



Learning that works for South Dakota

CTE[™]

CTE Standards Revision



Organization of Standards

Cluster

Pathways

Courses



Organization of Standards

Cluster

- Agriculture, Food & Natural Resources

Pathways

- Plant Systems
- Animal Systems

Courses

- Fundamental Plant Science, Agriscience, Horticulture
- Fundamental Animal Science, Companion Animals, Advanced Animal Science



Revision Process

- Partnered with the National Center for College & Career Transitions (NC3T)
 - Conducted labor market analysis in Spring 2015
 - Developed consistent review process across all career clusters
 - Facilitated standards revision meetings
- Gathered feedback on current standards
 - Educators
 - Postsecondary faculty
 - Industry representatives
 - Employer survey
 - DOE Parent Advisory
- Released call for work group participants
 - Secondary CTE teachers knowledgeable of the career cluster
 - School counselors and administrators
 - Postsecondary CTE faculty knowledgeable of the career cluster
 - Business/industry or trade association members
 - Parents



Revision Process

- Workgroups met for three 8-hour days
- Purpose was to review and revise state standards for the career cluster that:
 - Are aligned with industry needs
 - Prepare learners to be successful in employment and training beyond high school
 - Establish a sequence of courses leading to completion of a Program of Study
- Day 1
 - Reviewed employer feedback, labor market needs, and related industry resources
 - Identified concepts that were new, emerging, and no longer used within the industry
 - Defined a program of study for each cluster
 - Reviewed current program of study and added new course titles, modified existing course titles, or eliminated course titles as they deemed appropriate.
 - The sequence, as developed, became the basis for course titles in the standards development process



Revision Process

- Days 2 & 3
 - Focused on revising standards
 - Group encouraged to consider the following criteria:
 - Connections to postsecondary programs
 - Relevant across the content area
 - Reflects business/industry input
 - Adaptable to change over time
 - Allows for instructional creativity
 - Aligned with relevant academic content
 - Facilitators guided work in small groups
 - Final drafts of all standards were reviewed by the entire work group to incorporate final changes and seek consensus



Industry Validation

- Final drafts of standards shared with industry partners
- Workgroups made additional revisions based on feedback
- Result is the standards presented today



Next Steps

- Solicit additional public comment
- Additional public hearings
- If approved, each set of content standards will be “unpacked” Summer 2017
 - Workgroup of teachers will identify related resources and make recommendations on dual credit courses
- Training on standards will be held statewide during 2017-18 school year
- Full implementation in 2018-19

