

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 07/28/2026

AEROSPACE ENGINEERING (BS, MS, PhD) MI	Middle School Math
APPLIED ARTIFICIAL INTELLIGENCE (MS)	Middle School Science
APPLIED MATHEMATICS (BS, MS) MI	Middle School Social Studies
Actuarial Science (BS)	Secondary Teaching
Algebra (MS)	ELECTRICAL ENGINEERING (BS, MS, PhD, DE) MI
Applied Analysis (MS)	Circuits and Electronics Communications and Signal
Computational Mathematics	Processing Computer Engineering
Data Science and Statistics (BS)	Controls and Systems
Secondary Education (BS)	Electromagnetics
Statistics (MS)	Optics and Devices
APPLIED PSYCHOLOGY (PhD)	Power and Energy
ARCHITECTURAL ENGINEERING (BS)	Solar Energy (MS)
Construction Eng & Project Mgt	ENGINEERING MANAGEMENT (BS, MS, PhD) MI
Construction Materials	Industrial Engineering (BS)
Environmental Systems for Buildings	Management of Technology (BS)
Structural Engineering	Manufacturing Engineering (BS)
BIOCHEMISTRY (BS)	Packaging Engineering (BS)
BIOENGINEERING (PhD)	Public Works (MS)
BIOLOGICAL SCIENCES (BA, BS, MS, PhD) MI	Quality Engineering (BS)
Medical Laboratory Scientist (BS)	ROTC (BS)
Pre-Medicine (BA)	ENGLISH AND TECHNICAL COMMUNICATION (BS)
Secondary Education (BA)	English Education
Stem Education (MS)	ENVIRONMENTAL ENGINEERING (BS, MS)
BIOMEDICAL ENGINEERING (BS) MI	ENVIRONMENTAL SCIENCE (BS)
BUSINESS ADMINISTRATION (MBA)	Secondary Education
BUSINESS AND MANAGEMENT SYSTEMS (BS)	EXPLOSIVES ENGINEERING (MS, PhD) MI
Military Science and Leadership	EXPLOSIVES TECHNOLOGY (MS)
Secondary Education	GEOLOGICAL ENGINEERING (BS, MS, PhD, DE) MI
CERAMIC ENGINEERING (BS, MS, PhD)	Engineering Geology and Geotechnics (BS)
Biomaterials (BS, MS)	Environ Protect & Haz Waste Mgt (BS)
Computational Materials Science and Eng (BS)	Groundwater Hydro & Contaminant Transport (BS)
Energy Materials (BS)	Hazardous Waste Engineering & Science (MS)
Functional Materials (BS)	Petroleum, Energy and Natural Resources (BS)
Materials Characterization and Analysis (BS)	Quarry Engineering (BS)
Materials for Extreme Environments (BS)	GEOLOGY AND GEOPHYSICS (BS, MS, PhD)
CHEMICAL ENGINEERING (BS, MS, PhD, DE)	Exploration Geochemistry (MS, PhD)
Biochemical Engineering (BS)	Exploration Geophysics (MS, PhD)
CHEMISTRY (BA, BS, MS, MST, PhD) MI	Geochemistry (BS)
Biochemistry (BS)	Geology (BS)
Polymer & Coatings Science (BS)	Geophysics (BS)
Pre-Medicine (BS)	Groundwater & Environmental Geochemistry (BS)
Secondary Education (BA)	Petroleum Geology (BS)
CIVIL ENGINEERING (BS, MS, PhD, DE)	GEOSPATIAL ENGINEERING (MS)
Construction Engineering	GEOTECHNICS (ME)
Environmental Engineering	HISTORY (BA, BS) MI
Geotechnical Engineering	National Security
Materials Engineering	Secondary Education (BA)
Structural Engineering	INDUSTRIAL-ORGANIZATIONAL PSYCHOLOGY (MS)
Transportation Engineering	INFORMATION SCIENCE & TECHNOLOGY (BS, MS) MI
Water Resources Engineering	MANUFACTURING ENGINEERING (MS, ME)
COMPUTER ENGINEERING (BS, MS, PhD) MI	MATERIALS SCIENCE AND ENGINEERING (MS, PhD) MI
Computational Chips and Semiconductor Eng	MATHEMATICS (MST, PhD) MI
Computer Intelligence	Computational and Applied Mathematics (PhD)
Electronic Computer System Design	Statistics (PhD)
Networks and Cyber Physical Systems	MECHANICAL ENGINEERING (BS, MS, PhD, DE)
COMPUTER SCIENCE (BS, MS, PhD) MI	Control Systems
Artificial Intelligence (BS)	Energy Conversion
Critical Infrastructure Protection (MS)	Environmental Systems
Cybersecurity (BS)	Instrumentation
Software Engineering (MS)	Manufacturing Processes
DATA SCIENCE (BS, MS)	Materials Science
Computer Science (BS)	Mechanical Design and Analysis
Mathematics and Statistics (BS)	Systems Integration
ECONOMICS (BS)	Thermal Science
Decision Data Analytics	METALLURGICAL ENGINEERING (BS, MS, PhD)
Economics/Business	Chemical Metallurgy (BS)
Energy Economics	Manufacturing Metallurgy (BS)
Financial Economics & Tech	Physical Metallurgy (BS)
ECONOMICS and INNOVATION (MS)	MINING ENGINEERING (BS, MS, ME, PhD, DE) MI
EDUCATION (BS)	Coal (BS)
Early Childhood Education (pre K-3)	Explosives Engineering (BS)
Educational Studies	Mining & the Environment (BS)
Elementary	Mining Health and Safety (BS)
Middle School Language Arts	Quarry Engineering (BS)
	Sustainable Development (BS)

