



Learning that works
for North Carolina

Cluster Transition Document

The intent of this document is to bridge new courses to the existing cluster rules for freshmen, sophomores, juniors, and seniors who entered high school under the 2009 rules (as revised in 2010). Please use this table as a frame of reference for students entering high school each academic year:

Academic Year Student Entered High School	Use This Document
2015-16	Clusters Document in Excel, August 2014
2014-15	Clusters Document in Excel, August 2014
2013-14	Clusters Document in Excel, August 2014
2012-13	Clusters Document in Excel, August 2014
2011-12	Cluster Transition
2010-11	Cluster Transition
2009-10	Cluster Transition
2008-09	Cluster Transition

Career and College Promise CTE pathway courses are added as Foundational Courses throughout the clusters. This was the result of legislative change that requires a more concentrated course of study than we had in the past. Prior to 2013-14, community college course numbers were generic with the 8598 course number used to indicate level one courses and 8598 used to indicate level two courses. It is a local decision as to which course should be level one and level two. Beginning with Power School implementation in 2013-14, each community college course should receive a unique code and assignment to a specific cluster. Schools should review transcripts and may be required to perform overrides where generic community college course codes were used and where flexibility is needed to designate a level two course.

This document contains course codes assigned prior to 2013-14. A cross walk to the new course codes can be found in the CTE Status of Curriculum and Assessment.

North Carolina Career Cluster Agriculture, Food and Natural Resources

Related Pathways

Agribusiness Systems
Animal Systems
Environmental Service Systems
Plant Systems
Food Products and Processing Systems
Power, Structural and Technical Systems

CTE Program Areas	CONCENTRATION (Four total credits required)		
	Foundational Courses		Career Cluster Enhancement Courses
AGRICULTURAL EDUCATION	6810 Agriscience Applications 6811 Agriculture Production I 6812* Agriculture Production II 6821 Animal Science I 6822* Animal Science II 6823* Animal Science II – Small Animals 6825 Equine Science I 6826* Equine Science II 6831 Agricultural Mechanics I 6832* Agricultural Mechanics II 6833* Agricultural Mechanics II – Small Engines 6911 Agribusiness Management Trends & Issues I 6912* Agribusiness Management Trends & Issues II AA41 Veterinary Assisting	6841 Horticulture I 6842* Horticulture II 6843* Horticulture II – Turf Grass Management 6851 Environmental & Natural Resources Studies I 6852* Environmental & Natural Resources Studies II 6871 Biotechnology & Agriscience Research I 6872* Biotechnology & Agriscience Research II 6882* Horticulture II – Landscaping Construction 6896 Agricultural Education Department of Labor Registered Apprenticeship 8596 CTE Apprenticeship 6897 Agricultural Education Cooperative Education 6899* Agricultural Education Advanced Studies 8595 CTE Advanced Studies	6898 Agricultural Education Internship 8597 CTE Internship 6998 University – Agricultural Education 6999 Community College – Agricultural Education
BUSINESS AND INFORMATION TECHNOLOGY EDUCATION	8510 Project Management I 8511* Project Management II-Global 8512* Project Management II-Technology 8513 Project Management III	8599* CTE Career and College Promise II 8598 CTE Career and College Promise I	6200/6600 Principles of Business & Finance 8721 Principles of Business & Finance 6215 Business Law 6225 Business Management & Applications 8710 Business Management ^ 6227/6640 International Baccalaureate Business Management 6311 Accounting I 6411 Computer Applications I 6514 Digital Communications Systems 6417 Microsoft Word and PowerPoint ^ 6418 Microsoft SharePoint ^ 6419 Microsoft Excel and Access ^ 6145 Career Management
CAREER DEVELOPMENT			
FAMILY AND CONSUMER SCIENCES EDUCATION	7015 Teen Living 8726 Personal Finance 7045 Foods I – Fundamentals 7046* Foods II – Advanced Enterprise 7075* Foods II – Food Technology	7196 Family & Consumer Sciences Education Department of Labor Registered Apprenticeship 8596 CTE Apprenticeship 7197 Family & Consumer Sciences Education Cooperative Education 7199* Family & Consumer Sciences Education Advanced Studies 8595 CTE Advanced Studies	7120 Introduction to Culinary Arts & Hospitality 7086 Personal Finance (moved to Foundational) 7098 University – Family & Consumer Sciences Education 7099 Community College – Family & Consumer Sciences Education 7198 Family & Consumer Sciences Education Internship 8597 CTE Internship
HEALTH OCCUPATIONS			7200 Biomedical Technology 7270 PLTW Principles of Biomedical Sciences 235/6615 Small Business Entrepreneurship 8716 Entrepreneurship I 6621 Marketing 6626 Strategic Marketing
MARKETING EDUCATION			8020 Introduction to Engineering and Design 8110 Fundamentals of Technology 8210 Technology Engineering & Design 7511 Automotive Service Technology I 7661 Welding Technology I 7921 Drafting I
TECHNOLOGY EDUCATION			
TRADE AND INDUSTRIAL EDUCATION			