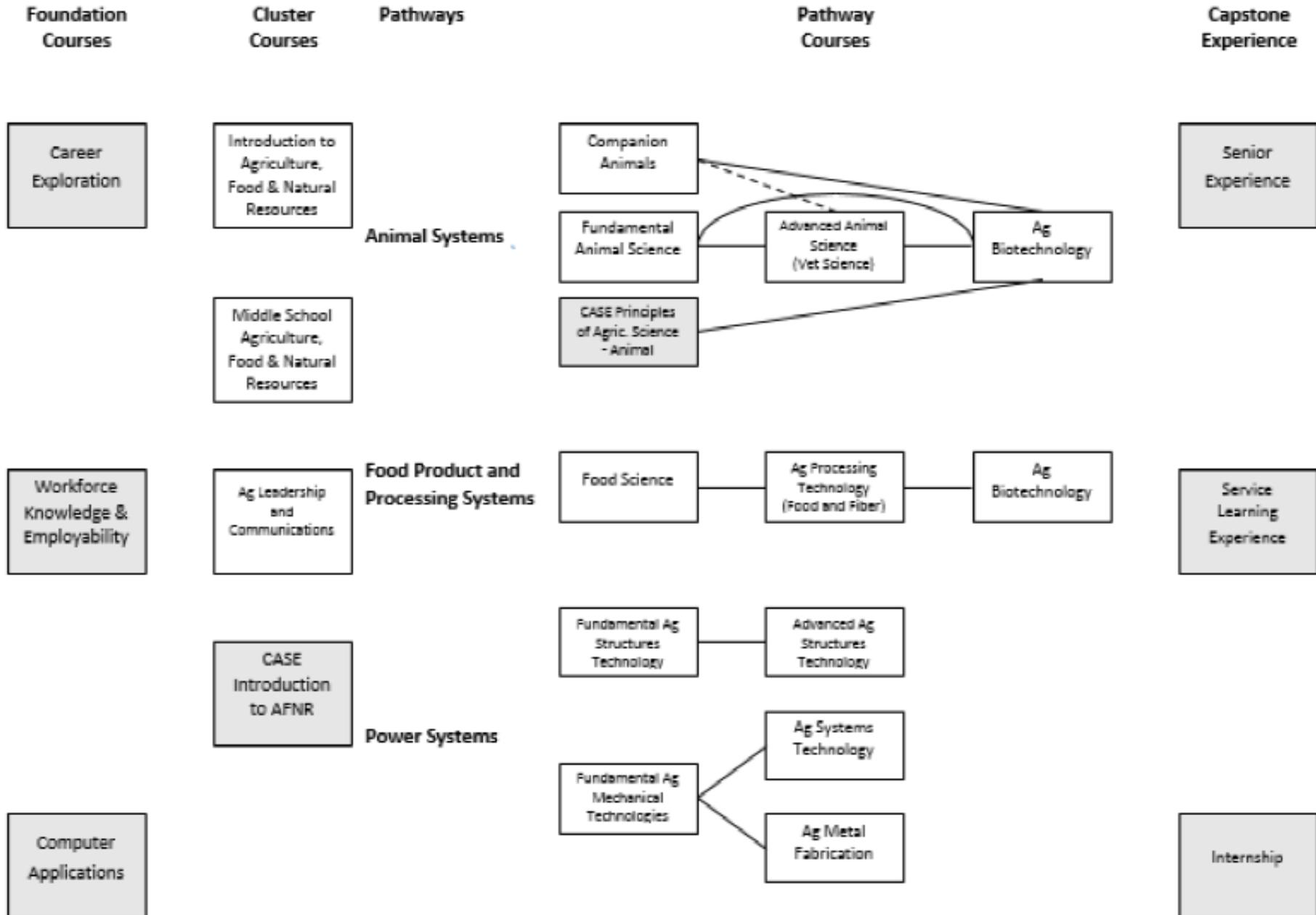


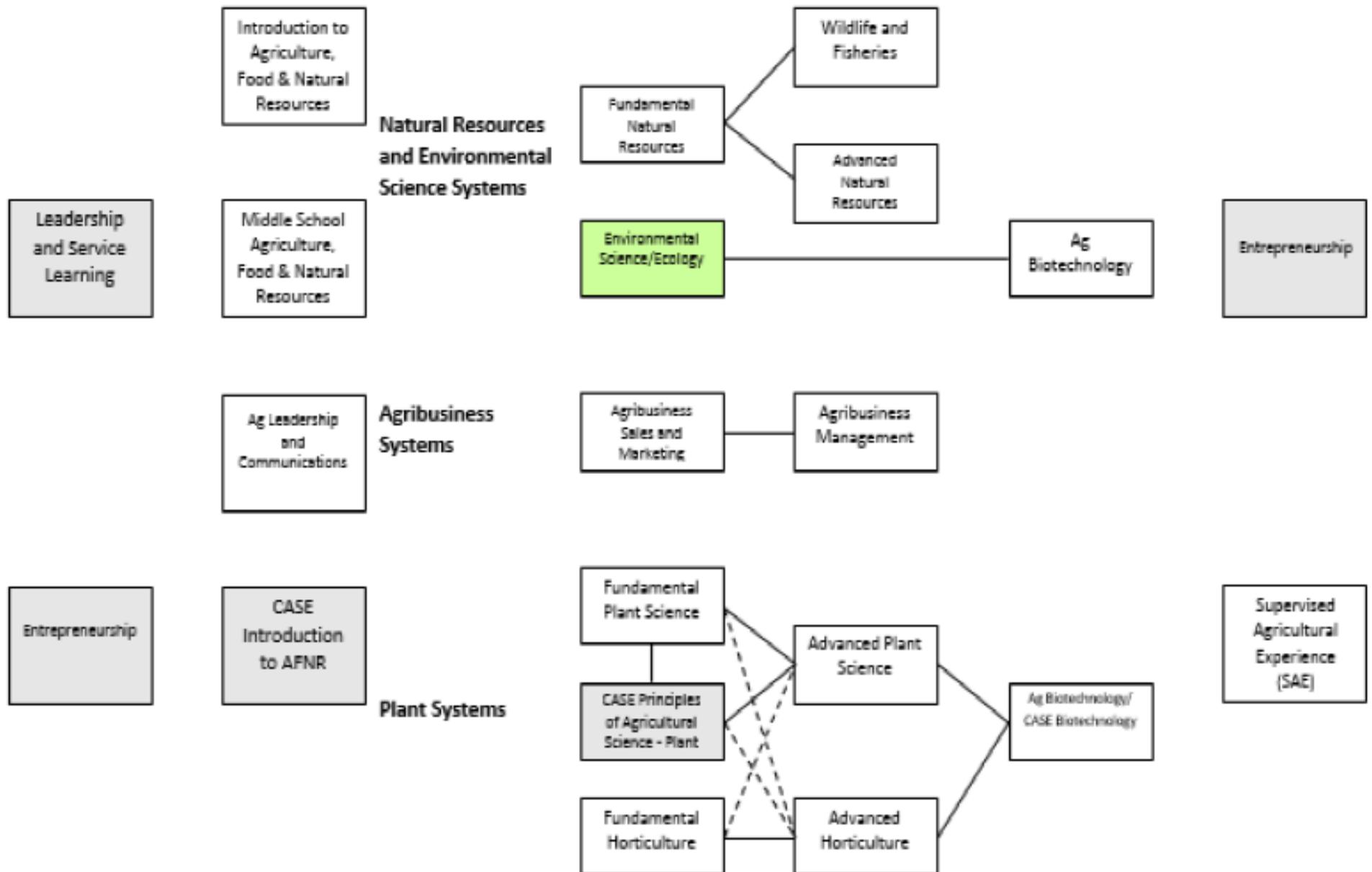
Agriculture, Food & Natural Resources

- Careers focused on the production, processing, marketing, financing, and development of agricultural commodities and resources.
- Workgroup Discussion
 - Employability Skills
 - Precision Agriculture
 - Drone Technology
 - Biotechnology
 - Global Markets



AFNR Programs of Study





Advanced Coursework

- Curriculum for Agricultural Science Education (CASE)
 - AFNR coursework integrated with math and science content
- 12 courses across five pathways
 - Pathways include sequence of four courses



Key Changes

- Added employability skills standards to all courses
- Developed Middle School course standards
- Developed Advanced Horticulture course
- Developed Advanced Natural Resources course



Industry Feedback

- Recognized regional difference in agriculture across the state
- Focus on precision agriculture
- Employability skills extremely important

