
  Chemical Metallurgy (BS)
  Manufacturing Metallurgy (BS)
  Physical Metallurgy (BS)
MINING ENGINEERING (BS, MS, ME, PhD, DE) MI
  Coal (BS)
  Explosives Engineering (BS)
  Mining & the Environment (BS)
  Mining Health and Safety (BS)
  Quarry Engineering (BS)
  Sustainable Development (BS)
MULTIDISCIPLINARY STUDIES (BA)
NUCLEAR ENGINEERING (BS, MS, PhD, DE) MI
PETROLEUM ENGINEERING (BS, MS, PhD, DE) MI
PHILOSOPHY (BA) MI
PHYSICS (BS, MS, MST, PhD) MI
  Applied Physics (BS)
  Geophysics (BS)
  Secondary Education (BS)
PSYCHOLOGY (BA, BS) MI
  Cognitive Neuroscience
  Human Resources/Personnel
  Human Services
  Psychology of Leadership
  Secondary Education (BA, BS)
  Usability of Technology
SYSTEMS ENGINEERING (BS, MS) MI
  Technical Communication (BS, MS) MI*

Updated 12/14/2012
### MINORS

(In addition to those designated MI on opposite page)

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<td>Ind/Organizational Psych</td>
<td>Psychology of Leadership</td>
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<tr>
<td>Business</td>
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<td>Psychometrics</td>
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<td>Creative Writing</td>
<td>Leadership Communication</td>
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<td>Cognitive Neuroscience</td>
<td>Literature</td>
<td>Science, Technology &amp; Politics</td>
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<td>Communication Studies</td>
<td>Literature and Film</td>
<td>Sociology</td>
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<td>Energy Technology</td>
<td>Marketing</td>
<td>Spanish</td>
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<td>Enterprise Resource Planning</td>
<td>Materials</td>
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<td>Ethics</td>
<td>Military Science</td>
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<td>Explosives Engineering *</td>
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<td>Film and Literature</td>
<td>Multiculturalism &amp; Diversity</td>
<td>Technical Communication*</td>
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<tr>
<td>Finance</td>
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<td>Writing</td>
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<tr>
<td>Geology</td>
<td>Political Science</td>
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### UNDERGRADUATE CERTIFICATES

**Certificate**
- Explosives Engineering
- Explosives Technology
- Design
- Technical Communication

**Discipline**
- Mining Engineering
- Mining & Nuclear Engineering
- Interdisciplinary Engineering
- Technical Communication

### GRADUATE CERTIFICATES

**Certificate**
- Actuarial Science
- Business Essentials
- Business Intelligence
- CAD/CAM and Rapid Product Realization
- Composite Materials and Structures
- Computational Intelligence
- Contemporary Structural Engineering
- Control Systems
- Electric Machine and Drives
- Electrical Power Systems Engineering
- Energy Conversion and Transport
- Engineering Management
- Engineering Mechanics
- Enterprise Resource Planning
- Explosives Engineering
- Explosives Technology
- Financial Engineering
- Financial Mathematics
- Geoenvironmental Engineering
- Geotechnical Earthquake Engineering
- Geotechnics
- Human Computer Interaction
- Human Systems Integration
- Information Assurance and Security
- Infrastructure Renewal
- Leadership in Engineering Organizations
- Lean Six Sigma
- Management for Sustainable Business
- Manufacturing Automation
- Manufacturing Systems
- Military Construction Management
- Military Geological Engineering
- Mining Engineering
- Multimedia and Information Systems
- Network Centric Systems
- Project Engineering and Construction Management
- Project Management
- Psychology of Leadership
- Psychometrics
- Safety Engineering
- Software Design and Development
- Statistics
- Systems Engineering
- Systems and Software Architecture
- Technical Communication
- Wireless Networks and Mobile Systems

**Discipline**
- Mathematics
- Business Administration
- Information Science & Technology
- Manufacturing Engineering
- Aerospace Engineering/Mechanical Engineering
- Systems Engineering/Computer Engineering/Computer Science
- Civil Engineering
- Mechanical Engineering
- Electrical Engineering
- Electrical Engineering
- Aerospace Engineering/Mechanical Engineering
- Engineering Management
- Mechanical Engineering
- Information Science & Technology
- Mining Engineering
- Mining Engineering
- Engineering Management/Systems Engineering
- Mathematics
- Civil Engineering
- Civil Engineering
- Geological Engineering
- Information Science & Technology
- Engineering Management/Information Science and Technology
- Computer Engineering/Computer Science
- Civil Engineering
- Engineering Management/Psychology
- Engineering Management
- Business Administration
- Mechanical Engineering
- Manufacturing Engineering
- Civil Engineering/Engineering Management
- Geotechnical Engineering
- Multiculturalism & Diversity
- Technical Communication
- Computer Science
- Computer Science
- Mathematics/Psychology
- Chemical and Biochemical Engineering/Engineering Management
- Computer Science
- Mathematics and Statistics
- Systems Engineering
- Computer Science
- Technical Communication
- Computer Science

* Indicates undergraduate & graduate level minor