Homeland Security Investigations
National Security Division
Student and Exchange Visitor Program

U.S. Immigration
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DHS STEM Designated Degree Program List
Last Updated: May 10, 2016

PLEASE NOTE: The 2016 DHS STEM Designated Degree Program List has been archived. Stakeholders should refer to the most up-to-date version of the last at ICE.gov/SEVIS/Schools, under the DHS STEM Designated Degree Program List and CIP Code Nomination Process header.

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.

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CIP Code Two-Digit Series	2010 CIP Code	CIP Code Title
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.

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CIP Code Two-Digit Series	2010 CIP Code	CIP Code Title
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.

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CIP Code Two-Digit Series	2010 CIP Code	CIP Code Title
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.

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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.

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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 Ordinance/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.

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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.

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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.