Minnesota Career Fields, Clusters & Pathways

Marketing
- Merchandising
- Marketing Management
- Marketing Communications
- Marketing Research
- Professional Sales

Business, Management, and Administration
- Administrative Support
- Operations Management
- Business Information Management
- Human Resources Management
- General Management

Finance
- Banking Services
- Business Finance
- Securities and Investment
- Accounting
- Insurance

Hospitality and Tourism
- Lodging
- Recreation, Amusements and Attractions
- Restaurants and Food/Beverage Services
- Travel and Tourism

Agriculture, Food, and Natural Resources
- Animal Systems
- Agribusiness Systems
- Environmental Service Systems
- Food Products and Processing Systems
- Natural Resources Systems
- Plant Systems
- Power, Structural, and Technical Systems

Arts, Audio/Video Technology, and Communications
- Audio/Video Technology and Film
- Journalism and Broadcasting
- Performing Arts
- Printing Technology
- Communications Technology
- Visual Arts

Information Technology
- Information Support and Services
- Network Systems
- Programming and Software Development
- Web and Digital Communications

Law, Public Safety, Corrections, and Security
- Correction Services
- Emergency and Fire Management Services
- Law Enforcement Services
- Legal Services
- Security and Protective Services

Human Services
- Consumer Services
- Counseling and Mental Health Services
- Early Childhood Development and Services
- Family and Community Services
- Personal Care Services

Government and Public Administration
- Revenue and Taxation
- Foreign Service
- Governance
- National Security
- Planning
- Public Management and Administration
- Regulation

Education and Training
- Administration and Administrative Support
- Professional Support Services
- Teaching/Training

Health Science
- Biotechnology Research and Development
- Diagnostic Services
- Support Services
- Health Informatics
- Therapeutic Services

Transportation, Distribution, and Logistics
- Facility and Mobile Equipment Maintenance
- Health, Safety, and Environmental Management
- Logistics Planning and Management Services
- Sales and Services
- Transportation Operations
- Transportation Systems/Infrastructure Planning, Management, and Regulation
- Warehousing and Distribution Center Operations

Architecture and Construction
- Construction
- Design/Pre-construction
- Maintenance/Operations

Manufacturing
- Production
- Manufacturing Production Process Development
- Maintenance, Installation, and Repair
- Quality Assurance
- Logistics and Inventory Control
- Health, Safety, and Environmental Assurance

Science, Technology, Engineering, and Mathematics
- Engineering and Technology
- Science and Mathematics

CAREER FIELD — Agriculture, Food, & Natural Resources
CAREER FIELD — Business, Management, & Administration
CAREER FIELD — Arts, Communications, & Information Systems
CAREER FIELD — Human Services
CAREER FIELD — Health Science Technology
CAREER FIELD — Engineering, Manufacturing, & Technology

Foundation Knowledge & Skills
Problem Solving • Critical Thinking
Employability • Citizenship • Ethics
Career Development • Integrity • Teamwork
Legal Responsibilities • Academic Foundations
Technology Application • Communications
Safety, Health & Environment • Leadership
Technical Literacy • Cultural Competence
Lifelong Learning • Financial Well-Being
Organizational & Global Systems
Creativity • Innovation