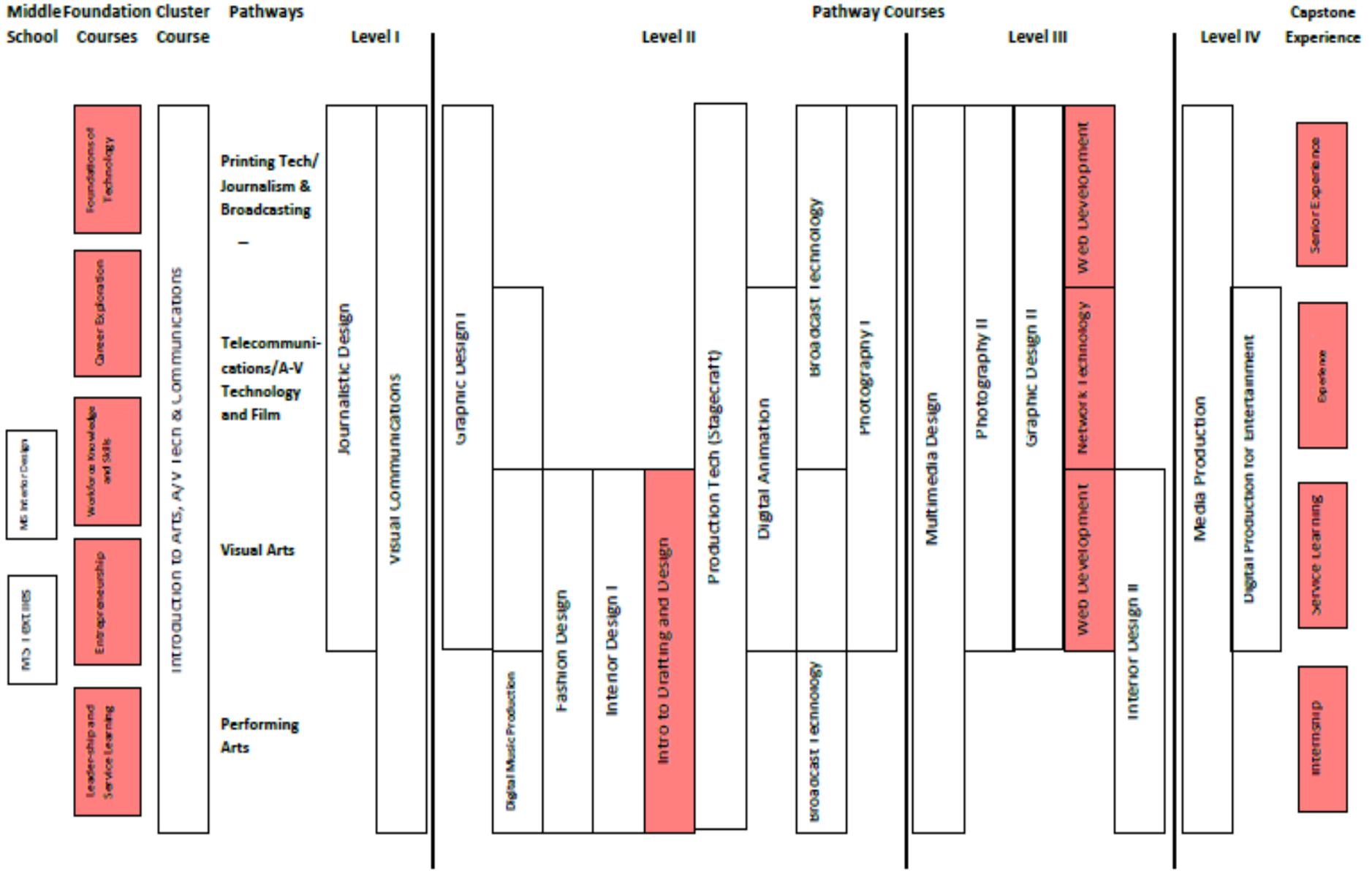


Arts, AV Technology & Communications

- Cluster focused on designing, producing, and publishing multimedia content including visual arts, journalism, and entertainment services
- Workgroup Discussion
 - Employability Skills
 - App Design
 - 3D Printing
 - Public Journalism
 - Faster Production Times
 - Branding



Arts, A/V Technology, Communications



Key Changes

- Addition of employability skills
- Addition of advanced courses in graphic design
- Addition of entertainment production course
- Desktop Publishing course discontinued



Industry Feedback

- Questions on labor market need for some courses
 - Regional differences, particularly related to production