MULTIDISCIPLINARY STUDIES (BA)
 French Language and French Speaking
 Cultures
 Global Engineering
 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)
 PSYCHOLOGICAL SCIENCE (BA, BS)
 Secondary Education (BA)
 SEMICONDUCTOR ENGINEERING (BS)
 Semiconductor Device Engineering
 Semiconductor Process Engineering
 SYSTEMS ENGINEERING (MS, PHD) MI
 TECHNICAL COMMUNICATION (MS)

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MINORS

(In addition to those designated MI on previous page)

Adaptive Leadership
 Art
 Artificial Intelligence and
 Machine Learning in
 Business
 Automation Engineering
 Bioinformatics
 Business
 Business Analytics & Data Science
 Cognitive Neuroscience
 Communication Studies
 Computational Earth Sciences
 Construction Engineering & Mgmt
 Cybersecurity Management and
 Information Assurance
 Digital Supply Chain Mgmt
 Energy Technology
 Enterprise Resource Planning
 Entrepreneurship
 Ethics
 Explosives Engineering *
 Film and Literature

Finance
 Financial Technology, Analytics and
 Transformation
 French
 Game Studies
 Geology
 German
 Human Factors Psychology
 Ind-Organizational Psych
 Latin American Studies for Technical
 Applications
 Leadership Communication
 Linguistics
 Literature
 Literature and Film
 Management
 Marketing
 Military Aerospace Studies
 Mineral Process Engineering
 Multiculturalism & Diversity
 Music
 Philosophy of Technology

Political Science
 Pre-Medicine
 Psychology
 Psychology for Health Care
 Psychology of Leadership
 Quantitative Economics
 Russian
 Social Media in Industry
 Sociology
 Spanish
 Studio Art
 Sustainability
 Technical Communication*
 Theatre
 Writing

*Indicates undergraduate &
 graduate level minor
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UNDERGRADUATE CERTIFICATES

Certificate

Automation Engineering
 Bioinnovation
 Creative Writing
 Decision Data Analytics
 Education of Young Children
 Energy Economics
 Entertainment Technologies and Theatre
 Environmental Science and Policy
 Explosives Engineering
 Explosives Technology
 Financial Economics and Technology
 Healthcare Psychology
 Human Factors Psychology
 Industrial/Organizational Psychology
 Intercultural Studies
 Logic and the Philosophical Foundations of STEM
 Medicinal Chemistry
 Medieval and Renaissance Studies
 Military and Security Studies
 Neuroscience
 Pre-Law
 Professional Ethics and Moral Reasoning
 Psychology of Diversity and Inclusion
 Russian and Eurasian Studies
 Science, Technology, and Society
 Teaching and Learning

