

**FIRST DRAFT**

**Figure 1**

**Career Clusters and Proposed Primary and Related CIP Codes**

<b>Career Areas</b>	<b>Definitions</b>	<b>1990 CIP Codes</b>
<p>1. Agriculture &amp; Natural Resources</p>	<p>Planning and managing agriculture, food, fiber, and natural resources systems. Production of agricultural commodities, including food, fiber, wood products, horticultural crops, and other plant and animal products. Financing, processing, and marketing and distribution of agricultural products; farm production and supply and service industries; horticulture and landscaping services, and the use and conservation of land and water resources; development and maintenance of recreational resources. It also includes mining and extraction operations and related environmental management services.</p>	<p><u>Primary:</u> Agricultural Business and Production (01.0101-01.9999), Agricultural Sciences (02.0101-02.9999), Conservation and Renewable Natural Resources (03.0101-03.9999), Mining and Petroleum Tech./Technician (15.0901-15.0999),</p> <p><u>Related:</u> Agricultural Engineering (14.0201), Mining and Material Engineering (14.2101), Petroleum Engineering (14.2501),</p>
<p>2. Architecture &amp; Construction</p>	<p>Designing, planning, managing, building, and maintaining physical structures and the larger built environment including roadways and bridges and industrial, commercial and residential facilities and buildings.</p>	<p><u>Primary:</u> Architecture and Related Programs (04.0201-04.9999), Architectural Engineering Techn/ Technician (15.0101), Civil Engineering/ Civil Tech./Technician (15.0201), Surveying (15.1102), Construction Trades (46.0101-46.9999), Heating, Air Conditioning and Refrigeration Mechanic and Repairer (47.0201),</p> <p><u>Related:</u> Civil Engineering (14.0899), Transportation and Highway Engineering (14.0804), Industrial Electronics Installer and Repairer (47.0105), Cabinet Maker (48.0703).</p>
<p>3. Manufacturing</p>	<p>Planning, managing and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance and manufacturing/process engineering.</p>	<p><u>Primary:</u> Robotics Tech/Technician, Industrial/Manufacturing Tech/Technician, Industrial Electronics Installer and Repairer (47.0105), Industrial Machinery Maint. and Repairer (47.0303), Precision Production Workers (48.0101-48.9999), Plastics Technician (15.0607), Electromechanical Technician (production-related) (15.0403).</p> <p><u>Related:</u> Chemical Engineering (14.0701), Industrial/ Manufacturing Engineering (14.1701), Mechanical Engineering (14.1901), Logistics and Materials Management (52.0203), Quality Control Technician (15. 15.0702).</p>

<p>4. , Transportation , Distribution and Logistics</p>	<p>Planning, management, and movement of people, materials, and goods by road, pipeline, air, rail and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.</p>	<p><u>Primary:</u> Automotive Repair (47.0603-47.0604), Aircraft Mechanic/Technician (47.0607-0608), Vehicle and Mobile Equipment Mechanics/Repairers (47.0699), Transportation and Material Moving Workers (49.0101-49.9999), Logistics and Materials Management (52.0203)</p> <p><u>Related:</u> Transportation and Highway Engineering (14.0804), Engineering/Industrial Management (14.3001), Automotive Engineering Tech/ Technicians (15.0803), Aeronautical and Aerospace Engineering Tech./Technicians, Industrial Electronics Installer and Repairer (47.0105)</p>
<p>5. Information Technology</p>	<p>Designing, developing, managing and operating communication and information technology networks and related hardware and software including both telecommunications and computing services.</p>	<p><u>Primary:</u> Computer and Information Sciences (11.0101-11.9999), Computer Engineering Tech./Technician (15.0301), Computer Maintenance Tech./Technician (15.0402), Computer Installer and Repairer (47.0105), Management Information Systems (52.1101-52.1205).</p> <p><u>Related:</u> Communications Technologies (10.0101-10.0199), Electrical, Electronics and Communication Engineering (14.1001), Library Science (Information Services-related) 25.0101-25.9999</p>
<p>6. Wholesale/Retail Sales and Service</p>	<p>Planning, managing and performing wholesaling and retailing services and related marketing and distribution support services including merchandise/product management and promotion.</p>	<p><u>Primary:</u> Business Marketing and Marketing Management (52.1401), Marketing Operations/Marketing and Distribution (except Hospitality-related and Finance-Related) (08.0101-08.0899), (08.1203-08.9999). Personal and Miscellaneous Services (except Hospitality-related) 12.0301-12.0499), Vocational Home Economics (Apparel-related) (20.0301, 20.0305-20.0399), Vocational Home Economics (Home Furnishings-related) 20.0501-20.0599), Misc. Installer/Repairer (Except in other career areas (47.0101-47.9999)</p> <p><u>Related:</u> Marketing Operations/Marketing and Distribution (Hospitality-related and Finance-related) 08.0901-08.0999, 08.1001)</p>

