

CAREER CLUSTERS

Just the Facts...For Students and Parents

“What do you want to do after high school?” If you ask a lot of high school students that question, you will get a variety of answers, but the one that appears more often than not is, “I don’t know.” Students often don’t know exactly where they will be in five years but are able to indicate whether or not post-secondary education is part of their plan. This could mean that the student will go after an associate’s degree, bachelor’s degree or certificate program, but even at that they will be unsure what they want to study. Students that decide post-secondary education is not their path then they are most often looking into the military or joining the workforce post-graduation. So how does one decide what their path will be? The Career Clusters information included in the Program of Study can help guide some of those decisions by showing you the type of courses you can take in high school to help solidify the career path you would like in the future.

What is a Career Cluster?

A **Career Cluster** is a group of related careers or jobs. Nationally, there are sixteen (16) different clusters that cover over seventy-nine (79) career pathways which lead to thousands of career choices. Outlined for you in the Program of Study are twelve (12) of those Career Clusters. The Career Clusters included are:

- Architecture & Construction
- Arts, A/V Technology & Communications
- Business Management & Administration
- Education & Training
- Finance
- Health Science
- Hospitality & Tourism
- Information Technology
- Manufacturing
- Marketing
- Science, Technology, Engineering & Mathematics
- Transportation, Distribution & Logistics

Who benefits from using the Career Clusters information?

Everyone does! The Career Cluster information can assist ALL students in making informed decisions regarding which career field they choose, whether they are going right into the workforce or are attending a 4-year university. This information will also give them an opportunity to take control of which classes they take in high school in order to reach their career goal.

What kind of information will I find on a Career Cluster page?

Each Career Cluster page will contain two grids. The far left column on the top grid contains a list of the Career Paths that are found within each Career Cluster. From there you will find Post-Secondary options as well as possible college majors within that Career Cluster. The bottom grid then outlines what required and recommended courses are available at Somersworth High School and Career Technical Center for a student to pursue a career after high school in that particular Career Cluster. Recommended courses are just that; courses students who are interested in a particular Career Cluster and path may add additional knowledge and skills to help prepare students for life after high school.

How can students use the Career Cluster information?

The Guidance Office recommends that students make appointments with their counselors to discuss a four year plan for their courses at Somersworth High School and Career Technical Center. This plan can change throughout a student’s high school career, but having an idea of what areas are of interest as well as will help to support post-secondary efforts.

EDUCATION & TRAINING CAREER CLUSTER

Career Paths	Certificate Programs	2-Year College	4-Year College
Para-Educator	Associate Teacher, Early Childhood Education	Early Care & Education: Young Children with Disabilities	Education
Occupational Therapist	Autism Education		Occupational Therapy
K-8 Classroom Teacher		Early Childhood Education	Teacher Education, Multiple Levels
High School Teacher			High School Teaching

Grade 9	Grade 10	Grade 11	Grade 12
<p>Required Courses: Survey of Lit. and Composition Integrated Math 1 Physical Earth Science World Cultures and Geography Physical Education Freshman Health</p> <p>Recommended Courses: World Languages I</p>	<p>Required Courses: World Lit. and Composition Integrated Math 2 Biology US History Fine Art (Intro to Art) Physical Education Elective Health Elective</p> <p>Recommended Courses: World Languages II Intro to Teacher Education</p>	<p>Required Courses: American Lit. and Composition Integrated Math 3 Government Economics Computer</p> <p>Recommended Courses: World Languages III Chemistry Teaching Education, Multiple Levels I Child Development</p>	<p>Required Courses: British Lit. and Composition</p> <p>Recommended Courses: Physics Math Elective Teaching Education, Multiple Levels II Child Health, Safety, and Nutrition Art, Music Movement, and Drama</p>

HEALTH SCIENCE CAREER CLUSTER

Career Paths	Certificate Programs	2-Year College	4-Year College
Biomedical Engineer	Phlebotomy	Biological Sciences	Biomedical Engineering
Forensic Scientist	Criminal Justice	Chemistry	Forensic Chemistry
Pathologist	Diagnostic Medical Sonography	Liberal Arts—Health Science	Biochemistry

Grade 9	Grade 10	Grade 11	Grade 12
<p>Required Courses: Survey of Lit. and Composition Integrated Math 1 Physical Earth Science World Cultures and Geography Physical Education Freshman Health</p> <p>Recommended Courses: World Languages I</p>	<p>Required Courses: World Lit. and Composition Integrated Math 2 Biology US History Fine Art (Intro to Art) Physical Education Elective Health Elective</p> <p>Recommended Courses: World Languages II</p>	<p>Required Courses: American Lit. and Composition Integrated Math 3 Government Economics Computer</p> <p>Recommended Courses: World Languages III Chemistry Biotechnology I Intro to Anatomy & Physiology</p>	<p>Required Courses: British Lit. and Composition</p> <p>Recommended Courses: Math Elective Biotechnology II Honors Anatomy & Physiology I Honors Anatomy & Physiology II</p>