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North Carolina Career Cluster Architecture and Construction

Related Pathways
Design and Pre-Construction
Construction
Maintenance and Operations

CTE Program Areas	CONCENTRATION (Four total credits required)	
	Foundational Courses	
AGRICULTURAL EDUCATION		6831 Agricultural Mechanics I
BUSINESS AND INFORMATION TECHNOLOGY EDUCATION	8510 Project Management I 8511* Project Management II-Global 8512* Project Management II-Technology 8513 Project Management III	8599* CTE Career and College Promise II 8598 CTE Career and College Promise I
CAREER DEVELOPMENT		6200/6600 Principles of Business & Finance 8721 Principles of Business & Finance 6215 Business Law 6225 Business Management & Applications 8710 Business Management ^ 6227/6640 International Baccalaureate Business Management 6414 Computer Applications I 6417 Microsoft Word and PowerPoint ^ 6418 Microsoft SharePoint ^ 6419 Microsoft Excel and Access ^ 6145 Career Management
FAMILY AND CONSUMER SCIENCES EDUCATION	7015 Teen Living 7055 Housing & Interiors I 7151 Interior Design I 7056* Housing & Interiors II 7152* Interior Design II 7153 Interior Applications	7196 Family & Consumer Sciences Education-Department of Labor-Registered Apprenticeship 8596 CTE Apprenticeship 7197 Family & Consumer Sciences Education-Cooperative Education 7199* Family & Consumer Sciences Education-Advanced Studies 8595 CTE Advanced Studies
MARKETING EDUCATION		7086 Personal Finance 8726 Personal Finance 7098 University Family & Consumer Sciences Education 7099 Community College Family & Consumer Sciences Education 7198 Family & Consumer Sciences Education-Internship 8597 CTE Internship
TECHNOLOGY EDUCATION		235/6615 Small Business-Entrepreneurship 8716 Entrepreneurship I ^ 8020 PLTW Introduction to Engineering 8021 PLTW Principles of Engineering 8140 Fundamentals of Technology 8210 Technology Engineering and Design 8144 Structural Systems
TRADE AND INDUSTRIAL EDUCATION	7400 Introduction to Trade & Industrial Education 7700 Core & Sustainable Construction 7621 Furniture & Cabinetmaking I-Cabinetmaking I 7622* Furniture & Cabinetmaking II-Cabinetmaking II 7623 Cabinetmaking III 7661 Welding Technology I 7711 Masonry I 7712* Masonry II 7713 Masonry III 7721 Construction Technology I-Carpentry I 7722* Construction Technology II-Carpentry II 7723 Construction Technology III-Carpentry III	7741 Electrical Trades I 7742* Electrical Trades II 7743 Electrical Trades III 7921 Drafting I 7962* Drafting II – Architectural 7963 Drafting III – Architectural 7996 Trade & Industrial Education-Department of Labor-Registered Apprenticeship 8596 CTE Apprenticeship 7997 Trade & Industrial Education-Cooperative Education 7999* Trade & Industrial Education-Advanced Studies 8595 CTE Advanced Studies
		7898 University Trade & Industrial Education 7899 Community College Trade & Industrial Education 7998 Trade & Industrial Education-Internship 8597 CTE Internship

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North Carolina Career Cluster

Arts, Audio/Video Technology and Communications

Related Pathways

- Audio and Video Technology and Film
- Journalism and Broadcasting
- Performing Arts
- Printing Technology
- Telecommunications
- Visual Arts

