

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)
BIOMATERIALS (MS)
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)
 Biomaterials (MS)
CHEMICAL ENGINEERING (BS,MS,PhD,DE)
 Biochemical Engineering (BS)
CHEMISTRY (BA,BS,BS non-ACS Cert,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
 Bioinformatics (MS)
 Critical Infrastructure Protection (MS)
 Software Engineering (MS)
EARTH SCIENCES (MST)
ECONOMICS (BA, BS) MI
 Economics/Business (BS)
 Secondary Education (BA)
ELECTRICAL ENGINEERING (BS,MS,PhD,DE)
 Circuits
 Communications-Signal Processing
 Computer Engineering
 Control
 Electromagnetics
 Electronics
 Power
 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)
GEOLOGICAL ENGINEERING (BS,MS,PhD,DE) MI
 Engineering Geology and Geotechnics (BS)
 Environ Protect & Haz Waste Mgt (BS)
 Groundwater Hydro & Cont 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)
INTERDISCIPLINARY ENGINEERING (BS)
MANUFACTURING ENGINEERING (MS, ME)
MATERIALS SCIENCE AND ENGINEERING (MS,PhD)
MATHEMATICS (MST, PhD) MI
 Analysis (PhD)
 Differential and Functional Equations (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)
NUCLEAR ENGINEERING (BS,MS,PhD,DE) MI
PETROLEUM ENGINEERING (BS,MS,PhD,DE) MI
 Energy Industry Management
 Information Technology
 Reservoir Characterization
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
 Psychometrics
 Secondary Education (BA, BS)
 Usability of Technology
SYSTEMS ENGINEERING (MS,PhD)
TECHNICAL COMMUNICATION (BS,MS) MI*

MINORS

(In addition to those designated MI on opposite page. *undergraduate & graduate level minor)

American Studies	German	Political Science
Art	Ind/Organizational Psych	Pre-Law
Bioinformatics	International Economics	Pre-MBA
Business	Leadership	Pre-medicine
Cognitive Neuroscience	Communication	Psychology of Leadership
Communication Studies	Literature	Russian
Energy Technology	Literature and Film	Science, Technology & Politics
Explosives Engineering*	Marketing	Sociology
Film and Literature	Materials	Spanish
Finance	Military Science	Writing
French	Multiculturalism & Diversity	
Geology	Music	

Approved 4/18/08

UNDERGRADUATE CERTIFICATES

Approved 4/12/07

Certificate

Explosives Engineering
Design

Discipline

Mining Engineering
Interdisciplinary Engineering

GRADUATE CERTIFICATES

Approved 06/12/08

Certificates

Business Essentials
CAD/CAM and Rapid Product Realization
Composite Materials and Structures
Contemporary Structural Engineering
Control Systems
Data Warehouses
Electric Machine and Drives
Electrical Power Systems Engineering
Engineering Management
Engineering Mechanics
Enterprise Resource Planning
Explosives Engineering
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
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
Quality Engineering
Software Design and Development
Systems Engineering
Wireless Networks and Mobile Systems

Discipline

Business Administration
Manufacturing Engineering
Aerospace Engineering/Mechanical Engineering
Civil Engineering
Mechanical Engineering
Information Science & Technology
Electrical Engineering
Electrical Engineering
Engineering Management
Engineering Mechanics
Information Science & Technology
Mining Engineering
Engineering Management/Systems Engineering
Mathematics
Civil Engineering
Civil Engineering
Geological Engineering
Information Science & Technology
Engineering Management/Information Science & Technology
Computer Engineering/Computer Science
Civil Engineering
Engineering Management/Psychology
Mechanical Engineering
Manufacturing Engineering
Civil Engineering/Engineering Management
Geological Engineering
Mining Engineering
Computer Science
Computer Engineering/Systems Engineering
Civil Engineering/Engineering Management
Engineering Management/Information Science & Technology
Information Science and Technology/Psychology
Mathematics/Psychology
Engineering Management
Computer Science
Systems Engineering
Computer Science