Discipline

Electrical Engineering
 Biological Sciences
 English
 Jaggi School of Business
 Education
 Jaggi School of Business
 Theatre
 Biological Sciences
 Mining Engineering
 Mining Engineering
 Jaggi School of Business
 Psychological Science
 Psychological Science
 Psychological Science
 Multidisciplinary Studies
 Philosophy
 Chemistry
 History
 History
 Psychological Science
 History
 Philosophy
 Psychological Science
 Multidisciplinary Studies
 History
 Education

Technical Writing
Technology, Philosophy, and Ethical Futures
War and Society

Technical Communication
Philosophy
History

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GRADUATE CERTIFICATES

Certificates

Advanced Materials for Sustainable Infrastructure
AI, Machine Learning and Automation in Business
Applied Workplace Psychology
Automation Engineering and PLC
Building Systems Engineering
Business Analytics and Data Science
Business Intelligence
Business Project Management
CAD/CAM and Rapid Product Realization
Carbon Management Engineering
Chemical Process Engineering
Composite Materials and Structures
Computational Intelligence
Contemporary Structural Engineering
Control Systems
Cyber Security
Cybersecurity and Information Assurance Management
Digital Engineering
Digital Supply Chain Management
Disaster Management
Electric Machine and Drives
Electrical Power Systems Engineering
Energy Conversion and Transport
Energy Economics and Global Sustainability
Engineering Management
Engineering Mechanics
Enterprise Resource Planning
Entrepreneurship and Technological Innovation
Environmental Conservation
Environmental Health & Safety
Explosives Engineering
Explosives Technology
Finance
Financial Engineering
Financial Technology, Analytics and Transformation
Foundations of Supply Chain Integration Systems
Geoanalytics and Geointelligence
Geoenvironmental Engineering
Geologic Hazards
Geophysics
Geotechnical Earthquake Engineering
Geotechnics
Infrastructure Renewal
Lean Six Sigma
Literacy Coaching
Management and Leadership
Manufacturing Automation
Manufacturing Systems
Military Construction Management
Military Geological Engineering
Mining Engineering
Mining Project Evaluation
Model Based Systems Engineering
Nuclear Nonproliferation
Professional Communication
Project Engineering and Construction Management
Project Management
Statistics
Subsurface Water Resources
Surface Water Resources
Sustainability in Mining
Systems Engineering
Teacher Leadership
Value-Driven Innovation

Discipline

Civil Engineering
Jaggi School of Business
Psychological Science
Electrical Engineering
Civil Engineering
Jaggi School of Business
Jaggi School of Business
Jaggi School of Business
Manufacturing Engineering
Chemical Engineering
Chemical Engineering
Aerospace Engineering/Mechanical Engineering
Systems Engineering/Computer Engineering/Computer Science
Civil Engineering
Mechanical Engineering
Computer Science
Jaggi School of Business
Systems Engineering
Jaggi School of Business
Environmental Sciences
Electrical Engineering
Electrical Engineering
Aerospace Engineering/Mechanical Engineering
Jaggi School of Business
Engineering Management
Aerospace Engineering/Mechanical Engineering
Jaggi School of Business
Jaggi School of Business
Environmental Sciences
Environmental Sciences
Explosives Engineering
Explosives Engineering
Jaggi School of Business
Engineering Management/Systems Engineering
Jaggi School of Business
Engineering Management
Geological Engineering
Civil Engineering
Geological Engineering
Geology and Geophysics
Civil Engineering
Geotechnics
Civil Engineering
Engineering Management
Education
Jaggi School of Business
Mechanical Engineering
Manufacturing Engineering
Engineering Management
Geological Engineering
Mining Engineering
Mining Engineering
Systems Engineering
Nuclear Engineering
Technical Communication
Civil Engineering/Engineering Management
Engineering Management
Mathematics and Statistics
Geological Engineering
Civil Engineering
Mining Engineering
Systems Engineering
Education
Jaggi School of Business

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TEACHER CERTIFICATION PROGRAMS

Elementary Education Certification

- Education (BS)
- Early Childhood Education
- Elementary

Middle School Education Certification

- Education (BS)
- Middle School Language Arts
- Middle School Math
- Middle School Science
- Middle School Social Science
- Secondary Teaching

Secondary Education Certification

- Applied Mathematics BS
- Biological Sciences BA
- Business and Management Systems BS
- Chemistry BA
- English BS
- Environmental Science BS
- History BA
- Physics BS
- Psychological Science BA

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