CTE Program Areas	CONCENTRATION (Four total credits required)	
	Foundational Courses	Career Cluster Enhancement Courses
BUSINESS AND INFORMATION TECHNOLOGY EDUCATION	6414 Multimedia & Webpage Design 6417 Microsoft Word and PowerPoint ^ 8510 Project Management I 8511* Project Management II-Global 8512* Project Management II-Technology 8513 Project Management III	8599* CTE Career and College Promise II 8598 CTE Career and College Promise I
CAREER DEVELOPMENT		
FAMILY AND CONSUMER SCIENCES EDUCATION	7015 Teen Living 7035 Apparel and Textile Production Development I 7036* Apparel and Textile Production Development-II Enterprise	7196 Family & Consumer Sciences Education Department of Labor Registered Apprenticeship 8596 CTE Apprenticeship 7197 Family & Consumer Sciences Education Cooperative Education 7199* Family & Consumer Sciences Education Advanced Studies 8595 CTE Advanced Studies
MARKETING EDUCATION		
TECHNOLOGY EDUCATION	8221* Game Art & Design 8222 Advanced Game Art & Design	
TRADE AND INDUSTRIAL EDUCATION	7400 Introduction to Trade & Industrial Education 7821 Trade & Industrial Cooperative Training I 7901/8006 Scientific & Technical Visualization I 7911 Printing Graphics I 7912* Printing Graphics II 7915 Introduction to Graphic Communications 7916* Digital File Preparation 7918 Print Advertising and Design 7921 Drafting I 7993 Adobe Visual Design ^ 7993 Adobe Digital Design * ^ 1133 Adobe Video Design ^	7935 Digital Media I 7936* Advanced Digital Media II 7996 Trade & Industrial Education Department of Labor Registered Apprenticeship 8596 CTE Apprenticeship 7997 Trade & Industrial Education Cooperative Education 7999* Trade & Industrial Education Advanced Studies 8595 CTE Advanced Studies

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North Carolina Career Cluster

Business Management and Administration

Related Pathways

Administrative Support
Business Information Technology
General Management
Human Resources Management
Operations Management

CTE Program Areas	CONCENTRATION (Four total credits required)			
	Foundational Courses		Career Cluster Enhancement Courses	
BUSINESS AND INFORMATION TECHNOLOGY EDUCATION	6200/6600	Principles of Business & Finance	6514 Digital Communication Systems	6341 Networking I- Network Administration I 6415 eCommerce I 6418 Microsoft SharePoint ^ 6498 University Business & Marketing 6499 Community College Business & Marketing 6598 Business & Information Technology Education Internship 8726 Personal Finance 8597 CTE Internship
	8721	Principles of Business & Finance	6419 MS Excel & Access	
	6215*	Business Law	6596 Business & Information Technology Education Department of Labor Registered Apprenticeship	
	6225*	Business Management & Applications	8596 CTE Apprenticeship	
	8710*	Business Management	6597 Business & Information Technology Education Cooperative Education	
	6227/6640	International Baccalaureate Business Management	6599* Business & Information Technology Education Advanced Studies	
	6235/6615	Small Business Entrepreneurship	8595 CTE Advanced Studies	
	8716*	Entrepreneurship I ^	8510 Project Management I	
	8717	Entrepreneurship II ^	8511* Project Management II-Global	
	6311	Computerized Accounting I	8512* Project Management II-Technology	
	6411	Computer Applications I	8513 Project Management III	
	6417	Microsoft Word and PowerPoint		
	6412	Computer Applications II*		
	6414*	Multimedia and Webpage Design (completer for all students graduating 2012-2013)		
CAREER DEVELOPMENT		8599* CTE Career and College Promise II 8598 CTE Career and College Promise I	6145 Career Management	
MARKETING EDUCATION	MU81 Virtual Enterprise I		6626 Strategic Marketing	
TRADE AND INDUSTRIAL EDUCATION			7935 Digital Media I 7980 Networking I 7980 Network Engineering Technology I 7991 Computer Engineering Technology I	

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North Carolina Career Cluster **Finance**

Related Pathways

**Accounting
Banking Services
Business Finance
Insurance
Securities and Investments**

CTE Program Areas	CONCENTRATION (Four total credits required)		
	Foundational Courses		Career Cluster Enhancement Courses
BUSINESS AND INFORMATION TECHNOLOGY EDUCATION	6200/6600 Principles of Business & Personal Finance 8721 Principles of Business & Finance 6215 Business Law 6235/6615 Small Business Entrepreneurship 8716 Entrepreneurship I ^ 6311 Accounting I 6312* Accounting II 6419 Microsoft Excel and Access ^ 8726 Personal Finance 6316* Business Financial Planning	6597 Business & Information Technology Education Cooperative Education 6599* Business & Information Technology Education Advanced Studies 8595 CTE Advanced Studies 8599* CTE Career and College Promise II 8598 CTE Career and College Promise I	6225 Business Management & Applications 8710 Business Management 6227/6640 International Baccalaureate Business Management 6411 Computer Applications I 6417 Microsoft Word and PowerPoint ^ 6418 Microsoft SharePoint ^ 6498 University Business & Marketing 6499 Community College Business & Marketing 6596 Business & Information Technology Education Department of Labor Registered Apprenticeship 8510 Project Management I 8596 CTE Apprenticeship 6598 Business & Information Technology Education Internship 8597 CTE Internship
	Partnering opportunities: NAF Academy of Finance courses can meet requirements for Foundational courses in this cluster		
CAREER DEVELOPMENT			6145 Career Management
FAMILY AND CONSUMER SCIENCES EDUCATION			7015 Teen Living 7086 Personal Finance
MARKETING EDUCATION			MU81 Virtual Enterprise I

