Degree Programs, Emphasis Areas, Minors and Graduate Certificates  
University of Missouri-Rolla

(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
  Statistics
ARCHITECTURAL ENGINEERING (BS)
  Construction Eng & Project Mgt
  Construction Materials
  Environmental Systems for Buildings
  Structural Engineering
BIOLOGICAL SCIENCES (BA, BS) MI
  Pre-Medicine (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)
  Chemical Engineering (MS)
CHEMISTRY (BA, BS, MS, PhD) MI
  Biochemistry (BS)
  Polymer & Coatings Science (BS)
  Pre-Medicine Chemistry (BS)
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)
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)
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)
  Geology (BS)
  Geophysics (BS)
  Groundwater & Environmental Geochemistry (BS)
  Petroleum Geology (BS)
GEOTECHNICS (ME)
HISTORY (BA) MI
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)
MATH (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) 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)
PSYCHOLOGY (BA,BS) MI
  Cognitive Neuroscience
  Human Resources/Personnel
  Human Services
  Psychology of Leadership
  Psychometrics
  Usability of Technology
SYSTEMS ENGINEERING (MS,PhD)
  Information Technology
  Reservoir Characterization
TEACHER EDUCATION PROGRAM
  (Secondary Teacher Certification)
TECHNICAL COMMUNICATION (BS,MS) MI

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MINORS
(In addition to those designated MI on opposite page)

American Studies  
Art  
Bioinformatics  
Business  
Cognitive Neuroscience  
Communication Studies  
Energy Technology  
Explosives Engineering  
Film and Literature  
French  
Geology  

German  
Ind/Organizational Psych  
International Economics  
Leadership Communication  
Literature  
Literature and Film  
Marketing  
Materials  
Military Science  
Multiculturalism & Diversity  
Music

*undergraduate & graduate level minor     Approved 9/20/07

UNDERGRADUATE CERTIFICATES

Certification  
Explosives Engineering  
Design  

Discipline  
Mining Engineering  
Interdisciplinary Engineering  

Approved 4/12/07

GRADUATE CERTIFICATES

Certificates  
Business Essentials  
CAD/CAM and Rapid Product Realization  
Composite Materials and Structures  
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 Engineering  
Financial Mathematics  
Geoenvironmental Engineering  
Geotechnical Earthquake Engineering  
Geotechnics  
Human Computer Interaction  
Information Assurance and Security  
Information Assurance and Security  
Infrastructure Renewal  
Leadership in Engineering Organizations  
Leadership in Engineering Organizations  
Manufacturing Automation  
Manufacturing Systems  
Military Construction Management  
Military Construction Management  
Mining Engineering  
Multimedia and Information Systems  
Network Centric Systems  
Network Centric Systems  
Project Engineering and Construction Management  
Project Engineering and Construction Management  
Project Management  
Project Management  
Psychology of Leadership  
Psychology of Leadership  
Psychometrics  
Psychometrics  
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  
Computer Engineering  
Computer Science  
Civil Engineering  
Engineering Management  
Psychology  
Mechanical Engineering  
Manufacturing Engineering  
Civil Engineering  
Engineering Management  
Mining Engineering  
Computer Science  
Computer Engineering  
Systems Engineering  
Civil Engineering  
Engineering Management  
Information Science and Technology  
Information Science and Technology  
Psychology  
Mathematics  
Psychology  
Computer Science  
Systems Engineering  
Computer Science

Approved 10/11/07