

**STEM Designated Degree
Program List
Effective May 10, 2016**

The STEM Designated Degree Program list is a complete list of fields of study that DHS considers to be science, technology, engineering or mathematics (STEM) fields of study for purposes of the 24-month STEM optional practical training extension described at 8 CFR 214.2(f). Under 8 CFR 214.2(f)(10)(ii)(C)(2), a STEM field of study is a field of study “included in the Department of Education’s Classification of Instructional Programs taxonomy within the two-digit series containing engineering, biological sciences, mathematics, and physical sciences, or a related field. In general, related fields will include fields involving research, innovation, or development of new technologies using engineering, mathematics, computer science, or natural sciences (including physical, biological, and agricultural sciences).”

Accordingly, this list designates the following four CIP summary groups/series at the 2-digit CIP code level: Engineering (CIP code 14), Biological and Biomedical Sciences (CIP code 26), Mathematics and Statistics (CIP code 27), and Physical Sciences (CIP code 40). Any new additions to those areas will automatically be included on this STEM Designated Degree Program list. Consistent with the definition of “related field” above, related fields in this list include fields involving research, innovation, or development of new technologies using engineering, mathematics, computer science, or natural sciences. DHS designates these fields at the 6-digit level.

CIP Code Two-Digit Series	2010 CIP Code	CIP Code Title
01	01.0308	Agroecology and Sustainable Agriculture
01	01.0901	Animal Sciences, General
01	01.0902	Agricultural Animal Breeding
01	01.0903	Animal Health
01	01.0904	Animal Nutrition
01	01.0905	Dairy Science
01	01.0906	Livestock Management
01	01.0907	Poultry Science
01	01.0999	Animal Sciences, Other
01	01.1001	Food Science
01	01.1002	Food Technology and Processing
01	01.1099	Food Science and Technology, Other
01	01.1101	Plant Sciences, General
01	01.1102	Agronomy and Crop Science

01	01.1103	Horticultural Science
01	01.1104	Agricultural and Horticultural Plant Breeding
01	01.1105	Plant Protection and Integrated Pest Management
01	01.1106	Range Science and Management
01	01.1199	Plant Sciences, Other
01	01.1201	Soil Science and Agronomy, General
01	01.1202	Soil Chemistry and Physics
01	01.1203	Soil Microbiology
01	01.1299	Soil Sciences, Other
03	03.0101	Natural Resources/Conservation, General
03	03.0103	Environmental Studies
03	03.0104	Environmental Science
03	03.0199	Natural Resources Conservation and Research, Other
03	03.0205	Water, Wetlands, and Marine Resources Management

03	03.0502	Forest Sciences and Biology
03	03.0508	Urban Forestry
03	03.0509	Wood Science and Wood Products/Pulp and Paper Technology
03	03.0601	Wildlife, Fish and Wildlands Science and Management
04	04.0902	Architectural and Building Sciences/Technology
09	09.0702	Digital Communication and Media/Multimedia
10	10.0304	Animation, Interactive Technology, Video Graphics and Special Effects
11	11.0101	Computer and Information Sciences, General
11	11.0102	Artificial Intelligence
11	11.0103	Information Technology
11	11.0104	Informatics
11	11.0199	Computer and Information Sciences, Other
11	11.0201	Computer Programming/Programmer, General
11	11.0202	Computer Programming, Specific Applications
11	11.0203	Computer Programming, Vendor/Product Certification
11	11.0299	Computer Programming, Other
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	11.0804	Modeling, Virtual Environments and Simulation
11	11.0899	Computer Software and Media Applications, Other
11	11.0901	Computer Systems Networking and Telecommunications
11	11.1001	Network and System Administration/Administrator
11	11.1002	System, Networking, and LAN/WAN Management/Manager
11	11.1003	Computer and Information Systems Security/Information Assurance
11	11.1004	Web/Multimedia Management and Webmaster
11	11.1005	Information Technology Project Management

11	11.1006	Computer Support Specialist
11	11.1099	Computer/Information Technology Services Administration and Management, Other
13	13.0501	Educational/Instructional Technology
13	13.0601	Educational Evaluation and Research
13	13.0603	Educational Statistics and Research Methods
14	14.XXXX	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	15.0306	Integrated Circuit Design
15	15.0399	Electrical and Electronic Engineering Technologies/Technicians, Other
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	15.0406	Automation Engineer Technology/Technician
15	15.0499	Electromechanical and Instrumentation and Maintenance Technologies/Technicians, Other
15	15.0501	Heating, Ventilation, Air Conditioning and Refrigeration Engineering Technology/Technician
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	15.0599	Environmental Control Technologies/Technicians, Other
15	15.0607	Plastics and Polymer Engineering Technology/Technician
15	15.0611	Metallurgical Technology/Technician
15	15.0612	Industrial Technology/Technician
15	15.0613	Manufacturing Engineering Technology/Technician

15	15.0614	Welding Engineering Technology/Technician
15	15.0615	Chemical Engineering Technology/Technician
15	15.0616	Semiconductor Manufacturing Technology
15	15.0699	Industrial Production Technologies/Technicians, Other
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	15.0799	Quality Control and Safety Technologies/Technicians, Other
15	15.0801	Aeronautical/Aerospace Engineering Technology/Technician
15	15.0803	Automotive Engineering Technology/Technician
15	15.0805	Mechanical Engineering/Mechanical Technology/Technician
15	15.0899	Mechanical Engineering Related Technologies/Technicians, Other
15	15.0901	Mining Technology/Technician
15	15.0903	Petroleum Technology/Technician
15	15.0999	Mining and Petroleum Technologies/Technicians, Other
15	15.1001	Construction Engineering Technology/Technician
15	15.1102	Surveying Technology/Surveying
15	15.1103	Hydraulics and Fluid Power Technology/Technician
15	15.1199	Engineering-Related Technologies, Other
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	15.1299	Computer Engineering Technologies/Technicians, Other
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	15.1399	Drafting/Design Engineering Technologies/Technicians, Other
15	15.1401	Nuclear Engineering Technology/Technician
15	15.1501	Engineering/Industrial Management