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North Carolina Career Cluster

Health Science

Related Pathways

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

CTE Program Areas	CONCENTRATION (Four total credits required)	
	Foundational Courses	Career Cluster Enhancement Courses
AGRICULTURAL EDUCATION		6871 Biotechnology & Agriscience Research I
BUSINESS AND INFORMATION TECHNOLOGY EDUCATION		6200/6600 Principles of Business & Finance 8721 Principles of Business & Finance 6215 Business Law 6225 Business Management & Applications 8710 Business Management 6227/6640 International Baccalaureate Business Management 6311 Accounting I 6411 Computer Applications I 6514 Digital Communication Systems 6417 Microsoft Word and PowerPoint ^ 6418 Microsoft SharePoint ^ 6419 Microsoft Excel and Access ^
CAREER DEVELOPMENT		6145 Career Management
FAMILY AND CONSUMER SCIENCES EDUCATION		7045 Foods I – Fundamentals 7086 Personal Finance 8726 Personal Finance
HEALTH OCCUPATIONS	7200 Biomedical Technology HB11 Biomedical Technology I HB12* Biomedical Technology II 7210 Health Team Relations 7211 Allied Health Sciences-I 7240 Health Science I 7242* Health Science II 7212* Allied Health Sciences II w/ Nurse Aide 7221 Medical Sciences I 7222* Medical Sciences II 7243 Nursing Fundamentals 8596 CTE Apprenticeship 7299* Health Sciences Advanced Studies 8595 CTE Advanced Studies	7232* Pharmacy Technician 7244 Fundamentals of Gerontology 7245 Public Health Fundamentals <u>Project Lead the Way (PLTW)</u> 7270 PLTW Principles of Biomedical Sciences 7271* PLTW Human Body Systems 7272 PLTW Medical Intervention 7273 PLTW Science Research 8599* CTE Career and College Promise II 8598 CTE Career and College Promise I 7296 Health Sciences Department of Labor Registered Apprenticeship
MARKETING EDUCATION		235/6615 Small Business Entrepreneurship 8716 Entrepreneurship I 6621 Marketing
TECHNOLOGY EDUCATION		7904/8006 Scientific & Technical Visualization I
TRADE AND INDUSTRIAL EDUCATION	7839 Emergency Medical Technology I ^ 7840 Emergency Medical Technology II * ^	

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North Carolina Career Cluster Hospitality and Tourism

Related Pathways

**Lodging
Travel and Tourism
Recreation, Amusements and Attractions
Restaurants and Food and Beverage
Service**

CTE Program Areas	CONCENTRATION (Four total credits required)		
	Foundational Courses		Career Cluster Enhancement Courses
BUSINESS AND INFORMATION TECHNOLOGY EDUCATION	8510 Project Management I 8511* Project Management II-Global 8721 Principles of Business & Finance		6200/6600 Principles of Business & Finance 8724 Principles of Business & Finance 6215 Business Law 6225 Business Management & Applications 8710 Business Management 6227/6640 International Baccalaureate Business Management 6411 Computer Applications I 6514 Digital Communications Systems 6417 Microsoft Word and PowerPoint ^ 6418 Microsoft SharePoint ^ 6419 Microsoft Excel and Access ^ 6145 Career Management
CAREER DEVELOPMENT			
FAMILY AND CONSUMER SCIENCES EDUCATION	7015 Teen Living 7045 Foods I – Fundamentals 7046* Foods II - Enterprise 7120 Introduction to Culinary Arts & Hospitality 7121 Culinary Arts & Hospitality I 7122* Culinary Arts & Hospitality II 7171 ProStart I 7172* ProStart II	7196 Family & Consumer Sciences Education Department of Labor Registered Apprenticeship 8596 CTE Apprenticeship 7197 Family & Consumer Sciences Education Cooperative Education 7199* Family & Consumer Sciences Education Advanced Studies 8595 CTE Advanced Studies	7086 Personal Finance 8726 Personal Finance 7098 University – Family & Consumer Sciences Education 7099 Community College – Family & Consumer Sciences Education 7198 Family & Consumer Sciences Education Internship 8597 CTE Internship
MARKETING EDUCATION	6621 Marketing 6645* Travel/Tourism & Recreation Marketing Hospitality and Tourism 6670 Sports & Entertainment Marketing I 6671* Sports & Entertainment Marketing II 8599* CTE Career and College Promise II 8598 CTE Career and College Promise I	6696 Marketing Education Department of Labor Registered Apprenticeship 8596 CTE Apprenticeship 6697 Marketing Education Cooperative Education 6699* Marketing Education Advanced Studies 8595 CTE Advanced Studies	6235/6615 Small Business Entrepreneurship 8716 Entrepreneurship I ^ 6498 University – Business & Marketing 6499 Community College – Business & Marketing 6698 Marketing Education Internship 8597 CTE Internship
	Partnering opportunities: NAF Academy of Hospitality and Tourism courses can meet requirements for Foundational courses in this cluster.		