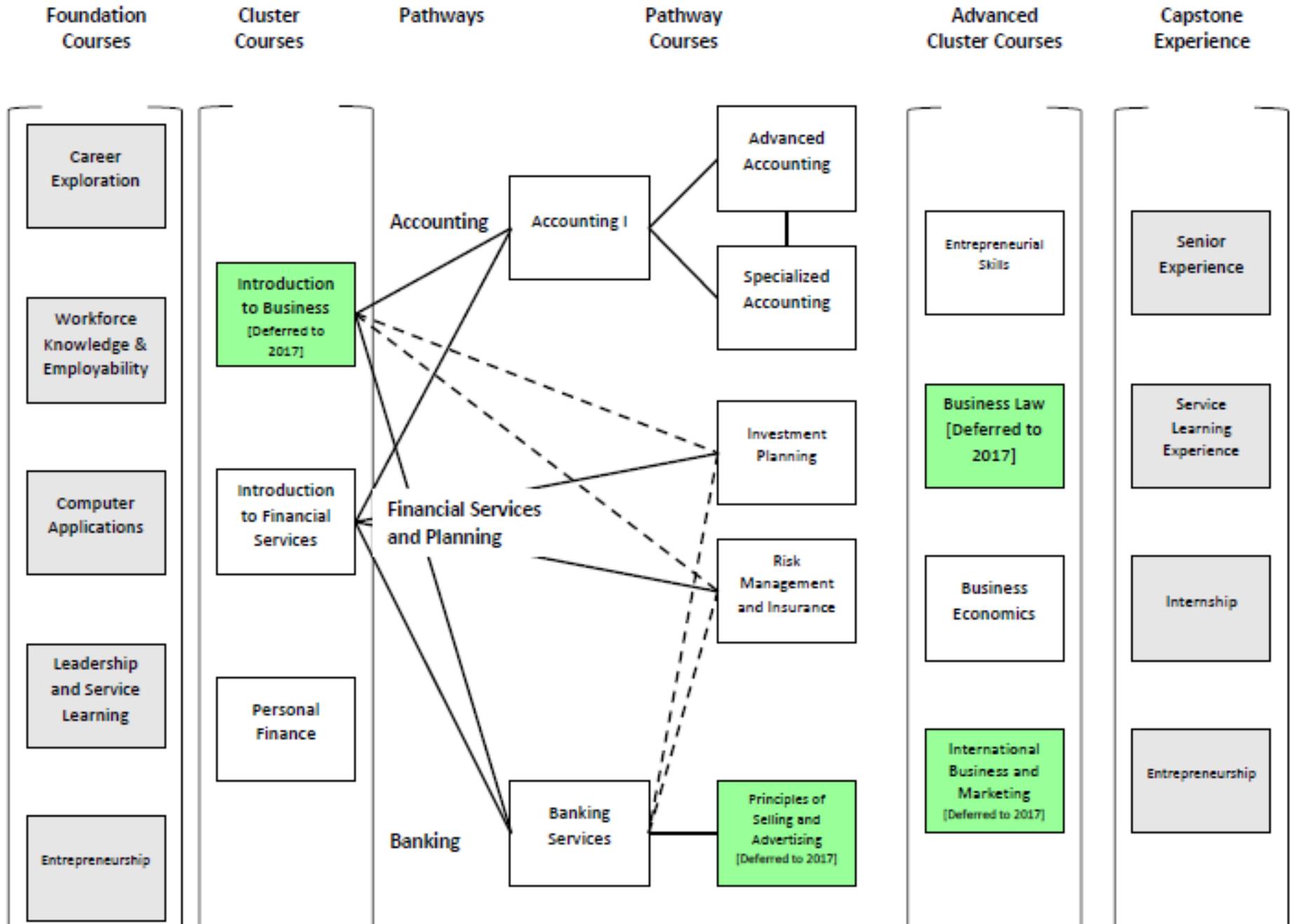


Finance

- Cluster focused on financial and investment planning, banking, insurance, and business financial management
- Workgroup Discussion
 - Confidentiality
 - Online financial services
 - Expanding from products to planning
 - Personal Finance education for customers
 - Insurance laws
 - Changing payment methods (e.g. thumbprint)



Finance Programs of Study



Key Changes

- Discontinued Business Math & Office Administration courses
- Addition of Investment Planning & Business Economics courses
- Expanded entrepreneurship coursework



Industry Feedback

- Strong support for business economics and entrepreneurial skills course
- Stressed the importance of ethics

