

Field of Science Codes (FOS)

A. Engineering

EN1	1. Aerospace, Aeronautical, and Astronautical Engineering	
		Aerodynamics
		Aerospace engineering
		Space Technology
EN9	2. Bioengineering and Biomedical Engineering	
		Biological and Biosystems engineering
		Biomaterials engineering
		Biomedical technology
		Medical engineering
EN2	3. Chemical Engineering	
		Biochemical engineering
		Chemical and biomolecular engineering
		Engineering chemistry
		Paper science
		Petroleum refining process
		Polymer, plastics engineering
EN3	4. Civil Engineering	
		Architectural engineering
		Construction engineering
		Engineering management, administration
		Environmental, environmental health engineering
		Geotechnical and geoenvironmental engineering
		Sanitary engineering
		Structural engineering
		Surveying engineering
		Transportation and highway engineering
		Water resource engineering
EN4	5. Electrical, Electronic, and Communications Engineering	
		Communication engineering
		Computer engineering
		Computer hardware engineering
		Computer software engineering
		Electrical and electronic engineering
		Laser and optical engineering
		Power
		Telecommunications engineering
EN5	6. Mechanical Engineering	
		Electromechanical engineering
		Mechatronics, robotics, and automation engineering
EN6	7. Industrial and Manufacturing Engineering	
		Industrial engineering
		Manufacturing engineering
		Operations research
		Systems engineering
EN7	8. Metallurgical and Materials Engineering	
		Ceramic sciences and engineering
		Geophysical, geological engineering

		Materials Engineering
		Metallurgical engineering
		Mining and mineral engineering
		Textile sciences and engineering
		Welding
EN8	9. Other Engineering	
		Agricultural engineering
		Engineering design
		Engineering mechanics, physics and science
		Forest engineering
		Nanotechnology
		Naval architecture and marine engineering
		Nuclear engineering
		Ocean engineering
		Petroleum engineering
		Other engineering fields that cannot be classified using the fields above
B. Physical Sciences		
PS1	1. Astronomy and Astrophysics	
		Astronomy
		Astrophysics
		Planetary astronomy and science
PS2	2. Chemistry	
		Analytical Chemistry
		Chemical physics
		Environmental chemistry
		Forensic chemistry
		Inorganic chemistry
		Organic chemistry
		Organo-metallic chemistry
		Physical chemistry
		Polymer chemistry
		Theoretical chemistry
PS3	3. Physics	
		Acoustics
		Atomic, molecular physics
		Condensed matter and materials physics
		Elementary particle physics
		Mathematical physics
		Nuclear physics
		Optics, optical sciences
		Plasma, high-temperature physics
		Theoretical physics
PS5	4. Materials Science	
		Materials chemistry
		Materials science
PS4	5. Other Physical Sciences	
		Other physical sciences that cannot be classified using the fields listed above
C. Geosciences, Atmospheric, and Ocean Sciences		
ES1	1. Atmospheric Sciences and Meteorology	

		Aeronomy
		Atmospheric chemistry and climatology
		Atmospheric Physics and dynamics
		Extraterrestrial atmospheres
		Meteorology
		Solar
		Weather modification
ES2	2. Geological and Earth Sciences	
		Earth and planetary sciences
		Geochemistry
		Geodesy and gravity
		Geology
		Geomagnetism
		Geophysics and seismology
		Hydrology and water resources
		Minerology and petrology
		Paleomagnetism
		Paleontology
		Physical geography
		Stratigraphy and sedimentation
		Surveying
ES3	3. Ocean Sciences and Marine Sciences	
		Biological oceanography
		Geological oceanography
		Marine biology
		Marine oceanography
		Marine sciences
		Oceanography, chemical and physical
ES4	4. Other Geosciences, Atmospheric and Ocean Sciences	
		Other related disciplines that cannot be classified using the fields listed above
D. Mathematics and Statistics		
MS1		Applied mathematics
		Mathematics
		Statistics
E. Computer and Information Sciences		
CS1		Artificial intelligence
		Computer and information technology administration and management
		Computer science
		Computer software and media applications
		Computer systems analysis
		Computer systems networking and telecommunications
		Data processing
		Information Sciences, studies
		Information technology
F. Life Sciences and Veterinary Medicine		
LS1/VM1	1. Agricultural Sciences	
		Agricultural business and management
		Agricultural chemistry
		Agricultural economics