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North Carolina Career Cluster

Human Services

Related Pathways

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

CTE Program Areas	CONCENTRATION (Four total credits required)		
	Foundational Courses	Career Cluster Enhancement Courses	
BUSINESS AND INFORMATION TECHNOLOGY EDUCATION	8721 Principles of Business & Finance	6200/6600 Principles of Business & Finance 8724 Principles of Business & Finance 6215 Business Law 6225-8710 Business Management & Applications 6227/6640 International Baccalaureate Business Management 6411 Computer Applications I 6514 Digital Communication Systems 6417 Microsoft Word and PowerPoint ^ 6418 Microsoft SharePoint ^ 6419 Microsoft Excel and Access ^ 6145 Career Management	
CAREER DEVELOPMENT			
FAMILY AND CONSUMER SCIENCES EDUCATION	7015 Teen Living 7065 Parenting & Child Development 7086 Personal Finance 8726 Personal Finance 7111 Early Childhood Education I 7112* Early Childhood Education II 8599* CTE Career and College Promise II 8598 CTE Career and College Promise I	7196 Family & Consumer Sciences Education Department of Labor Registered Apprenticeship 8596 CTE Apprenticeship 7197 Family & Consumer Sciences Education Cooperative Education 7199* Family & Consumer Sciences Education Advanced Studies 8595 CTE Advanced Studies	7098 University – Family & Consumer Sciences Education 7099 Community College – Family & Consumer Sciences Education 7198 Family & Consumer Sciences Education Internship 8597 CTE Internship
HEALTH OCCUPATIONS		7210 Health Team Relations	
MARKETING EDUCATION		235/6645 Small Business Entrepreneurship 8716 Entrepreneurship I ^	
TRADE AND INDUSTRIAL EDUCATION	7400 Introduction to Trade & Industrial Education 7810 Cosmetology – Introduction 7811 Cosmetology I 7812* Cosmetology II 7813 Cosmetology III	7821 Trade & Industrial Education Cooperative Training I 7996 Trade & Industrial Education Department of Labor Registered Apprenticeship 8596 CTE Apprenticeship 7997 Trade & Industrial Education Cooperative Education 7999* Trade & Industrial Education Advanced Studies 8595 CTE Advanced Studies	7898 University – Trade & Industrial Education 7899 Community College – Trade & Industrial Education 7998 Trade & Industrial Education Internship 8597 CTE Internship

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North Carolina Career Cluster

Information Technology

Related Pathways

Information Support and Services
Network Systems
Programming and Software Development
Web and Digital Communication