7. Finance	Planning, managing and providing banking, investment, financial planning, and insurance services.	<u>Primary:</u> Marketing Operations/Marketing and Distribution (Finance-Related) 08.1001, Banking and Financial Support Services Science (52.0803), Actuarial Science (52.0802), Financial Planning (52.0804), Financial Management and Services (52.0899), Investments and Securities (52.0807), Insurance and Risk Management (52.0805).
8. Hospitality and Tourism	Planning, managing and providing lodging, food, recreation, convention and tourism, and related planning and support services such as travel-related services.	<u>Primary:</u> Marketing Operations/Marketing and Distribution (Hospitality-related) (08.0901-08.0999), Personal and Miscellaneous Services (Hospitality-related) (12.0203-12.0299, 12.0501-12.0599), Vocational Home Economics (Food Service-related) (20.0401-20.0499). Executive Housekeeper (20.0605), Parks, Recreation, Leisure (31.0101-31.9999), Hospitality/Administration Management (52.0901), Hotel/Motel and Restaurant Management (52.0902), Travel-Tourism Management (52.0903).
9. Business and Administration	Planning, managing, and providing administrative support, information processing, accounting, and human resource management services and related management support services.	<u>Primary:</u> Business and Administration (General) (52.0201), Accounting (52.0301-52.0399), Administrative Assistant/Secretarial Science, (52.0401-52.0499), Human Resources Management (52.1001-52.1099).
10. Health Sciences	Planning, managing, and providing diagnostic, therapeutic, and information and environmental services in health care.	<u>Primary:</u> Health Professions and Related Science (51.0101-51.9999)  <u>Related:</u> Vocational Home Economics (Custodial Housekeeping and Home Service Workers and Managers (20.0601-20.0699), Social Work/Counseling Services (51.1501-51.15.999), Social Work (44.0701)
11. Human Services	Planning, managing, and providing human services including social and related community services	<u>Primary:</u> Social Work/Counseling Services (51.1501-51.15.999), Psychology (Clinical) (42.0201), Vocational Home Economics (Child care-related) 20.0201-20.0299), Vocational Home Economics (Custodial Housekeeping and Home Service Workers and Managers (20.0601-20.0699), Community Organization and Services (44.0201), Social Work (44.0701)

12. Arts, AV Technology and Communications	Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services	<u>Primary:</u> Business Communications (52.0501), Communications (09.0101-09.9999), Communications Technologies (10.0101-10.0199), Visual and Performing Arts (50.0101-50.999)
13 Law & Public Safety	Planning, managing and providing judicial, legal, and protective services including professional and technical support services in the fire protection and criminal justice systems.	<u>Primary:</u> Law and Legal Studies (22.0101-22.0199), Protective Services (43.0102-43.9999).
14. Scientific Research & Engineering	Planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.	<u>Primary:</u> Engineering (14.0101-14.9999), Engineer-Related Technologies (General) (15.0399, 15.9999), Biological and Life Sciences (26.0101-26.9999), Mathematics (27.0101-27.9999), Physical Sciences (40.0101-40.9999), Science Technologies (41.0101-41.9999), Psychology (General-Non-Clinical) (42.9999), Social Sciences (45.0101-45.9999)  <u>Related:</u> All Other Engineering-Related Technologies (assigned to other career areas)
15. Education and Training	Planning, managing and providing education and training services, and related learning support services including assessment and library and information services.	<u>Primary:</u> Education (13.0101-13.999), Library Science (25.0101-25.9999)
16 Government & Public Administration	Planning, managing and providing government legislative and administrative and regulatory services and related general purpose government services at the federal, state and local levels.	<u>Primary:</u> Public Administration and Services (44.0401-44.0501, 44.999),