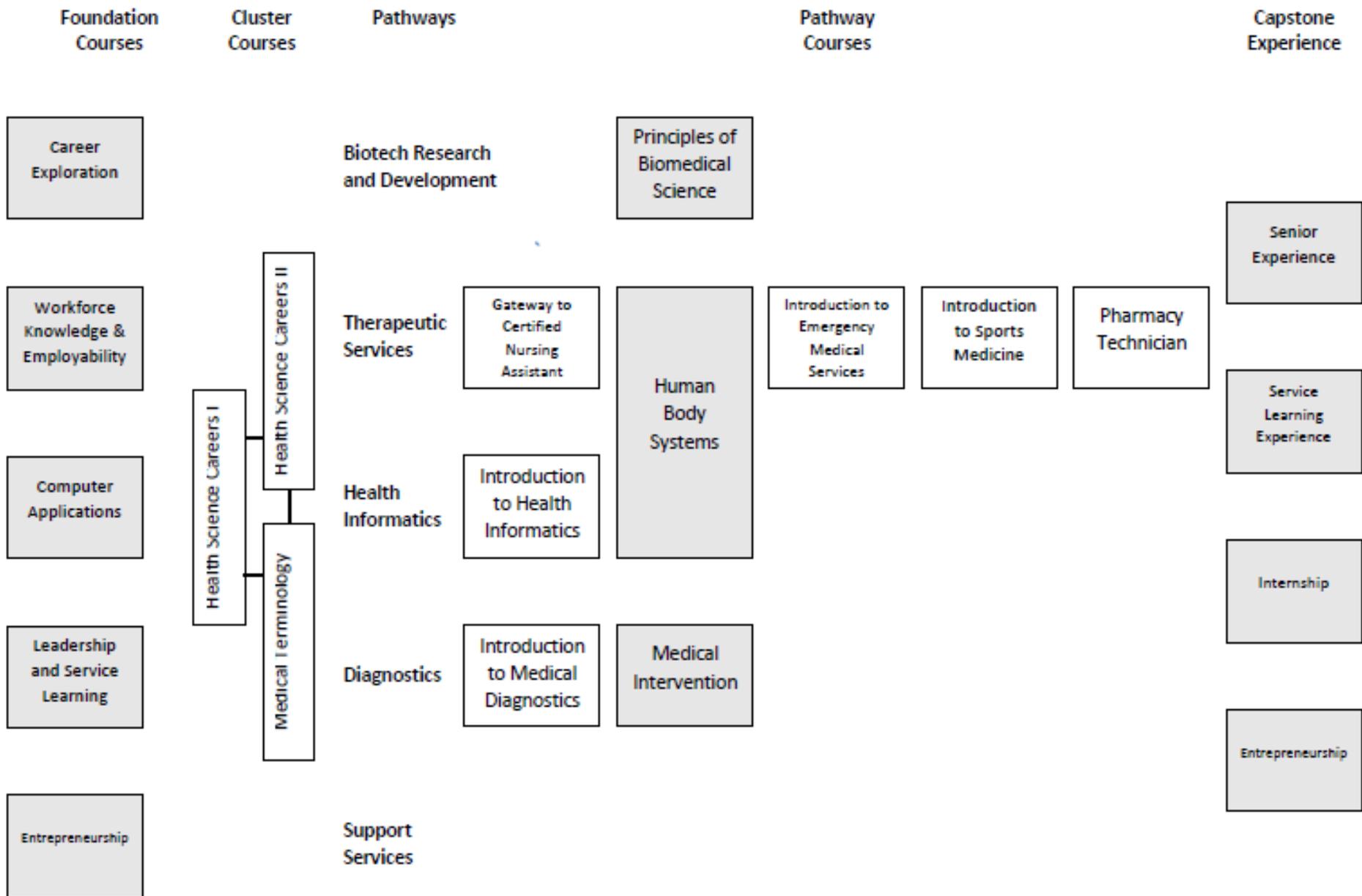


Health Science

- Cluster focused on planning, managing, and providing therapeutic services, diagnostic services, health informatics, and biotechnology research and development
- Workgroup Discussion
 - Cultural diversity
 - Evolving technology
(e.g. telemedicine, electronic health records, etc.)
 - Aging populations
 - Mental health
 - Genetics



Health Sciences Programs of Study



Advanced Coursework

- Project Lead the Way Biomedical Science
 - Sequence of four courses
 - Integrates real-world challenges into health science curriculum



Key Changes

- Addition of Introduction to Emergency Medical Services course
- Addition of Introduction to Medical Diagnostics course
- Addition of Introduction to Health Informatics course



Industry Feedback

- Important to have certification options, particularly in rural areas
 - Would like to see more certification options
 - e.g. surgical technician

