



## International Students

### STEM Designated Degree Programs

*Effective date: April 8, 2008; Updated September 25, 2008*

The following is a list of Classification of Instructional Programs codes published by the National Center for Education Statistics (NCES CIP codes) that have been designated by ICE as science, technology, engineering, or math (STEM) degrees for the purpose of approving a 17-month STEM extension of optional practical training (OPT) under the provisions of 8 CFR 214.2(f)(10)(ii)(C).

In order for F-1 students to qualify for this 17-month extension, the code for the student's degree program must be on this list. Other requirements are found in the regulatory language.

To suggest a change to the list of STEM designated degrees, write to [SEVIS.Source@dhs.gov](mailto:SEVIS.Source@dhs.gov), with STEM Code Change Request in the subject line. Please include your name, phone number, organizational affiliation, the code(s) you would like to see added and the rationale for the addition. Change requests will be reviewed by ICE in conjunction with the Department of Education and other advisors.

The Federal Register notice for this rule is available on line at <http://edocket.access.gpo.gov/2008/pdf/E8-7427.pdf>.

More information on NCES CIP codes is available at <http://nces.ed.gov/Pubsearch/pubsinfo.asp?pubid=2002165>.

### STEM List: Numerical Order

CIP Code Family	CIP Code	Numeric Order CIP Code Title
11	11.0101	Computer and Information Sciences, General.
11	11.0102	Artificial Intelligence and Robotics.
11	11.0103	Information Technology.
11	11.0201	Computer Programming/Programmer, General.
11	11.0202	Computer Programming, Specific Applications.
11	11.0203	Computer Programming, Vendor/Product Certification.
11	11.0301	Data Processing and Data Processing Technology/Technician.
11	11.0401	Information Science/Studies.

11	11.0501	Computer Systems Analysis/Analyst.
11	11.0701	Computer Science.
11	11.0801	Web Page, Digital/Multimedia and Information Resources Design.
11	11.0802	Data Modeling/Warehousing and Database Administration.
11	11.0803	Computer Graphics.
11	11.0901	Computer Systems Networking and Telecommunications.
11	11.1001	System Administration/Administrator.
11	11.1002	System, Networking, and LAN/WAN Management/Manager.
11	11.1003	Computer and Information Systems Security.
11	11.1004	Web/Multimedia Management and Webmaster.
14	14.0101	Engineering, General.
14	14.0201	Aerospace, Aeronautical and Astronautical Engineering.
14	14.0301	Agricultural/Biological Engineering and Bioengineering.
14	14.0401	Architectural Engineering.
14	14.0501	Biomedical/Medical Engineering.
14	14.0601	Ceramic Sciences and Engineering.
14	14.0701	Chemical Engineering.
14	14.0801	Civil Engineering, General.
14	14.0802	Geotechnical Engineering.
14	14.0803	Structural Engineering.
14	14.0804	Transportation and Highway Engineering.
14	14.0805	Water Resources Engineering.
14	14.0901	Computer Engineering, General.
14	14.0902	Computer Hardware Engineering.
14	14.0903	Computer Software Engineering.
14	14.1001	Electrical, Electronics and Communications Engineering.
14	14.1101	Engineering Mechanics.
14	14.1201	Engineering Physics.
14	14.1301	Engineering Science.
14	14.1401	Environmental/Environmental Health Engineering.
14	14.1801	Materials Engineering.
14	14.1901	Mechanical Engineering.
14	14.2001	Metallurgical Engineering.
14	14.2101	Mining and Mineral Engineering.
14	14.2201	Naval Architecture and Marine Engineering.
14	14.2301	Nuclear Engineering.

