



**2012-2013 Career Clusters
Articulation Guide**

Courses are articulated with one or more high schools.
(This is a guide and its content is subject to change.)

NOTE: Some of these courses may also be accepted as electives in other programs or serve as in-lieu-of courses.

Updated: September 2012

AGRICULTURE, FOOD & NATURAL RESOURCES				
Pathway	Program Code	Program	Articulated with High Schools	
			Core/Technical Support Courses	Credits
Environmental Service Systems	10-527-2	Water Quality Technician	Supervision (TCC) Written Communication (AS) Oral & Interpersonal Communication (AS) College Mathematics (AS) Economics (AS) Introduction to Sociology (AS) Introduction to Psychology (AS)	3 3 3 3 3 3 3

ARCHITECTURE & CONSTRUCTION

Pathway	Program Code	Program	Articulated with High Schools	
			Course Title	Cr
Construction	10-601-1	Air Conditioning, Heating & Refrigeration Technologies	Written Communication (AS)	3
			Oral & Interpersonal Communication (AS)	3
			College Mathematics (TCC)	3
			College Technical Math 1A (TCC)	3
			Economics (AS)	3
			Introduction to Sociology (AS)	3
Construction	31-413-1	Electricity	Beginning Electrical Concepts (TCC)	3
			Computer Literacy-Microsoft Office (TCC)	2
Construction	31-475-2	Building Trades Construction Worker	Computer Essentials (TCC)	2
Maintenance/Operations	10-607-5	Civil Engineering Technician-Structural	Written Communication (AS)	3
			Oral & Interpersonal Communication (AS)	3
			College Technical Math 1A (TCC)	3
			College Technical Math 1B (TCC)	2
			Economics (AS)	3
			Introduction to Psychology (AS)	3

ARTS, AV TECHNOLOGY & COMMUNICATIONS

Pathway	Program Code	Program	Articulated with High Schools	
			Course Title	Cr
Printing Technology Visual Arts	10-204-1	Graphic Communications	Beginning Photoshop (TCC)	2
			InDesign (TCC)	2
			Introduction to Graphic Comm (TCC)	3
			Digital Graphic Design (TCC)	3
			Marketing Basics (TCC)	1
			Digital Illustration and Design (TCC)	2
			Image Editing (TCC)	2
			Publishing Principles (TCC)	2
			Computer Literacy (TCC)	1
			Written Communication (AS)	3
			Oral and Interpersonal Communication (AS)	3
			College Mathematics (TCC)	3
			Economics (AS)	3
Introduction to Sociology (AS)	3			
Visual Arts Audio, Video Technology and Film	10-206-4	Interactive Media Design-Animation	Computer Literacy (TCC)	1
			Motion/Visual Effects (TCC)	2
			Video/Sound Editing (TCC)	3
			Image Editing (TCC)	2
			Digital Illustration and Design (TCC)	2
			College Mathematics (TCC)	3
			Oral & Interpersonal Communication (AS)	3
			Introduction to Psychology (AS)	3
			Economics (AS)	3
			Written Communication (AS)	3
Economics (AS)	3			

ARTS, AV TECHNOLOGY & COMMUNICATIONS

Pathway	Program Code	Program	Articulated with High Schools	
Audio, Video Technology and Film Visual Arts	10-206-4	Interactive Media Design-Motion Graphics	Computer Literacy (TCC)	1
			Video/Sound Editing (TCC)	3
			College Mathematics (TCC)	3
			Image Editing (TCC)	2
			Digital Illustration and Design (TCC)	2
			Digital Graphic Design (TCC)	3
			Motion/Visual Effects (TCC)	2
			Written Communication (AS)	3
			Oral & Interpersonal Communication (AS)	3
			Introduction to Psychology (AS)	3
Economics (AS)	3			

BUSINESS, MANAGEMENT & ADMINISTRATION

Pathway	Program Code	Program	Articulated with High Schools	
			Course Title	Cr
Admin & Information Support	10-106-3	Legal Administrative Professional	Document Processing (TCC)	1
			Introduction to Business (TCC)	3
			Written Communication (AS)	3
			Oral & Interpersonal Communication (AS)	3
			College Mathematics (TCC)	3
			Economics (AS)	3
			Introduction to Sociology (AS)	3
Admin & Information Support	10-106-6	Administrative Professional	Document Processing (TCC)	1
			Computer Essentials (TCC)	2
			Written Communication (AS)	3
			Oral & Interpersonal Communication (AS)	3
			College Mathematics (TCC)	3
			Economics (AS)	3
			Introduction to Sociology (AS)	3
Admin & Information Support	31-106-1	Office Assistant	Document Processing (TCC)	1
			Computer Essentials (TCC)	2
			Computer Literacy-Microsoft Office (TCC)	1
Admin & Information Support	31-106-2	Medical Office Specialist	Computer Literacy-Microsoft Office (TCC)	1
			Document Processing (TCC)	1
			Medical Terminology (TCC)	3
			Computer Essentials (TCC)	2
			Oral & Interpersonal Communication (AS)	3