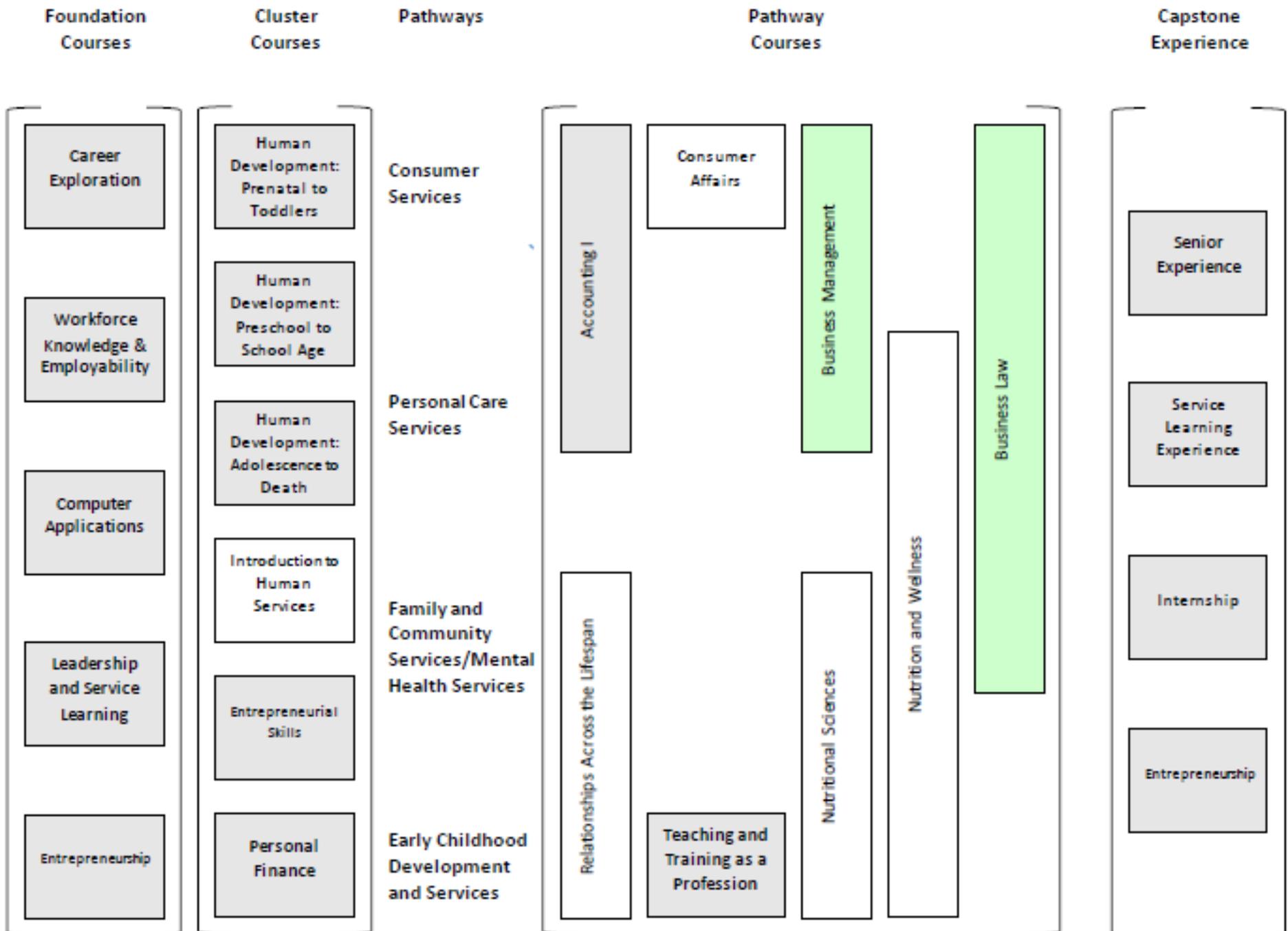


Human Services

- Cluster focused on families and human needs such as counseling and mental health services, family and community services, personal care, & consumer services
- Workgroup Discussion
 - Individualized services
 - Confidentiality
 - Access to services 24/7
 - Differences between generations
 - Emotional intelligence



Human Services Programs of Study



Key Changes

- Addition of employability skills
- Skills for Parenting course re-worked to focus more on relationships across the lifespan
- Development of a Consumer Services course



Industry Feedback

- Standards may not be appropriate for high school level
 - Better suited for college level courses
- Nutrition courses needed more chemistry content