15	15.1502	Engineering Design
15	15.1503	Packaging Science
15	15.1599	Engineering-Related Fields, Other
15	15.1601	Nanotechnology
15	15.9999	Engineering Technologies and Engineering-Related Fields, Other
26	26.XXXX	Biological and Biomedical Sciences
27	27.XXXX	Mathematics and Statistics
28	28.0501	Air Science/Airpower Studies
28	28.0502	Air and Space Operational Art and Science
28	28.0505	Naval Science and Operational Studies
29	29.0201	Intelligence, General
29	29.0202	Strategic Intelligence
29	29.0203	Signal/Geospatial Intelligence
29	29.0204	Command & Control (C3, C4I) Systems and Operations
29	29.0205	Information Operations/Joint Information Operations
29	29.0206	Information/Psychological Warfare and Military Media Relations
29	29.0207	Cyber/Electronic Operations and Warfare
29	29.0299	Intelligence, Command Control and Information Operations, Other
29	29.0301	Combat Systems Engineering
29	29.0302	Directed Energy Systems
29	29.0303	Engineering Acoustics
29	29.0304	Low-Observables and Stealth Technology
29	29.0305	Space Systems Operations
29	29.0306	Operational Oceanography
29	29.0307	Undersea Warfare
29	29.0399	Military Applied Sciences, Other
29	29.0401	Aerospace Ground Equipment Technology
29	29.0402	Air and Space Operations Technology
29	29.0403	Aircraft Armament Systems Technology
29	29.0404	Explosive Ordnance/Bomb Disposal
29	29.0405	Joint Command/Task Force (C3, C4I) Systems

29	29.0406	Military Information Systems Technology
29	29.0407	Missile and Space Systems Technology
29	29.0408	Munitions Systems/Ordinance Technology
29	29.0409	Radar Communications and Systems Technology
29	29.0499	Military Systems and Maintenance Technology, Other
29	29.9999	Military Technologies and Applied Sciences, Other
30	30.0101	Biological and Physical Sciences
30	30.0601	Systems Science and Theory
30	30.0801	Mathematics and Computer Science
30	30.1001	Biopsychology
30	30.1701	Behavioral Sciences
30	30.1801	Natural Sciences
30	30.1901	Nutrition Sciences
30	30.2501	Cognitive Science
30	30.2701	Human Biology
30	30.3001	Computational Science
30	30.3101	Human Computer Interaction
30	30.3201	Marine Sciences
30	30.3301	Sustainability Studies
40	40.XXXX	Physical Sciences
41	41.0000	Science Technologies/Technicians, General
41	41.0101	Biology Technician/Biotechnology Laboratory Technician
41	41.0204	Industrial Radiologic Technology/Technician
41	41.0205	Nuclear/Nuclear Power Technology/Technician
41	41.0299	Nuclear and Industrial Radiologic Technologies/Technicians, Other
41	41.0301	Chemical Technology/Technician
41	41.0303	Chemical Process Technology
41	41.0399	Physical Science Technologies/Technicians, Other
41	41.9999	Science Technologies/Technicians, Other

42	42.2701	Cognitive Psychology and Psycholinguistics
42	42.2702	Comparative Psychology
42	42.2703	Developmental and Child Psychology
42	42.2704	Experimental Psychology
42	42.2705	Personality Psychology
42	42.2706	Physiological Psychology/Psychobiology
42	42.2707	Social Psychology
42	42.2708	Psychometrics and Quantitative Psychology
42	42.2709	Psychopharmacology
42	42.2799	Research and Experimental Psychology, Other
43	43.0106	Forensic Science and Technology
43	43.0116	Cyber/Computer Forensics and Counterterrorism
45	45.0301	Archeology
45	45.0603	Econometrics and Quantitative Economics
45	45.0702	Geographic Information Science and Cartography
49	49.0101	Aeronautics/Aviation/Aerospace Science and Technology, General
51	51.1002	Cytotechnology/Cytotechnologist
51	51.1005	Clinical Laboratory Science/Medical Technology/Technologist
51	51.1401	Medical Scientist
51	51.2003	Pharmaceutics and Drug Design
51	51.2004	Medicinal and Pharmaceutical Chemistry
51	51.2005	Natural Products Chemistry and Pharmacognosy
51	51.2006	Clinical and Industrial Drug Development
51	51.2007	Pharmacoeconomics/Pharmaceutical Economics
51	51.2009	Industrial and Physical Pharmacy and Cosmetic Sciences
51	51.2010	Pharmaceutical Sciences
51	51.2202	Environmental Health
51	51.2205	Health/Medical Physics
51	51.2502	Veterinary Anatomy
51	51.2503	Veterinary Physiology
51	51.2504	Veterinary Microbiology and Immunobiology
51	51.2505	Veterinary Pathology and Pathobiology

51	51.2506	Veterinary Toxicology and Pharmacology
51	51.2510	Veterinary Preventive Medicine, Epidemiology, and Public Health
51	51.2511	Veterinary Infectious Diseases
51	51.2706	Medical Informatics
52	52.1301	Management Science
52	52.1302	Business Statistics
52	52.1304	Actuarial Science
52	52.1399	Management Science and Quantitative Methods, Other