14	14.2401	Ocean Engineering.
14	14.2501	Petroleum Engineering.
14	14.2701	Systems Engineering.
14	14.2801	Textile Sciences and Engineering.
14	14.3101	Materials Science.
14	14.3201	Polymer/Plastics Engineering.
14	14.3301	Construction Engineering.
14	14.3401	Forest Engineering.
14	14.3501	Industrial Engineering.
14	14.3601	Manufacturing Engineering.
14	14.3701	Operations Research.
14	14.3801	Surveying Engineering.
14	14.3901	Geological/Geophysical Engineering.
15	15.0000	Engineering Technology, General.
15	15.0101	Architectural Engineering Technology/Technician.
15	15.0201	Civil Engineering Technology/Technician.
15	15.0303	Electrical, Electronic and Communications Engineering Technology/Technician.
15	15.0304	Laser and Optical Technology/Technician.
15	15.0305	Telecommunications Technology/Technician.
15	15.0401	Biomedical Technology/Technician.
15	15.0403	Electromechanical Technology/Electromechanical Engineering Technology.
15	15.0404	Instrumentation Technology/Technician.
15	15.0405	Robotics Technology/Technician.
15	15.0501	Heating, Air Conditioning and Refrigeration Technology/Technician (ACH/ACR/ACHR/HRAC/HVAC/AC Technology).
15	15.0503	Energy Management and Systems Technology/Technician.
15	15.0505	Solar Energy Technology/Technician.
15	15.0506	Water Quality and Wastewater Treatment Management and Recycling Technology/Technician.
15	15.0507	Environmental Engineering Technology/Environmental Technology.
15	15.0508	Hazardous Materials Management and Waste Technology/Technician.
15	15.0607	Plastics Engineering Technology/Technician.
15	15.0611	Metallurgical Technology/Technician.
15	15.0612	Industrial Technology/Technician.

15	15.0613	Manufacturing Technology/Technician.
15	15.0701	Occupational Safety and Health Technology/Technician.
15	15.0702	Quality Control Technology/Technician.
15	15.0703	Industrial Safety Technology/Technician.
15	15.0704	Hazardous Materials Information Systems Technology/Technician.
15	15.0801	Aeronautical/Aerospace Engineering Technology/Technician.
15	15.0803	Automotive Engineering Technology/Technician.
15	15.0805	Mechanical Engineering/Mechanical Technology/Technician.
15	15.0901	Mining Technology/Technician.
15	15.0903	Petroleum Technology/Technician.
15	15.1001	Construction Engineering Technology/Technician.
15	15.1102	Surveying Technology/Surveying.
15	15.1103	Hydraulics and Fluid Power Technology/Technician.
15	15.1201	Computer Engineering Technology/Technician.
15	15.1202	Computer Technology/Computer Systems Technology.
15	15.1203	Computer Hardware Technology/Technician.
15	15.1204	Computer Software Technology/Technician.
15	15.1301	Drafting and Design Technology/Technician, General.
15	15.1302	CAD/CADD Drafting and/or Design Technology/Technician.
15	15.1303	Architectural Drafting and Architectural CAD/CADD.
15	15.1304	Civil Drafting and Civil Engineering CAD/CADD.
15	15.1305	Electrical/Electronics Drafting and Electrical/Electronics CAD/CADD.
15	15.1306	Mechanical Drafting and Mechanical Drafting CAD/CADD.
15	15.1401	Nuclear Engineering Technology/Technician.
15	15.1501	Engineering/Industrial Management.
26	26.0101	Biology/Biological Sciences, General.
26	26.0102	Biomedical Sciences, General.
26	26.0202	Biochemistry.
26	26.0203	Biophysics.
26	26.0204	Molecular Biology.
26	26.0205	Molecular Biochemistry.
26	26.0206	Molecular Biophysics.
26	26.0207	Structural Biology.
26	26.0208	Photobiology.
26	26.0209	Radiation Biology/Radiobiology.