CTE Program Areas	CONCENTRATION (Four total credits required)		
	Foundational Courses	Career Cluster Enhancement Courses	
BUSINESS AND INFORMATION TECHNOLOGY EDUCATION	2508/2521 AP Computer Science	6428* SAS Programming I	6200/6600 Principles of Business & Finance
	6341 Networking I Network Administration I	6429 SAS Programming II	6412 Multimedia & Webpage Design
	6342 *Network Administration II	6430 International Baccalaureate Information Technology	6418 Microsoft SharePoint ^
	6343 Network Administration III	6451 Database Programming I— Oracle Database Programming I	6498 University Business & Marketing
	6345* Network Administration II—Linux	6452* Database Programming II— Oracle Database Programming II	6499 Community College Business & Marketing
	6346* Network Administration II—Novell	6514 Digital Communication Systems	6598 Business & Information Technology Education Internship
	6347* Network Administration II—Microsoft	6596 Business & Information Technology Education	8597 CTE Internship
	6411 Computer Applications I	8596 Department of Labor Registered Apprenticeship	6417 Microsoft Word, PPT and Publisher
	6414* Multimedia & Webpage Design	6597 Business & Information Technology Education Cooperative Education	8726 Personal Finance
	6417 Microsoft Word and PowerPoint ^	8595 CTE Advanced Studies	
	6419 Microsoft Excel and Access ^	8510 Project Management I	
	6415* e-Commerce I	8511* Project Management II-Global	
	6416* e-Commerce II	8512* Project Management II-Technology	
	6421 Computer Programming I—VB.NET	8513 Project Management III	
	6422* Computer Programming II—VB.NET		
6426 Computer Programming I—Other Languages			
6427* Computer Programming II—Other Languages			
8721 Principles of Business and Finance			
8811 Foundations of Information Technology			
6599* Business & Information Technology Education Advanced Studies			
Partnering opportunities: NAF Academy of Information Technology courses can meet requirements for Foundational courses in this cluster.			
CAREER DEVELOPMENT		6145 Career Management	
MARKETING EDUCATION		235/6645 Small Business Entrepreneurship	
TECHNOLOGY EDUCATION	8599* CTE Career and College Promise II	8716 Entrepreneurship I ^	
	8598 CTE Career and College Promise I	7904/8006 Scientific & Technical Visualization I	
TRADE AND INDUSTRIAL EDUCATION	7400 Introduction to Trade & Industrial Education	8110 Fundamentals of Technology	
	7980 Networking I	8210 Technology Engineering and Design	
	7980 Network Engineering Technology I	8125 Communication Systems	
	7981* Network Engineering Technology II—Cisco	7921 Drafting I	
	7981* Network Engineering Technology II	7935 Digital Media I	
	7982 Network Engineering Technology III—Cisco	II14 Network Engineering Technology IV	
	7982 Network Engineering Technology III	7898 University Trade & Industrial Education	
	7983* Network Engineering Technology II—Nortel	7899 Community College Trade & Industrial Education	
	7983* Network Engineering Technology II—Nortel	7998 Trade & Industrial Education Internship	
	7984 Network Engineering Technology III—Nortel	8597 CTE Internship	
7991 Computer Engineering Technology I			
7992* Computer Engineering Technology II			
7996 Trade & Industrial Education Department of Labor Registered Apprenticeship			
8596 CTE Apprenticeship			
7997 Trade & Industrial Education Cooperative Education			
7999* Trade & Industrial Education Advanced Studies—			
8595 CTE Advanced Studies			

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North Carolina Career Cluster Law, Public Safety, Corrections & Security

Related Pathways

Correction Services
Emergency and Fire Management Services
Security and Protective Services
Law Enforcement Services
Legal Services

CTE Program Areas	CONCENTRATION (Four total credits required)	
	Foundational Courses	Career Cluster Enhancement Courses
BUSINESS AND INFORMATION TECHNOLOGY EDUCATION		8721 Principles of Business and Finance 6411 Computer Applications † 6514 Digital Communication Systems 6417 Microsoft Word and PowerPoint ^ 6418 Microsoft SharePoint ^ 6419 Microsoft Excel and Access ^
CAREER DEVELOPMENT		6145 Career Management
MARKETING EDUCATION		6645 Hospitality and Tourism
TECHNOLOGY EDUCATION		
TRADE AND INDUSTRIAL EDUCATION	7834 Public Safety I 7834 Public Safety II * ^ 7835 Fire Fighter Technology I 7836* Fire Fighter Technology II 7837 Fire Fighter Technology III 7839 Emergency Medical Technology I ^ 7840 Emergency Medical Technology II * ^	8596 CTE Apprenticeship 8595 CTE Advanced Studies 8599* CTE Career and College Promise II 8598 CTE Career and College Promise I
		8597 CTE Internship

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North Carolina Career Cluster

