

## Location Codes and Examples of Disciplines

Assigning a Location Code is necessary in order for EMU to align its research expenditures with the NSF categories. Below are codes that should be used at the expense level, including salary, supplies, materials, travel. Also included are examples of disciplines covered by these codes.

### LOCATION CODES

#### **Computer Science**

A0COMP

### NAME

Computer Science

- 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

#### **Engineering**

B1AERO

Aerospace, Aeronautical, and Astronautical Engineering

- Aerodynamics
- Aerospace engineering
- Space technology

B2BIOE

Bioengineering and Biomedical Engineering

- Biological and biosystems engineering
- Biomaterials engineering
- Biomedical technology
- Medical engineering

B3CHME

Chemical Engineering

- Biochemical engineering
- Chemical and biomolecular engineering
- Engineering chemistry
- Paper science
- Petroleum refining process
- Polymer, plastics engineering

B4CVEN

Civil Engineering

- Architectural engineering
- Construction engineering
- Engineering management, administration
- Environmental, environmental health engineering
- Geotechnical and geoenvironmental engineering
- Sanitary engineering
- Structural engineering
- Surveying engineering

	<ul style="list-style-type: none"> <li>• Transportation and highway engineering</li> <li>• Water resources engineering</li> </ul>
B5ELEC	<p>Electrical, Electronic, and Communications Engineering</p> <ul style="list-style-type: none"> <li>• Communications engineering</li> <li>• Computer engineering</li> <li>• Computer hardware engineering</li> <li>• Computer software engineering</li> <li>• Electrical and electronics engineering</li> <li>• Laser and optical engineering</li> <li>• Power</li> <li>• Telecommunications engineering</li> </ul>
B6INMN	<p>(NEW) Industrial and Manufacturing Engineering</p> <ul style="list-style-type: none"> <li>• Industrial engineering</li> <li>• Manufacturing engineering</li> <li>• Operations research</li> <li>• Systems engineering</li> </ul>
B7MCHE	<p>Mechanical Engineering</p> <ul style="list-style-type: none"> <li>• Electromechanical engineering</li> <li>• Mechatronics, robotics, and automation engineering</li> </ul>
B8MATE	<p>Metallurgical and Materials Engineering</p> <ul style="list-style-type: none"> <li>• Ceramic sciences and engineering</li> <li>• Geophysical, geological engineering</li> <li>• Materials engineering</li> <li>• Metallurgical engineering</li> <li>• Mining and mineral engineering</li> <li>• Textile sciences and engineering</li> <li>• Welding</li> </ul>
B9OTHE	<p>Other Engineering</p> <ul style="list-style-type: none"> <li>• Agricultural engineering</li> <li>• Engineering design</li> <li>• Engineering mechanics, physics, and science</li> <li>• Engineering physics</li> <li>• Engineering science</li> <li>• Forest engineering</li> <li>• Nanotechnology</li> <li>• Naval architecture and marine engineering</li> <li>• Nuclear engineering</li> <li>• Ocean engineering</li> <li>• Petroleum engineering</li> <li>• Other engineering fields that cannot be classified using the fields listed above</li> </ul>

## **Geosciences, Atmospheric, and Ocean Sciences**

C1ASAM

Atmospheric Science and Meteorology

- Aeronomy
- Atmospheric chemistry and climatology
- Atmospheric physics and dynamics
- Extraterrestrial atmospheres
- Meteorology
- Solar
- Weather modification

C2GAES

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

C3OSMS

Ocean Sciences and Marine Sciences

- Biological oceanography
- Geological oceanography
- Marine biology
- Marine oceanography
- Marine sciences
- Oceanography, chemical and physical

C4OTHG

Other Geosciences, Atmospheric and Ocean Sciences

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

## **Life Science**

D1AGRI

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
- Food science and technology International agriculture

- Plant sciences Soil sciences Wood science

## D2BIOM

### Biological and Biomedical Sciences (previously Biological 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

## D3HEAL

### Health Sciences (previously Medical 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
- 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 Zoology

- D4NATR (NEW) Natural Resources and Conservation
- Fishing and fisheries sciences and management
  - Forestry
  - Natural resources conservation and research
  - Natural resources economics
  - Natural resources management and policy
  - Renewable natural resources
  - Wildlife and wildlands science and management

- D5OLIF Other Life Sciences
- Other life sciences that cannot be classified using the fields listed above

**Mathematics and Statistics**

- E0MATH Mathematics and Statistics
- Applied mathematics
  - Mathematics
  - Statistics

**Physical Sciences**

- F1ASTR Astronomy and Astrophysics
- Astronomy
  - Astrophysics
  - Planetary astronomy and science

- F2CHEM 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

- F3MATS (NEW) Materials Science
- Materials chemistry
  - Materials science

- F4PHYS 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

F5OPHY

Other Physical Sciences

Other physical sciences that cannot be classified using the fields listed above

## Psychology

G0PSYC

Psychology

- Clinical psychology
- Counseling and applied psychology
- Human development
- Research and experimental psychology

## Social Sciences

H1ANTH

(NEW) Anthropology

- Cultural anthropology
- Medical anthropology
- Physical and biological anthropology

H2ECON

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

H3PLSG

Political Science and Government

- Comparative government
- Government
- Legal systems
- Political economy
- Political science
- Political theory

H4SOCl

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

H5OSOC

Other Social Sciences

- Archeology
- Area, ethnic, cultural, gender, and group studies
- Cartography Criminal science and corrections
- Criminology
- Geography
- Gerontology, social sciences
- International relations and national security studies
- Linguistics
- Public policy analysis
- Regional studies
- Urban studies, affairs

**Other Sciences**

I0OSCI

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.

**Non- S&E Fields**

J1BMBA

Business Management and Business Administration

- Business administration
- Business management
- Business, managerial economics
- Management information
- systems and services
- Marketing management and research

J2COMM

Communication and Communications Technologies (previously Communication, Journalism, and Library Science)

- Communication and media studies
- Communications technologies
- Journalism
- Radio, television, and
- digital communication

J3EDUC

- Education
- Education administration and supervision
- Education research
- Teacher education, specific levels and
- Methods
- Teaching fields

J4HUMA

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

J5LAW

Law

- Law
- Legal studies

J6SOCW

Social Work  
(no specific examples)

J7ARTS

Visual and Performing Arts

- Drama, theatre arts and stagecraft
- Film, video, and photographic arts
- Fine and studio arts Music

J8ONSC

Other Non- S&E Fields

- Architecture
- City, urban, community and regional planning 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.