ARTS,A/V TECHNOLOGY & COMMUNICATIONS CAREER CLUSTER

Career Paths	Certificate Programs	2-Year College	4-Year College
Web or Graphic Designer	Graphic Design for Web	Web Development & Design	Digital Arts
Multimedia Artist	Integrated Arts	Fine Arts	Studio Arts
Animator	Programming	Graphic Design/Illustrator	
Camera Operator			Film Production
Video Editor	Graphic Design for Animation	Visual Arts	Animation and Special Effects

Grade 9	Grade 10	Grade 11	Grade 12
<u>Required Courses:</u> Survey of Lit. and Composition Integrated Math 1 Physical Earth Science World Cultures and Geography Physical Education Freshman Health <u>Recommended Courses:</u> World Languages I	<u>Required Courses:</u> World Lit. and Composition Integrated Math 2 Biology US History Fine Art (Into to Art) Physical Education Elective Health Elective <u>Recommended Courses:</u> World Languages II Into to Broadcast Technology	<u>Required Courses:</u> American Lit. and Composition Integrated Math 3 Government Economics Computer <u>Recommended Courses:</u> World Languages III Chemistry Digital Media I & II Broadcast Technology I	<u>Required Courses:</u> British Lit. and Composition <u>Recommended Courses:</u> Physics Math Elective Digital Media III & IV Broadcast Technology II

INFORMATION TECHNOLOGY CAREER CLUSTER

Career Paths	Certificate Programs	2-Year College	4-Year College
Computer Programmer	IT Tech Support	Computer Networking	Information Technology
Graphic Designers	Network Administration	Computer Technology	Game and Interactive Media Design
Computer System Analysts	Computer Info Systems	Computer Service	Computer Science

Grade 9	Grade 10	Grade 11	Grade 12
<u>Required Courses:</u> Survey of Lit. and Composition Integrated Math 1 Physical Earth Science World Cultures and Geography Physical Education Freshman Health <u>Recommended Courses:</u> World Languages I	<u>Required Courses:</u> World Lit. and Composition Integrated Math 2 Biology US History Fine Art (Into to Art) Physical Education Elective Health Elective <u>Recommended Courses:</u> World Languages II Computer Education	<u>Required Courses:</u> American Lit. and Composition Integrated Math 3 Government Economics Computer <u>Recommended Courses:</u> World Languages III Chemistry Computer/Network Technician I	<u>Required Courses:</u> British Lit. and Composition <u>Recommended Courses:</u> Physics Math Elective Computer/Network Technician II

HOSPITALITY & TOURISM CAREER CLUSTER

Career Paths	Certificate Programs	2-Year College	4-Year College
Chef	Food Service Production	Culinary Arts & Nutrition	Nutrition
Pastry Chef	Pastry Arts	Baking and Pastry Arts	Culinary Arts
Restaurant Manager	Institutional Food Service	Restaurant Management	Business Administration— Management
Hospitality Manager	Event/Conference Management	Hospitality Management	Hospitality Management

Grade 9	Grade 10	Grade 11	Grade 12
Required Courses: Survey of Lit. and Composition Integrated Math 1 Physical Earth Science World Cultures and Geography Physical Education Freshman Health Recommended Courses: World Languages I	Required Courses: World Lit. and Composition Integrated Math 2 Biology US History Fine Art (Into to Art) Physical Education Elective Health Elective Recommended Courses: World Languages II	Required Courses: American Lit. and Composition Integrated Math 3 Government Economics Computer Recommended Courses: World Languages III Chemistry Culinary Arts I Accounting I (Rochester)	Required Courses: British Lit. and Composition Recommended Courses: Physics Math Elective Culinary Arts II Accounting II (Rochester)

MARKETING CAREER CLUSTER

Career Paths	Certificate Programs	2-Year College	4-Year College
Marketing	Marketing	Business Studies	Marketing
Advertising Sales Agent	Business Communications		Advertising
Buyers and Purchasers		Fashion Merchandising	Fashion Merchandising
Management Consultants	Business Management	Digital Communications	Communications