Manufacturing

Related Pathways

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

CTE Program Areas	CONCENTRATION (Four total credits required)	
	Foundational Courses	Career Cluster Enhancement Courses
BUSINESS AND INFORMATION TECHNOLOGY EDUCATION	8510 Project Management I 8511* Project Management II-Global 8512* Project Management II-Technology 8513 Project Management III	6225 Business Management & Applications 8710 Business Management 8721 Principles of Business and Finance 6227/6640 International Baccalaureate Business Management 6411 Computer Applications I 6514 Digital Communication Systems 6417 Microsoft Word and PowerPoint ^ 6418 Microsoft SharePoint ^ 6419 Microsoft Excel and Access ^ 6415 e-Commerce I 6145 Career Management
CAREER DEVELOPMENT		
FAMILY AND CONSUMER SCIENCES EDUCATION	7035 Apparel and Textile Production I 7036* Apparel and Textile Production II	
MARKETING EDUCATION	6631 Fashion Merchandising 6621 Marketing 8716 Entrepreneurship I	235/6615 Small Business Entrepreneurship 8716 Entrepreneurship I ^ 6621 Marketing 6626 Strategic Marketing 8110 Fundamentals of Technology 8210 Technology and Engineering and Design 8115 Manufacturing Systems 8030 PLTW Computer Integrated Manufacturing Partnering opportunities for Project Lead the Way (PLTW) courses can meet requirements for enhancement courses for this cluster.
TECHNOLOGY EDUCATION		
TRADE AND INDUSTRIAL EDUCATION	7400 Introduction to Trade & Industrial Education 7621 Furniture & Cabinet Making I-Cabinetmaking I 7622* Cabinetmaking II 7623 Cabinetmaking III 7631 Electronics I 7632* Electronics II 7633 Electronics III 7641 Metals Manufacturing Technology I 7642* Metals Manufacturing Technology II 7661 Welding Technology I 7662* Welding Technology II 7663 Welding Technology III	7821 Trade & Industrial Cooperative Training I 7822* Trade & Industrial Cooperative Training II 7921 Drafting I 7996 Trade & Industrial Education Department of Labor Registered Apprenticeship 8596 CTE Apprenticeship 7997 Trade & Industrial Education Cooperative Education 7999* Trade & Industrial Education Advanced Studies 8595 CTE Advanced Studies 8599* CTE Career and College Promise II 8598 CTE Career and College Promise I
		7898 University Trade & Industrial Education 7899 Community College Trade & Industrial Education 7998 Trade & Industrial Education Internship 8597 CTE Internship 7634 Electronics IV

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North Carolina Career Cluster

Marketing

Related Pathways

Marketing Communications
Marketing Management
Marketing Research
Merchandising
Professional Sales

CTE Program Areas	CONCENTRATION (Four total credits required)	
	Foundational Courses	Career Cluster Enhancement Courses
BUSINESS AND INFORMATION TECHNOLOGY EDUCATION	8510 Project Management I 8511* Project Management II-Global 8512* Project Management II-Technology 8513 Project Management III 8721 Principles of Business and Finance	6200/6600 Principles of Business & Finance 6215 Business Law 6311 Accounting I 6411 Computer Applications I 6514 Digital Communication Systems 6414 Multimedia and Webpage Design 6417 Microsoft Word and PowerPoint ^ 6418 Microsoft SharePoint ^ 6419 Microsoft Excel and Access ^ 6415 e-Commerce I 6145 Career Management
CAREER DEVELOPMENT		
MARKETING EDUCATION	6235/6615 * Small Business Entrepreneurship 8716* Entrepreneurship I ^ 8717 Entrepreneurship II 6621 Marketing 6622* Marketing Management 6626* Strategic Marketing 6631 Fashion Merchandising 6665* Marketing Technology & Media 6670 Sports & Entertainment Marketing I MU81 Virtual Enterprise I	6696 Marketing Education Department of Labor Registered Apprenticeship 8596 CTE Apprenticeship 6697 Marketing Education Cooperative Education 6699* Marketing Education Advanced Studies 8595 CTE Advanced Studies 8599* CTE Career and College Promise II 8598 CTE Career and College Promise I
TRADE AND INDUSTRIAL EDUCATION		6498 University – Business & Marketing 6499 Community College – Business & Marketing 6698 Marketing Education Internship 8597 CTE Internship 7035 Apparel I 8726 Personal Finance 7935 Digital Media I

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- At least one of the Foundational courses must be at the completer level, identified by an asterisk on the chart above.
- The fourth technical credit can be either a Foundational or Enhancement course.
- Enhancement courses can be from any program area identified in the Career Cluster.