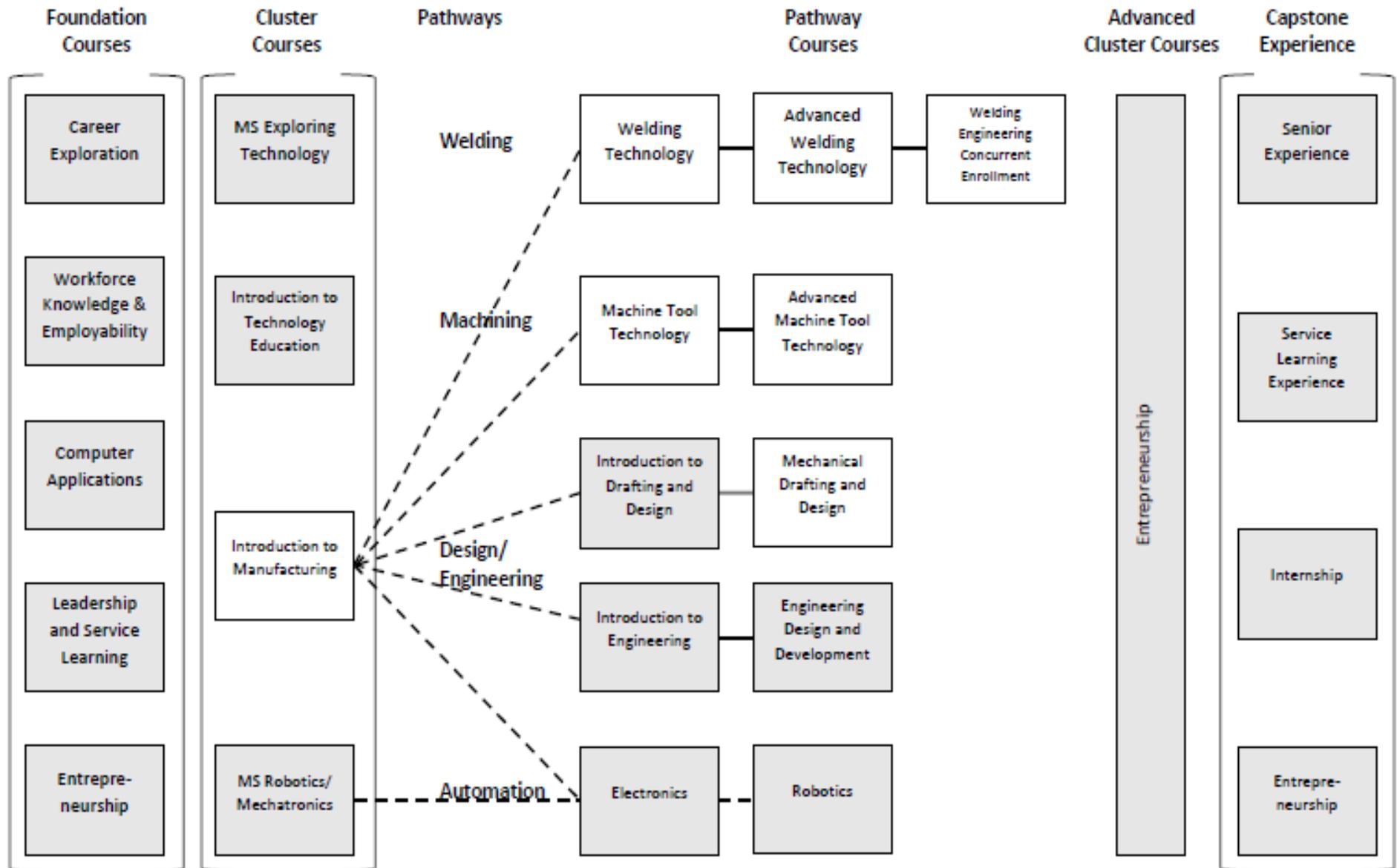


Manufacturing

- Cluster focused on the processing of materials into intermediate or final products and related support activities such as engineering
- Workgroup Discussion
 - Ethics and employability skills
 - 3D Printers
 - LEAN processes
 - Robotics
 - Safety



Manufacturing Programs of Study



Key Changes

- Addition of employability skills
- Addition of Advanced Machine Tool course



Advanced Coursework

- Concurrent Credit
 - Common introductory welding course supported by each technical institute



Industry Feedback

- Employability skills must be explicitly taught to students
- Introductory course included too much information