MINNESOTA STATE

Minnesota Department of Education

Learn about Programs of Study
www.mnprogramsofstudy.org
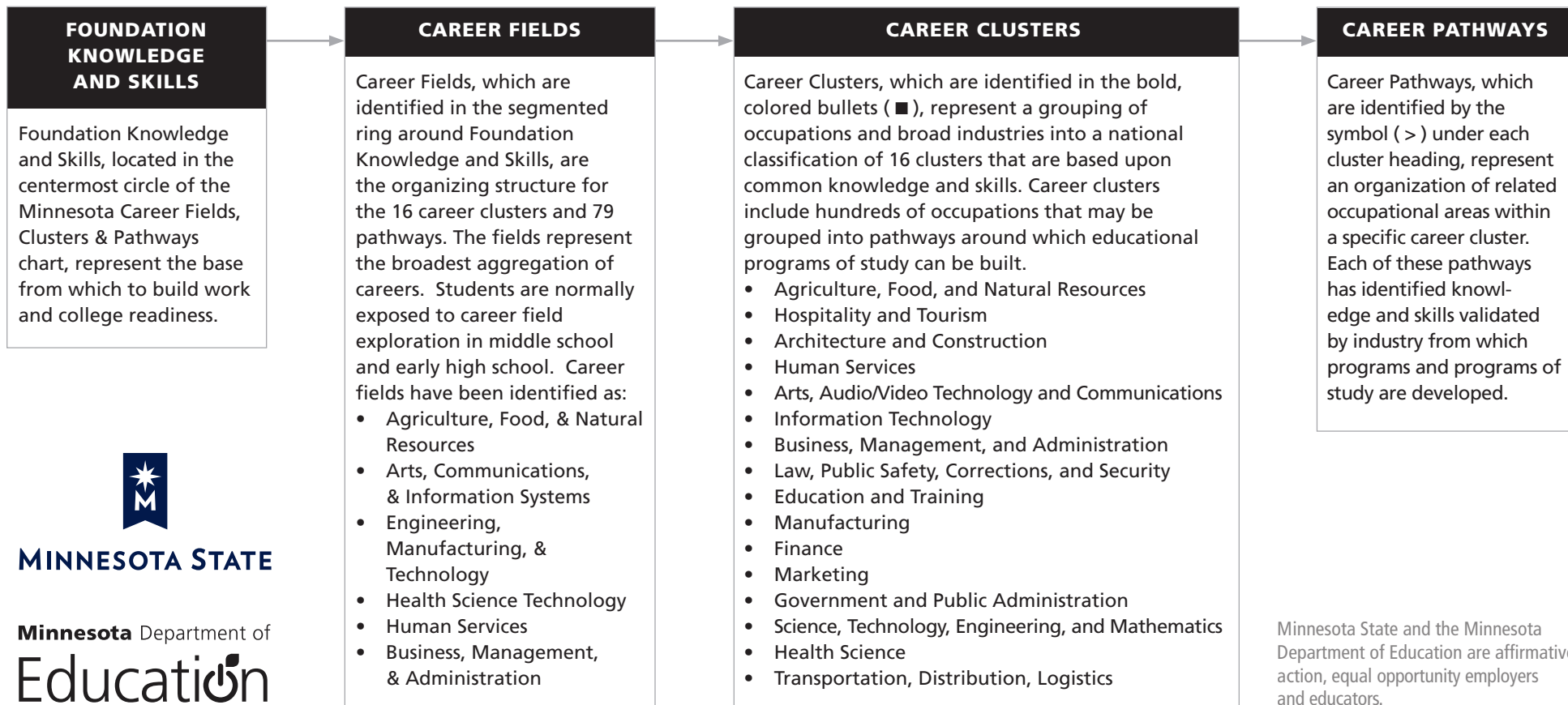
iSPEAK CTE Blog
www.mnlearningthatworks.org

Legend:
■ = Career Cluster
> = Career Pathway
Explanation provided on reverse side.

Version 2016

Minnesota Career Fields, Clusters & Pathways Chart Explanation

FOUNDATION KNOWLEDGE AND SKILLS

Foundation Knowledge and Skills, located in the centermost circle of the Minnesota Career Fields, Clusters & Pathways chart, represent the base from which to build work and college readiness.

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CAREER FIELDS

Career Fields, which are identified in the segmented ring around Foundation Knowledge and Skills, are the organizing structure for the 16 career clusters and 79 pathways. The fields represent the broadest aggregation of careers. Students are normally exposed to career field exploration in middle school and early high school. Career fields have been identified as:

- Agriculture, Food, & Natural Resources
- Arts, Communications, & Information Systems
- Engineering, Manufacturing, & Technology
- Health Science Technology
- Human Services
- Business, Management, & Administration

CAREER CLUSTERS

Career Clusters, which are identified in the bold, colored bullets (■), represent a grouping of occupations and broad industries into a national classification of 16 clusters that are based upon common knowledge and skills. Career clusters include hundreds of occupations that may be grouped into pathways around which educational programs of study can be built.

- Agriculture, Food, and Natural Resources
- Hospitality and Tourism
- Architecture and Construction
- Human Services
- Arts, Audio/Video Technology and Communications
- Information Technology
- Business, Management, and Administration
- Law, Public Safety, Corrections, and Security
- Education and Training
- Manufacturing
- Finance
- Marketing
- Government and Public Administration
- Science, Technology, Engineering, and Mathematics
- Health Science
- Transportation, Distribution, Logistics

CAREER PATHWAYS

Career Pathways, which are identified by the symbol (>) under each cluster heading, represent an organization of related occupational areas within a specific career cluster. Each of these pathways has identified knowledge and skills validated by industry from which programs and programs of study are developed.

Minnesota State and the Minnesota Department of Education are affirmative action, equal opportunity employers and educators.

Minnesota Programs of Study

The Minnesota Career Fields, Clusters & Pathways chart, on the reverse side, depicts the organizing framework of the foundation knowledge and skills, career fields, career clusters, and career pathways that Minnesota will use for developing Programs of Study (POS) in career and technical education. Once developed, learners at various levels (high school, collegiate, or workforce training level) will then be able to choose from several individual programs within a Program of Study in order to attain the specific knowledge, skills and abilities needed to pursue a career of their choice.

Programs of study are sets of aligned programs and curricula that begin at the high school level and continue through college and university certificate, diploma and degree programs. The following are some of the key elements that underlie the definition:

» Competency based curricula tied to industry expectations and skill standards;
» Sequential course offerings that provide strategic entry and exit points as needed throughout a lifetime - this leads to manageable "stepping stones" of skill building, high school graduation and postsecondary education completion;

» Flexible course and program formats convenient for learner segments;
» Course portability for seamless progression;
» Multiple entry and exit points to support continuing education, returning adults, and dislocated workers;
» Connections between high school and postsecondary education, skill progression, and career opportunities that align academic credentials with job advancement in high-skill, high-wage or high-demand occupations.

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