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.)
as of 09/15/2016

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)
  E-commerce
  Enterprise Resource Planning
  Finance
  Human Computer Interaction
  Management Information Systems
  Marketing
CERAMIC ENGINEERING (BS, MS, PhD) MI
  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 (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) MI
  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) MI
  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)
EXPLOSIVES ENGINEERING (MS, PhD) MI
GEODETIC ENGINEERING (BS, MS, Ph.D, 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)
  Geophysics (BS)
  Groundwater & Environmental Geochemistry (BS)
  Petroleum Geology (BS)
GEOTECHNICS (ME)
HISTORY (BA, BS) MI
  Secondary Education
INDUSTRIAL ORGANIZATIONAL PSYCHOLOGY (MS)
INFORMATION SCIENCE & TECHNOLOGY (BS, MS) MI
  Enterprise Resource Planning
  Human Computer Interaction (BS)
MANUFACTURING ENGINEERING (MS, ME)
MATERIALS SCIENCE AND ENGINEERING (BS, MS)
MATHMATICS (MST, PhD) MI
  Computational and Applied Mathematics (PhD)
  Statistics (PhD)
MECHANICAL ENGINEERING (BS, MS, 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 (BS) 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 (MS, PhD)
  TECHNICAL COMMUNICATION (BS, MS) MI

Updated 07/07/2015
MINORS
(In addition to those designated MI on previous page)

Adaptive Leadership  Finance  Multiculturalism & Diversity
American Studies  French  Music
Art  Geology  Philosophy of Technology
Automation Engineering  German  Political Science
Bioinformatics  Global Studies  Pre-Law
Biomedical Engineering  Global Sustainable Economics  Pre-MBA
Business  Human-Computer Interaction & User Experience
Business Analytics & Data Science  Humanitarian Engineering and Science
Cognitive Neuroscience  Ind/Organizational Psych
Communication Studies  International Economics
Creative Writing  Leadership Communication
Digital Supply Chain Management  Literature
Electronic and Social Commerce  Literature and Film
Energy Technology  Management
Entrepreneurship  Marketing
Ethics  Military Aerospace Studies
Explosives Engineering  Mineral Process Engineering
Film and Literature  Mobile Business and Technology

* Indicates undergraduate & graduate level minor

Updated 05/03/2016

UNDERGRADUATE CERTIFICATES

Certificate  Discipline
Explosives Engineering  Mining & Nuclear Engineering
Explosives Technology  Mining & Nuclear Engineering
Technical Writing  Technical Communication

Updated 10/25/2012

GRADUATE CERTIFICATES

Certificates  Discipline
Actuarial Science  Mathematics
Big Data Management and Analytics  Computer Science
Big Data Management and Security  Computer Science
Business Analytics and Data Science  Information Science & Technology
Business Essentials  Business Administration
Business Intelligence  Information Science & Technology
Business Project Management  Manufacturing Engineering
CAD/CAM and Rapid Product Realization  Aerospace Engineering/Mechanical Engineering
Composite Materials and Structures  Systems Engineering/Computer Engineering/Computer Science
Computational Intelligence  Civil Engineering
Contemporary Structural Engineering  Mechanical Engineering
Control Systems  Information Science & Technology
Digital Media  Electrical Engineering
Digital Supply Chain Management  Information Science & Technology
Electric Machine and Drives  Electrical Engineering
Electrical Power Systems Engineering  Information Science & Technology
Electronic and Social Commerce  Aerospace Engineering/Mechanical Engineering
Energy Conversion and Transport  Engineering Management
Engineering Management  Aerospace Engineering/Mechanical Engineering
Engineering Mechanics  Information Science & Technology
Enterprise Resource Planning  Business Administration
Entrepreneurship and Technological Innovation  Mining Engineering
Explosives Engineering  Engineering Management/System Engineering
Explosives Technology  Mathematics
Financial Engineering  Civil Engineering
Financial Mathematics  Geotechnics
Geoenvironmental Engineering  Information Science & Technology
Geotechnical Earthquake Engineering  Engineering Management/Information Science & Technology
Geotechnics  Computer Engineering/Computer Science
Human-Computer Interaction and User Experience  Information Science & Technology
Human Systems Integration  Computer Science
Information Assurance & Security Officer Essentials  Civil Engineering
Information System Project Management  Engineering Management
Information Systems and Cloud Computing  Engineering Management
Infrastructure Renewal  Geotechnical Earthquake Engineering
Leadership in Engineering Organizations  Geotechnics
Lean Six Sigma  Information Science & Technology
Management  Information Science & Technology
Management and Leadership  Engineering Management
Management for Sustainable Business  Business Administration
Manufacturing Automation  Economics
Manufacturing Systems  Mechanical Engineering

Military Construction Management | Engineering Management
Military Geological Engineering | Geological Engineering
Mining Engineering | Mining Engineering
Mobile Business and Technology | Information Science & Technology
Model Based Systems Engineering | Systems Engineering
Network Centric Systems | Computer Engineering/Systems Engineering
Project Engineering and Construction Management | Civil Engineering/Engineering Management
Project Management | Engineering Management
Psychology of Leadership | Information Science & Technology/Psychology
Psychometrics | Mathematics/Psychology
Safety Engineering | Chemical and Biochemical Engineering/Engineering Management
Software Design and Development | Computer Science
Statistics | Mathematics and Statistics
Systems Engineering | Systems Engineering
Systems and Software Architecture | Computer Science
Technical Communication | Technical Communication
Wireless Networks and Mobile Systems | Computer Science

**TEACHER CERTIFICATION PROGRAMS**

Secondary Education Certification
- Applied Mathematics BS
- Biological Sciences BA
- Chemistry BA
- Economics BA
- English BA
- History BA
- Physics BS
- Psychology BA, BS

Elementary Education Certification
- Multidisciplinary Studies BA

Updated 04/01/2016

Secondary Education Certification
- Multidisciplinary Studies BA

Elementary Education Certification
- Multidisciplinary Studies BA

Updated 02/04/2015