26	26.0210	Biochemistry/Biophysics and Molecular Biology.
26	26.0301	Botany/Plant Biology.
26	26.0305	Plant Pathology/Phytopathology.
26	26.0307	Plant Physiology.
26	26.0308	Plant Molecular Biology.
26	26.0401	Cell/Cellular Biology and Histology.
26	26.0403	Anatomy.
26	26.0404	Developmental Biology and Embryology.
26	26.0405	Neuroanatomy.
26	26.0406	Cell/Cellular and Molecular Biology.
26	26.0407	Cell Biology and Anatomy.
26	26.0502	Microbiology, General.
26	26.0503	Medical Microbiology and Bacteriology.
26	26.0504	Virology.
26	26.0505	Parasitology.
26	26.0506	Mycology.
26	26.0507	Immunology.
26	26.0701	Zoology/Animal Biology.
26	26.0702	Entomology.
26	26.0707	Animal Physiology.
26	26.0708	Animal Behavior and Ethology.
26	26.0709	Wildlife Biology.
26	26.0801	Genetics, General.
26	26.0802	Molecular Genetics.
26	26.0803	Microbial and Eukaryotic Genetics.
26	26.0804	Animal Genetics.
26	26.0805	Plant Genetics.
26	26.0806	Human/Medical Genetics.
26	26.0901	Physiology, General.
26	26.0902	Molecular Physiology.
26	26.0903	Cell Physiology.
26	26.0904	Endocrinology.
26	26.0905	Reproductive Biology.
26	26.0906	Neurobiology and Neurophysiology.
26	26.0907	Cardiovascular Science.
26	26.0908	Exercise Physiology.

26	26.0909	Vision Science/Physiological Optics.
26	26.0910	Pathology/Experimental Pathology.
26	26.0911	Oncology and Cancer Biology.
26	26.1001	Pharmacology.
26	26.1002	Molecular Pharmacology.
26	26.1003	Neuropharmacology.
26	26.1004	Toxicology.
26	26.1005	Molecular Toxicology.
26	26.1006	Environmental Toxicology.
26	26.1007	Pharmacology and Toxicology.
26	26.1101	Biometry/Biometrics.
26	26.1102	Biostatistics.
26	26.1103	Bioinformatics.
26	26.1201	Biotechnology.
26	26.1301	Ecology.
26	26.1302	Marine Biology and Biological Oceanography.
26	26.1303	Evolutionary Biology.
26	26.1304	Aquatic Biology/Limnology.
26	26.1305	Environmental Biology.
26	26.1306	Population Biology.
26	26.1307	Conservation Biology.
26	26.1308	Systematic Biology/Biological Systematics.
26	26.1309	Epidemiology.
27	27.0101	Mathematics, General.
27	27.0102	Algebra and Number Theory.
27	27.0103	Analysis and Functional Analysis.
27	27.0104	Geometry/Geometric Analysis.
27	27.0105	Topology and Foundations.
27	27.0301	Applied Mathematics.
27	27.0303	Computational Mathematics.
27	27.0501	Statistics, General.
27	27.0502	Mathematical Statistics and Probability.
29	29.0101	Military Technologies.
40	40.0101	Physical Sciences.
40	40.0201	Astronomy.
40	40.0202	Astrophysics.

40	40.0203	Planetary Astronomy and Science.
40	40.0401	Atmospheric Sciences and Meteorology, General.
40	40.0402	Atmospheric Chemistry and Climatology.
40	40.0403	Atmospheric Physics and Dynamics.
40	40.0404	Meteorology.
40	40.0501	Chemistry, General.
40	40.0502	Analytical Chemistry.
40	40.0503	Inorganic Chemistry.
40	40.0504	Organic Chemistry.
40	40.0506	Physical and Theoretical Chemistry.
40	40.0507	Polymer Chemistry.
40	40.0508	Chemical Physics.
40	40.0601	Geology/Earth Science, General.
40	40.0602	Geochemistry.
40	40.0603	Geophysics and Seismology.
40	40.0604	Paleontology.
40	40.0605	Hydrology and Water Resources Science.
40	40.0606	Geochemistry and Petrology.
40	40.0607	Oceanography, Chemical and Physical.
40	40.0801	Physics, General.
40	40.0802	Atomic/Molecular Physics.
40	40.0804	Elementary Particle Physics.
40	40.0805	Plasma and High-Temperature Physics.
40	40.0806	Nuclear Physics.
40	40.0807	Optics/Optical Sciences.
40	40.0808	Solid State and Low-Temperature Physics.
40	40.0809	Acoustics.
40	40.0810	Theoretical and Mathematical Physics.
41	41.0101	Biology Technician/Biotechnology Laboratory Technician.
41	41.0204	Industrial Radiologic Technology/Technician.
41	41.0205	Nuclear/Nuclear Power Technology/Technician.
41	41.0301	Chemical Technology/Technician.
51	51.1401	Medical Scientist (MS, PhD).
52	52.1304	Actuarial Science

