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 08/18/2022

AEROSPACE ENGINEERING (BS, MS, PhD) MI
APPLIED MATHEMATICS (BS, MS) MI
Actuarial Science (BS)
Algebra (MS)
Algebra/Discrete Mathematics (BS)
Applied Analysis
Computational Mathematics
Data Science and Statistics (BS)
Secondary Education (BS)
Statistics (MS)
ARCHITECTURAL ENGINEERING (BS)
Construction Eng & Project Mgt
Construction Materials
Environmental Systems for Buildings
Structural Engineering
BIOLOGICAL SCIENCES (BA, BS, MS) MI
Medical Laboratory Scientist (BS)
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
Secondary Education
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
Computer Architecture and Embedded Systems
Integrated Circuits and Logic Design
Networking, Security, and Dependability
COMPUTER SCIENCE (BS, MS, PhD) MI
Critical Infrastructure Protection (MS)
Software Engineering (MS)
ECONOMICS (BA, BS) MI
Economics/Business (BS)
Secondary Education (BA)
EDUCATION (BS)
Early Childhood Education (pre K-3)
Educational Studies
Elementary
Middle School Language Arts
Middle School Math
Middle School Science
Middle School Social Studies
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
ENGLISH AND TECHNICAL COMMUNICATION (BS)
ENVIRONMENTAL ENGINEERING (BS, MS)
ENVIRONMENTAL SCIENCES (BS)
EXPLOSIVES ENGINEERING (MS, PhD) MI
EXPLOSIVES TECHNOLOGY (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 Geophysics (BS, PhD)
Exploration Geophysics (MS, PhD)
Geochemistry (BS)
Geology (BS)
Geophysics (BS)
Groundwater & Environmental Geochemistry (BS)
Petroleum Geology (BS)
GEOTECHNICS (ME)
HISTORY (BA, BS) MI
Secondary Education (BA)
INDUSTRIAL ORGANIZATIONAL PSYCHOLOGY (MS)
INFORMATION SCIENCE & TECHNOLOGY (BS, MS) MI
Enterprise Resource Planning
Human Computer Interaction (BS)
MANUFACTURING ENGINEERING (MS, ME)
MATHEMATICS (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
Systems Integration
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)
French Language and French Speaking Cultures
Spanish Language and Spanish Speaking Cultures
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)
MINORS
(In addition to those designated MI on previous page)

Adaptive Leadership
American Studies
Art
Artificial Intelligence and Machine Learning in Business
Automation Engineering
Bioinformatics
Biomedical Engineering
Business
Business Analytics & Data Science
Business Applications and Software Development
Cognitive Neuroscience
Communication Studies
Construction Engineering & Management
Creative Writing
Cybersecurity Management and Information Assurance
Digital Supply Chain Management
Electronic and Social Commerce
Energy Technology
Enterprise Resource Planning
Entrepreneurship
Ethics
Explosives Engineering *
Film and Literature
Finance
Financial Technology, Analytics and Transformation
French
Game Studies
Geology
German
Global Studies
Global Sustainable Economics
Human-Computer Interaction & User Experience
Human Factors Psychology
Ind/Organizational Psych
International Economics
Latin American Studies for Technical Applications
Leadership Communication
Linguistics
Literature
Literature and Film
Management
Marketing
Military Aerospace Studies
Mineral Process Engineering
Mobile Business and Technology
Multiculturalism & Diversity
Music
Philosophy of Technology
Political Science
Pre-Law
Pre-MBA
Pre-Medicine
Psychology for Health Care
Psychology of Leadership
Russian
Science, Technology & Humanity
Social Media in Industry
Sociology
Spanish
Studio Art
Sustainability
Technical Communication*
Theatre
Writing

* Indicates undergraduate & graduate level minor

UNDERGRADUATE CERTIFICATES

Certificate
Automation Engineering
Bioinnovation
Explosives Engineering
Explosives Technology
Intercultural Studies
Logic and the Philosophical Foundations of STEM
Medieval and Renaissance Studies
Military and Security Studies
Professional Ethics and Moral Reasoning
Science, Technology, and Society
Teaching and Learning
Technical Writing
Technology, Philosophy, and Ethical Futures
War and Society

Discipline
Electrical Engineering
Biological Sciences
Mining Engineering
Mining Engineering
Multidisciplinary Studies
Philosophy
History
History
Philosophy
History
Teacher Education and Certification
Technical Communication
Philosophy
History

GRADUATE CERTIFICATES

Certificate
Actuarial Science
Advanced Control Systems
Advanced Engineering Materials
Advanced Materials for Sustainable Infrastructure
Aggregates Management
AI, Machine Learning and Automation in Business
Applied Workplace Psychology
Automation Engineering and PLC
Big Data Management and Analytics
Big Data Management and Security
Building Systems Engineering
Business Analytics and Data Science
Business Essentials

Discipline
Mathematics
Electrical Engineering
Materials Science and Engineering
Civil Engineering
Mining Engineering
Information Science & Technology
Psychology
Electrical Engineering
Computer Science
Computer Science
Civil Engineering
Information Science & Technology
Business Administration
Updated 06/24/2022
### TEACHER CERTIFICATION PROGRAMS

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<thead>
<tr>
<th>Elementary Education Certification</th>
<th>Middle School Education Certification</th>
<th>Secondary Education Certification</th>
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<tr>
<td>- Education (BS)</td>
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<td>- Applied Mathematics BS</td>
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