		Agricultural production operations
		Animal sciences
		Applied horticulture and horticultural business services
		Aquaculture
		Fishing and fisheries sciences and management
		Food science and technology
		Forestry
		International agriculture
		Plant sciences
		Soil Sciences
LS2/VM2	2. Biological and	Biomedical Sciences
		Allergies and immunology
		Biochemistry, biophysics, and molecular biology
		Biogeography
		Biology and biomedical sciences, general
		Biomathematics, bioinformatics, and computational biology
		Biotechnology
		Botany and plant biology
		Cell, cellular biology and anatomical sciences
		Epidemiology, ecology, and population biology
		Genetics
		Microbiological sciences and immunology
		Molecular medicine
		Neurobiology and neuroscience
		Pharmacology and toxicology
		Physiology, pathology and related sciences
		Zoology, animal biology
LS3	3. Health Sciences	
		Advance, graduate dentistry and oral sciences
		Allied health and medical assisting services
		Bioethics, medical ethics
		Clinical/medical laboratory science/research and allied professions
		Clinical medicine research
		Communication disorders sciences and services
		Dentistry
		Dietetics and clinical nutrition services
		Gerontology, health sciences
		Health and medical administrative services
		Health, medical preparatory programs
		Kinesiology and exercise science
		Medical clinical science, graduate medical studies
		Medical illustration and informatics
		Medicine
		Mental health
		Nursing
		Optometry
		Osteopathic medicine, osteopathy
		Pharmacy, pharmaceutical sciences, and administration
		Podiatric medicine, podiatry

		Public health
		Radiological science
		Registered nursing, nursing administration, nursing research and clinical nursing
		Rehabilitation and therapeutic professions
		Veterinary biomedical and clinical sciences
		Veterinary medicine
LS5	4. Natural Resources and Conservation	
		Natural resources economics
		Natural resources management and policy
		Renewable natural resources
		Wildlife and wildlands science and management
LS4	5. Other Life Sciences	
		Other life sciences that cannot be classified using the fields listed above
G. Psychology		
PY1		Clinical Psychology
		Counseling and applied psychology
		Human development
		Research and experimental psychology
H. Social Sciences		
SS5	1. Anthropology	
		Cultural anthropology
		Medical anthropology
		Physical and biological anthropology
SS1	2. Economics	
		Applied economics
		Business development
		Development economics and international development
		Econometrics and quantitative economics
		Industrial economics
		International economics
		Labor economics
		Managerial economics
		Public finance and fiscal policy
SS2	3. Political Science and Government	
		Comparative government
		Government
		Legal systems
		Political economy
		Political science
		Political theory
SS3	4. Sociology, Demography, and Population Studies	
		Comparative and historical sociology
		Complex organizations
		Cultural and social structure
		Demography and population studies
		Group interactions
		Rural sociology
		Social problems and welfare theory
		Sociology

SS4	5. Other Social Sciences	
		Archeology
		Area, ethnic, cultural, gender and group studies
		Cartography
		City, urban, community and regional planning
		Criminal science and corrections
		Criminology
		Geography
		Gerontology, social sciences
		International relations and national security studies
		Linguistics
		Public policy analysis
		Regional studies
I. Other Sciences		
OS1		Use this category for R&D that involves at least one S&E field if it is impossible to report multidisciplinary or interdisciplinary R&D expenditures in specific fields
J. Non-S&E Fields		
MC1	1. Business Management and Business Administration	
		Business administration
		Business management
		Business, managerial economics
		Management information systems and services
		Marketing management and research
CC1	2. Communication and Communications Technologies	
		Communication and media studies
		Communications technologies
		Journalism
		Radio, television, and digital communication
ED1	3. Education	
		Education administration and supervision
		Education research
		Teacher education, specific levels and methods
		Teaching fields
AH1	4. Humanities	
		English language and literature, letters
		Foreign languages and literatures
		History, including history and philosophy of science and technology
		Humanities, general
		Liberal arts and sciences
		Philosophy and religious studies
		Theology and religious vocations
LA1	5. Law	
		Law
		Legal Studies
SW1	6. Social Work	
		no specific examples
VP1	7. Visual and Performing Arts	
		Drama. Theatre arts and stagecraft

		Film, video, and photographic arts
		Fine and studio arts
		Music
ONSE	8. Other Non-S&E Fields	
		Architecture
		Family, consumer sciences and human sciences
		Foods, nutrition, and wellness studies
		Landscape architecture
		Library science
		Military technology and applied science
		Parks, sports, recreation, leisure and fitness
		Public administration and public affairs
		Other non-S&E fields that cannot be classified using the fields listed above. Also, use this category for R&D that involves multiple non-S&E fields if it is impossible to report multidisciplinary or interdisciplinary R&D expenditures in specific fields.