## STEM List: Alphabetical Order

<b>CIP Code Family</b>	<b>CIP Code</b>	<b>Alphabetical Order CIP Code Title</b>
40	40.0809	Acoustics.
52	52.1304	Actuarial Science
15	15.0801	Aeronautical/Aerospace Engineering Technology/Technician.
14	14.0201	Aerospace, Aeronautical and Astronautical Engineering.
14	14.0301	Agricultural/Biological Engineering and Bioengineering.
27	27.0102	Algebra and Number Theory.
27	27.0103	Analysis and Functional Analysis.
40	40.0502	Analytical Chemistry.
26	26.0403	Anatomy.
26	26.0708	Animal Behavior and Ethology.
26	26.0804	Animal Genetics.
26	26.0707	Animal Physiology.
27	27.0301	Applied Mathematics.
26	26.1304	Aquatic Biology/Limnology.
15	15.1303	Architectural Drafting and Architectural CAD/CADD.
15	15.0101	Architectural Engineering Technology/Technician.
14	14.0401	Architectural Engineering.
11	11.0102	Artificial Intelligence and Robotics.
40	40.0201	Astronomy.
40	40.0202	Astrophysics.
40	40.0402	Atmospheric Chemistry and Climatology.
40	40.0403	Atmospheric Physics and Dynamics.
40	40.0401	Atmospheric Sciences and Meteorology, General.
40	40.0802	Atomic/Molecular Physics.
15	15.0803	Automotive Engineering Technology/Technician.
26	26.0202	Biochemistry.
26	26.0210	Biochemistry/Biophysics and Molecular Biology.
26	26.1103	Bioinformatics.
41	41.0101	Biology Technician/Biotechnology Laboratory Technician.
26	26.0101	Biology/Biological Sciences, General.
26	26.0102	Biomedical Sciences, General.
15	15.0401	Biomedical Technology/Technician.
14	14.0501	Biomedical/Medical Engineering.
26	26.1101	Biometry/Biometrics.



26	26.0203	Biophysics.
26	26.1102	Biostatistics.
26	26.1201	Biotechnology.
26	26.0301	Botany/Plant Biology.
15	15.1302	CAD/CADD Drafting and/or Design Technology/Technician.
26	26.0907	Cardiovascular Science.
26	26.0407	Cell Biology and Anatomy.
26	26.0903	Cell Physiology.
26	26.0406	Cell/Cellular and Molecular Biology.
26	26.0401	Cell/Cellular Biology and Histology.
14	14.0601	Ceramic Sciences and Engineering.
14	14.0701	Chemical Engineering.
40	40.0508	Chemical Physics.
41	41.0301	Chemical Technology/Technician.
40	40.0501	Chemistry, General.
15	15.1304	Civil Drafting and Civil Engineering CAD/CADD.
15	15.0201	Civil Engineering Technology/Technician.
14	14.0801	Civil Engineering, General.
27	27.0303	Computational Mathematics.
11	11.0101	Computer and Information Sciences, General.
11	11.1003	Computer and Information Systems Security.
15	15.1201	Computer Engineering Technology/Technician.
14	14.0901	Computer Engineering, General.
11	11.0803	Computer Graphics.
14	14.0902	Computer Hardware Engineering.
15	15.1203	Computer Hardware Technology/Technician.
11	11.0202	Computer Programming, Specific Applications.
11	11.0203	Computer Programming, Vendor/Product Certification.
11	11.0201	Computer Programming/Programmer, General.
11	11.0701	Computer Science.
14	14.0903	Computer Software Engineering.
15	15.1204	Computer Software Technology/Technician.
11	11.0501	Computer Systems Analysis/Analyst.
11	11.0901	Computer Systems Networking and Telecommunications.
15	15.1202	Computer Technology/Computer Systems Technology.
26	26.1307	Conservation Biology.

