

# EXAMPLES OF DISCIPLINES

## A. Computer and Information Sciences

- 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

## B. Engineering

### 1. Aerospace, Aeronautical, and Astronautical Engineering

- Aerodynamics
- Aerospace Engineering
- Space Technology

### 2. Bioengineering and Biomedical Engineering

- Biological and Biosystems Engineering
- Biomaterials Engineering
- Biomedical Technology
- Medical Engineering

### 3. Chemical Engineering

- Biochemical Engineering
- Chemical and Biomolecular Engineering
- Engineering Chemistry
- Paper Science
- Petroleum Refining Process
- Polymer, Plastics Engineering

### 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 Resources Engineering

### 5. Electrical, Electronic, and Communications Engineering

- Communications Engineering
- Computer Engineering
- Computer Hardware Engineering

- Computer Software Engineering
- Electrical and Electronics Engineering
- Laser and Optical Engineering
- Power
- Telecommunications Engineering

### 6. Industrial and Manufacturing Engineering

- Industrial Engineering
- Manufacturing Engineering
- Operations Research
- Systems Engineering

### 7. Mechanical Engineering

- Electromechanical Engineering
- Mechatronics, Robotics, and Automation Engineering

### 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

### 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 listed above

## C. Geosciences, Atmospheric, and Ocean Sciences

### 1. Atmospheric Science and Meteorology

- Aeronomy
- Atmospheric Chemistry and Climatology
- Atmospheric Physics and Dynamics
- Extraterrestrial Atmospheres
- Meteorology
- Solar
- Weather Modification

### 2. Geological and Earth Sciences

- Earth and Planetary Sciences
- Geochemistry
- Geodesy and Gravity
- Geology

# EXAMPLES OF DISCIPLINES

- Geomagnetism
- Geophysics and Seismology
- Hydrology and Water Resources
- Mineralogy and Petrology
- Paleomagnetism
- Paleontology
- Physical Geography
- Stratigraphy and Sedimentation
- Surveying

### 3. Ocean Sciences and Marine Sciences

- Biological Oceanography
- Geological Oceanography
- Marine Biology
- Marine Oceanography
- Marine Sciences
- Oceanography, Chemical and Physical

### 4. Other Geosciences, Atmospheric and Ocean Sciences

- Other fields that cannot be classified using the fields listed above

## D. Life Sciences

### 1. Agricultural Sciences

- Agricultural Business and Management
- Agricultural Chemistry
- Agricultural Economics
- Agricultural Engineering – report in Engineering
- Agricultural Production Operations
- Animal Sciences
- Applied Horticulture and Horticultural Business Services
- Aquaculture
- Fishing and Fisheries Sciences and Management
- Food Sciences and Technology
- Forestry
- International Agriculture
- Plant Sciences
- Soil Sciences
- Wood Science

### 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

### 3. Health Sciences

- Advanced, Graduate Dentistry and Oral Sciences
- Allied Health and medical Assisting Services
- Bioethics, Medical Ethics
- Clinical Medicine Research
- Clinical/Medical Laboratory Science/Research and Allied Professions
- Communication Disorders Sciences and Services
- Dentistry
- Dietetics and Clinical Nutrition Services
- Health and Medical Administrative Services
- Health, Medical Preparatory Programs
- Gerontology, Health Sciences
- 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

### 4. Natural Resources and Conservation

# EXAMPLES OF DISCIPLINES

- Natural Resources Conservation and Research
- Natural Resources Economics
- Natural Resources Management and Policy
- Renewable Natural Resources
- Wildlife and Wildlands Science and Management

## 5. Other Life Sciences

- Other Life Sciences that cannot be classified using the fields listed above

## E. Mathematics and Statistics

- Applied Mathematics
- Mathematics
- Statistics

## F. Physical Sciences

### 1. Astronomy and Astrophysics

- Astronomy
- Astrophysics
- Planetary Astronomy and Science

### 2. Chemistry

- (except Biochemistry – report in Biological and Biomedical Sciences)
- Analytical Chemistry
- Chemical Physics
- Environmental Chemistry
- Forensic Chemistry
- Inorganic Chemistry
- Organic Chemistry
- Organo-metallic Chemistry
- Physical Chemistry
- Polymer Chemistry
- Theoretical Chemistry

### 3. Materials Science

- Materials Chemistry
- Materials Science

### 4. 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

### 5. Other Physical Sciences

- Other Physical Sciences that cannot be classified using the fields listed above

## G. Psychology

- Clinical Psychology
- Counseling and Applied Psychology

- Human Development
- Research and Experimental Psychology

## H. Social Sciences

### 1. Anthropology

- Cultural Anthropology
- Medical Anthropology
- Physical and Biological Anthropology

### 2. Economics

- Applied Economics
- Business Development
- Development Economics and International Development
- Econometrics and Quantitative Economics
- Industrial Economics
- Labor Economics
- Managerial Economics
- Public Finance and Fiscal Policy

### 3. Political Science and Government

- Comparative Government
- Government
- Legal Systems
- Political Economy
- Political Science
- Political Theory

### 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

### 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
- Urban Studies, Affairs

# EXAMPLES OF DISCIPLINES

## I. Other Sciences

- Use this category for R&D that involves at least one S&E field (rows A-H) if it is impossible to report multidisciplinary or interdisciplinary R&D expenditures in specific fields

## J. Non-S&E Fields

### 1. Education

- Education Administration and Supervision
- Education Research
- Teacher Education, Specific Levels and Methods
- Teaching Fields

### 2. Law

- Law
- Legal Studies

### 3. 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

### 4. Visual and Performing Arts

- Drama, Theatre Arts and Stagecraft
- Film, Video, and Photographic Arts
- Fine and Studio Arts
- Music

### 5. Business Management and Business Administration

- Business Administration
- Business Management
- Business, Managerial Economics
- Management Information Systems and Services

### 6. Communication and Communications Technologies

- Communication and Media Studies
- Communications Technologies
- Journalism
- Radio, Television, and Digital Communication

### 7. Social Work

- (no specific examples)

### 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.