North Carolina Career Cluster

Science, Technology, Engineering and Mathematics

Related Pathways

Engineering and Technology
Science and Mathematics

CTE Program Areas	CONCENTRATION (Four total credits required)		
	Foundational Courses	Career Cluster Enhancement Courses	
BUSINESS AND INFORMATION TECHNOLOGY EDUCATION	8510 Project Management I 8511* Project Management II-Global 8512* Project Management II-Technology 8513 Project Management III	6411 Computer Applications I 6514 Digital Communications Systems 6417 Microsoft Word and PowerPoint ^ 6418 Microsoft SharePoint ^ 6419 Microsoft Excel and Access ^ 6145 Career Management	
CAREER DEVELOPMENT			
TECHNOLOGY EDUCATION	8005* Technology Advanced Studies 7904/8006 Scientific & Technical Visualization I 7902/8007* Scientific & Technical Visualization II 8011 Principles of Technology I 8012* Principles of Technology II 8047 Physical Science/Principles of Technology I 8048* Physics/Principles of Technology II 8110 Fundamentals of Technology 8210 Technology Engineering and Design 8115* Manufacturing Systems 8125* Communication Systems 8126* Transportation Systems 8144* Structural Systems 8211* Technological Design 8212* Engineering Design	8196 Technology Education Department of Labor Registered Apprenticeship <i>Project Lead the Way (PLTW)</i> 8020 PLTW Introduction to Engineering Design 8021 PLTW Principles of Engineering 8022* PLTW Digital Electronics 8030* PLTW Computer Integrated Manufacturing 8031* PLTW Civil Engineering & Architecture 8032* PLTW Biotechnical Engineering 8033* PLTW Aerospace Engineering 8040 PLTW Engineering Design & Development 8599* CTE Career and College Promise II 8598 CTE Career and College Promise I	8998 University Technology Education 8999 Community College Technology Education 8198 Technology Education Internship 8597 CTE Internship
TRADE AND INDUSTRIAL EDUCATION	7400 Introduction to Trade & Industrial Education 7631 Electronics I 7632* Electronics II 7633 Electronics III 7821 Trade & Industrial Cooperative Training I 7921 Drafting I 7972* Drafting – Engineering II 7973 Drafting – Engineering III	7980 Networking I Network Engineering Technology I 7981 Network Engineering Technology II 7991 Computer Engineering Technology I 7996 Trade & Industrial Education Department of Labor Registered Apprenticeship 8596 CTE Apprenticeship 7997 Trade & Industrial Education Cooperative Education 7999* Trade & Industrial Education Advanced Studies 8595 CTE Advanced Studies	7935 Digital Media I 7898 University Trade & Industrial Education 7899 Community College Trade & Industrial Education 7998 Trade & Industrial Education Internship 8597 CTE Internship

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North Carolina Career Cluster

Transportation, Distribution and Logistics

Related Pathways

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

CTE Program Areas	CONCENTRATION (Four total credits required)		
	Foundational Courses	Career Cluster Enhancement Courses	
BUSINESS AND INFORMATION TECHNOLOGY EDUCATION	8510 Project Management I 8511* Project Management II-Global 8512* Project Management II-Technology 8513 Project Management III	6200/6600 Principles of Business & Finance 8721 Principles of Business & Finance 6215 Business Law 6225 Business Management & Applications 8710 Business Management 6227/6640 International Baccalaureate Business Management 6311 Accounting I 6411 Computer Applications I 6514 Digital Communication Systems 6417 Microsoft Word and PowerPoint ^ 6418 Microsoft SharePoint ^ 6419 Microsoft Excel and Access ^ 6145 Career Management	
CAREER DEVELOPMENT			
MARKETING EDUCATION		235/6615 Small Business Entrepreneurship 8716 Entrepreneurship I ^ 6621 Marketing	
TECHNOLOGY EDUCATION		8110 Fundamentals of Technology 8210 Technology Engineering and Design 8126 Transportation Systems	
TRADE AND INDUSTRIAL EDUCATION	7400 Introduction to Trade & Industrial Education 7511 Introduction to Automotive Service Technology I Service 7512 Automotive Service Technology II Brakes 7513* Automotive Service Technology III Computer System Diagnostics 7514 Automotive Electrical 7515* Automotive Electrical Advanced IT16 Automotive Service I IT17* Automotive Service II IT18 Automotive Service III 7521 Collision Repair Technology I 7522* Collision Repair Technology II	7821 Trade & Industrial Cooperative Training I 7996 Trade & Industrial Education Department of Labor Registered Apprenticeship 8596 CTE Apprenticeship 7997 Trade & Industrial Education Cooperative Education 7999* Trade & Industrial Education Advanced Studies 8595 CTE Advanced Studies 8599* CTE Career and College Promise II 8598 CTE Career and College Promise I	7898 University Trade & Industrial Education 7899 Community College Trade & Industrial Education 7998 Trade & Industrial Education Internship 8597 CTE Internship

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