15	15.1001	Construction Engineering Technology/Technician.
14	14.3301	Construction Engineering.
11	11.0802	Data Modeling/Warehousing and Database Administration.
11	11.0301	Data Processing and Data Processing Technology/Technician.
26	26.0404	Developmental Biology and Embryology.
15	15.1301	Drafting and Design Technology/Technician, General.
26	26.1301	Ecology.
15	15.0303	Electrical, Electronic and Communications Engineering Technology/Technician.
14	14.1001	Electrical, Electronics and Communications Engineering.
15	15.1305	Electrical/Electronics Drafting and Electrical/Electronics CAD/CADD.
15	15.0403	Electromechanical Technology/Electromechanical Engineering Technology.
40	40.0804	Elementary Particle Physics.
26	26.0904	Endocrinology.
15	15.0503	Energy Management and Systems Technology/Technician.
14	14.1101	Engineering Mechanics.
14	14.1201	Engineering Physics.
14	14.1301	Engineering Science.
15	15.0000	Engineering Technology, General.
14	14.0101	Engineering, General.
15	15.1501	Engineering/Industrial Management.
26	26.0702	Entomology.
26	26.1305	Environmental Biology.
15	15.0507	Environmental Engineering Technology/Environmental Technology.
26	26.1006	Environmental Toxicology.
14	14.1401	Environmental/Environmental Health Engineering.
26	26.1309	Epidemiology.
26	26.1303	Evolutionary Biology.
26	26.0908	Exercise Physiology.
14	14.3401	Forest Engineering.
26	26.0801	Genetics, General.
40	40.0606	Geochemistry and Petrology.
40	40.0602	Geochemistry.
14	14.3901	Geological/Geophysical Engineering.
40	40.0601	Geology/Earth Science, General.

27	27.0104	Geometry/Geometric Analysis.
40	40.0603	Geophysics and Seismology.
14	14.0802	Geotechnical Engineering.
15	15.0704	Hazardous Materials Information Systems Technology/Technician.
15	15.0508	Hazardous Materials Management and Waste Technology/Technician.
15	15.0501	Heating, Air Conditioning and Refrigeration Technology/Technician (ACH/ACR/ACHR/HRAC/HVAC/AC Technology).
26	26.0806	Human/Medical Genetics.
15	15.1103	Hydraulics and Fluid Power Technology/Technician.
40	40.0605	Hydrology and Water Resources Science.
26	26.0507	Immunology.
14	14.3501	Industrial Engineering.
41	41.0204	Industrial Radiologic Technology/Technician.
15	15.0703	Industrial Safety Technology/Technician.
15	15.0612	Industrial Technology/Technician.
11	11.0401	Information Science/Studies.
11	11.0103	Information Technology.
40	40.0503	Inorganic Chemistry.
15	15.0404	Instrumentation Technology/Technician.
15	15.0304	Laser and Optical Technology/Technician.
14	14.3601	Manufacturing Engineering.
15	15.0613	Manufacturing Technology/Technician.
26	26.1302	Marine Biology and Biological Oceanography.
14	14.1801	Materials Engineering.
14	14.3101	Materials Science.
27	27.0502	Mathematical Statistics and Probability.
27	27.0101	Mathematics, General.
15	15.1306	Mechanical Drafting and Mechanical Drafting CAD/CADD.
14	14.1901	Mechanical Engineering.
15	15.0805	Mechanical Engineering/Mechanical Technology/Technician.
26	26.0503	Medical Microbiology and Bacteriology.
51	51.1401	Medical Scientist (MS, PhD).
14	14.2001	Metallurgical Engineering.
15	15.0611	Metallurgical Technology/Technician.
40	40.0404	Meteorology.