Grade 9	Grade 10	Grade 11	Grade 12
Required Courses: Survey of Lit. and Composition Integrated Math 1 Physical Earth Science World Cultures and Geography Physical Education Freshman Health Recommended Courses: World Languages I Fashion Merchandising	Required Courses: World Lit. and Composition Integrated Math 2 Biology US History Fine Art (Into to Art) Physical Education Elective Health Elective Recommended Courses: World Languages II Sports Marketing	Required Courses: American Lit. and Composition Integrated Math 3 Government Economics Computer Recommended Courses: World Languages III Chemistry Marketing I	Required Courses: British Lit. and Composition Recommended Courses: Physics Math Elective Marketing II

BUSINESS MANAGEMENT AND ADMINISTRATION CAREER CLUSTER

Career Paths	Certificate Programs	2-Year College	4-Year College
Human Resources Manager	Human Resource Management	Business Administration	Human Resources Management
Store Manager	Entrepreneurship	Office Management	Retailing, Fashion Merchandising
Compensation Analyst	Bookkeeping	Mathematics and Science	Economics—Financial & Managerial Economics
Small Business Owner	Small Business Management	Entrepreneurship	Franchising

Grade 9	Grade 10	Grade 11	Grade 12
<u>Required Courses:</u> Survey of Lit. and Composition Integrated Math 1 Physical Earth Science World Cultures and Geography Physical Education Freshman Health <u>Recommended Courses:</u> World Languages I	<u>Required Courses:</u> World Lit. and Composition Integrated Math 2 Biology US History Fine Art (Into to Art) Physical Education Elective Health Elective <u>Recommended Courses:</u> World Languages II	<u>Required Courses:</u> American Lit. and Composition Integrated Math 3 Government Economics Computer <u>Recommended Courses:</u> World Languages III Chemistry Accounting I (Rochester)	<u>Required Courses:</u> British Lit. and Composition <u>Recommended Courses:</u> Physics Math Elective Accounting II (Rochester)

FINANCE CAREER CLUSTER

Career Paths	Certificate Programs	2-Year College	4-Year College
Cost Estimators	Accounting	Finance	Business Administration
Accountant	Finance	Business Administration	Accounting
Tax Examiner	Finance	Liberal Arts—Mathematics	Economics
Real Estate Appraiser		Real Estate	Business Management

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SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS CAREER CLUSTER

Career Paths	Certificate Programs	2-Year College	4-Year College
Mechanical Engineer	Advanced Machine Tool Tech	Advanced Manufacturing and Process	Mechanical Engineering
Electrical Engineer	Electrical Technology	Electrical Power and Control Tech	Electrical Engineering
Architect	Computer Aided Design—Architectural Construction		Architectural Engineering
Computer Hardware Engineer	Numerical Control Programming	Robotics Technology	Aerospace Engineering

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ARCHITECTURE AND CONSTRUCTION CAREER CLUSTER

Career Paths	Certificate Programs	2-Year College	4-Year College
Facilities Manager	Building Construction Technology	Facilities Management	Facilities Management
Industrial Manager	Construction Drafting	Mathematics and Science	Industrial Engineering
Builder	Computer-Aided Design/Architectural Concentration	Building Construction Technology	Business Management—Entrepreneurial Studies
Architect		Civil Engineering Technology	Architecture

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Required Courses: Survey of Lit. and Composition Integrated Math 1 Physical Earth Science World Cultures and Geography Physical Education Freshman Health Recommended Courses: World Languages I Introduction to Engineering Design	Required Courses: World Lit. and Composition Integrated Math 2 Biology US History Fine Art (Into to Art) Physical Education Elective Health Elective Recommended Courses: World Languages II Woodworking Tech I Woodworking Tech II	Required Courses: American Lit. and Composition Integrated Math 3 Government Economics Computer Recommended Courses: World Languages III Chemistry Basic Home Repair Building Trades I	Required Courses: British Lit. and Composition Recommended Courses: Physics Math Elective Building Trades II

TRANSPORTATION, DISTRIBUTION & LOGISTICS CAREER CLUSTER

Career Paths	Certificate Programs	2-Year College	4-Year College
Automotive Technician	Automotive Technology	Automotive Technology (specific brand, i.e. Dodge)	Business Administration— Entrepreneurial Studies
Service Manager	Entrepreneurship	Service Management	Business Administration— Management
Insurance Adjuster	Insurance Industry	Collision Repair Technology	Insurance
Automotive Engineer		Mobile Equipment Technology	Mechanical Engineering

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MANUFACTURING CAREER CLUSTER

Career Paths	Certificate Programs	2-Year College	4-Year College
Industrial Machinery Repairer	Advanced Composites Manu- facturing	Advanced Manufacturing and Process	Mechanical Engineering
Welder		Advanced Welding	
Ironworker	Pipe Welding	Welding Technology	
Civil Engineer		Civil Engineering Tech	Civil Engineering

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