26	26.0803	Microbial and Eukaryotic Genetics.
26	26.0502	Microbiology, General.
29	29.0101	Military Technologies.
14	14.2101	Mining and Mineral Engineering.
15	15.0901	Mining Technology/Technician.
26	26.0205	Molecular Biochemistry.
26	26.0204	Molecular Biology.
26	26.0206	Molecular Biophysics.
26	26.0802	Molecular Genetics.
26	26.1002	Molecular Pharmacology.
26	26.0902	Molecular Physiology.
26	26.1005	Molecular Toxicology.
26	26.0506	Mycology.
14	14.2201	Naval Architecture and Marine Engineering.
26	26.0405	Neuroanatomy.
26	26.0906	Neurobiology and Neurophysiology.
26	26.1003	Neuropharmacology.
15	15.1401	Nuclear Engineering Technology/Technician.
14	14.2301	Nuclear Engineering.
40	40.0806	Nuclear Physics.
41	41.0205	Nuclear/Nuclear Power Technology/Technician.
15	15.0701	Occupational Safety and Health Technology/Technician.
14	14.2401	Ocean Engineering.
40	40.0607	Oceanography, Chemical and Physical.
26	26.0911	Oncology and Cancer Biology.
14	14.3701	Operations Research.
40	40.0807	Optics/Optical Sciences.
40	40.0504	Organic Chemistry.
40	40.0604	Paleontology.
26	26.0505	Parasitology.
26	26.0910	Pathology/Experimental Pathology.
14	14.2501	Petroleum Engineering.
15	15.0903	Petroleum Technology/Technician.
26	26.1007	Pharmacology and Toxicology.
26	26.1001	Pharmacology.
26	26.0208	Photobiology.

40	40.0506	Physical and Theoretical Chemistry.
40	40.0101	Physical Sciences.
40	40.0801	Physics, General.
26	26.0901	Physiology, General.
40	40.0203	Planetary Astronomy and Science.
26	26.0805	Plant Genetics.
26	26.0308	Plant Molecular Biology.
26	26.0305	Plant Pathology/Phytopathology.
26	26.0307	Plant Physiology.
40	40.0805	Plasma and High-Temperature Physics.
15	15.0607	Plastics Engineering Technology/Technician.
40	40.0507	Polymer Chemistry.
14	14.3201	Polymer/Plastics Engineering.
26	26.1306	Population Biology.
15	15.0702	Quality Control Technology/Technician.
26	26.0209	Radiation Biology/Radiobiology.
26	26.0905	Reproductive Biology.
15	15.0405	Robotics Technology/Technician.
15	15.0505	Solar Energy Technology/Technician.
40	40.0808	Solid State and Low-Temperature Physics.
27	27.0501	Statistics, General.
26	26.0207	Structural Biology.
14	14.0803	Structural Engineering.
14	14.3801	Surveying Engineering.
15	15.1102	Surveying Technology/Surveying.
11	11.1001	System Administration/Administrator.
11	11.1002	System, Networking and LAN/WAN Management/Manager.
26	26.1308	Systematic Biology/Biological Systematics.
14	14.2701	Systems Engineering.
15	15.0305	Telecommunications Technology/Technician.
14	14.2801	Textile Sciences and Engineering.
40	40.0810	Theoretical and Mathematical Physics.
27	27.0105	Topology and Foundations.
26	26.1004	Toxicology.
14	14.0804	Transportation and Highway Engineering.
26	26.0504	Virology.

26	26.0909	Vision Science/Physiological Optics.
15	15.0506	Water Quality and Wastewater Treatment Management and Recycling Technology/Technician.
14	14.0805	Water Resources Engineering.
11	11.0801	Web Page, Digital/Multimedia and Information Resources Design.
11	11.1004	Web/Multimedia Management and Webmaster.
26	26.0709	Wildlife Biology.
26	26.0701	Zoology/Animal Biology.

Last Modified: Thursday, September 25, 2008