BUSINESS, MANAGEMENT & ADMINISTRATION

Pathway	Program Code	Program	Articulated with High Schools	
			Course Title	Cr
Management	10-102-3	Business Management-Management and Supervision	Accounting 1 (TCC)	4
			Marketing Principles (TCC)	3
			Introduction to Business (TCC)	3
			Business Law (TCC)	3
			Supervision (TCC)	3
			Written Communication (AS)	3
			Oral & Interpersonal Communication (AS)	3
			College Mathematics (TCC)	3
			Economics (AS)	3
			Introduction to Sociology (AS)	3
Management	10-196-1	Leadership Development (Formerly Supervisory Management)	Microsoft Excel (TCC) or	2
			Microsoft PowerPoint (TCC)	2
			Supervision (TCC)	3
			Written Communication (AS)	3
			Oral & Interpersonal Communication (AS)	3
			College Mathematics (TCC)	3
			Economics (AS)	3
			Introduction to Sociology (AS)	3
Introduction to Psychology (AS)	3			
Management	10-102-3	Business Management-Small Business Entrepreneurship	Accounting 1 (TCC)	4
			Marketing Principles (TCC)	3
			Introduction to Business (TCC)	3
			Business Law (TCC)	3
			Supervision (TCC)	3
			Written Communication (AS)	3
			Oral & Interpersonal Communication (AS)	3
			College Mathematics (TCC)	3
			Economics (AS)	3
			Introduction to Sociology (AS)	3

Human Resource Management	10-102-3	Human Resources	Introduction to Business (TCC)	3
			Written Communication (AS)	3
			Oral & Interpersonal Communication (AS)	3
			College Mathematics (TCC)	3
			Economics (AS)	3
			Introduction to Sociology (AS)	3
			Introduction to Psychology (AS)	3

EDUCATION & TRAINING

Pathway	Program Code	Program	Articulated with High Schools	
			Course Title	Cr
Teaching/Training	10-522-2	Instructional Assistant	IA: Child & Adolescent Development (TCC)	3
			IA: Guiding & Managing Behavior (TCC)	3
			IA: Introduction to Educational Practices (TCC)	3
			Written Communication (AS)	3
			Oral & Interpersonal Communication (AS)	3
			College Mathematics (TCC)	3
			Introduction to Sociology (AS)	3
			Introduction to Psychology (AS)	3
Teaching/Training	10-307-1	Early Childhood Education	ECE: Foundations of Early Childhood Ed (TCC)	3
			ECE: Infant & Toddler Development (TCC)	3
			IA: Child & Adolescent Development (TCC)	3
			IA: Guiding & Managing Behavior (TCC)	3
			Written Communication (AS)	3
			Oral & Interpersonal Communication (AS)	3
			College Mathematics (TCC)	3
			Introduction to Sociology (AS)	3
Introduction to Psychology (AS)	3			
Teaching/Training	31-307-1	Childcare Services	ECE: Foundations of Early Childhood Ed (TCC)	3
			ECE: Infant & Toddler Development (TCC)	3
			IA: Child & Adolescent Development (TCC)	3
			IA: Guiding & Managing Behavior (TCC)	3
			Written Communication (AS)	3

FINANCE

Pathway	Program Code	Program	Articulated with High Schools	
			Course Title	Cr
Accounting	10-101-1	Accounting	Accounting 1 (TCC)	4
			Accounting 2 (TCC)	4
			Introduction to Business (TCC)	3
			Microsoft Excel (TCC)	2
			Business Law (TCC)	3
			Computer Literacy-Microsoft Office	1
			Written Communication (AS)	3
			Oral & Interpersonal Communication (AS)	3
			College Mathematics (TCC)	3
			Economics (AS)	3
			Introduction to Sociology (AS)	3
Accounting	31-101-1	Accounting Assistant	Accounting 1 (TCC)	4
			Accounting 2 (TCC)	4
			Business Law (TCC)	3
			Computer Literacy-Microsoft Office (TCC)	1
			Microsoft Excel (TCC)	2
			Introduction to Business (TCC)	3
			Written Communication (AS)	3
			Oral & Interpersonal Communication (AS)	3
			College Mathematics (TCC)	3

HEALTH SCIENCE				
Pathway	Program Code	Program	Articulated with High Schools	
			Course Title	Cr
Diagnostic Services	10-513-1	Medical Lab Technician	Written Communication (AS) Oral & Interpersonal Communication (AS) Introduction to Sociology (AS) Introduction to Psychology (AS)	3 3 3 3
Diagnostic Services	10-526-1	Radiography	Written Communication (AS) Oral & Interpersonal Communication (AS) College Mathematics (TCC) Introduction to Sociology (AS) Introduction to Psychology (AS)	3 3 3 3 3
Health Informatics	10-530-1	Health Information Technology	Microsoft Access (TCC) Computer Essentials (TCC) Medical Terminology (TCC) Written Communication (AS) Oral & Interpersonal Communication (AS) Introduction to Sociology (AS) Introduction to Psychology (AS)	2 2 3 3 3 3 3
Therapeutic Services	10-512-1	Surgical Technology	Medical Terminology (TCC) Written Communication (AS) Oral & Interpersonal Communication (AS) Introduction to Sociology (AS) Introduction to Psychology (AS)	3 3 3 3 3

HEALTH SCIENCE				
Pathway	Program Code	Program	Articulated with High Schools	
			Course Title	Cr
Therapeutic Services	10-515-1	Respiratory Care Practitioner	Medical Terminology (TCC)	3
			Written Communication (AS)	3
			Oral & Interpersonal Communication (AS)	3
			Introduction to Sociology (AS)	3
			Introduction to Psychology (AS)	3
Therapeutic Services	10-523-1	Clinical Chiropractic Specialist	Medical Terminology (TCC)	3
			Basic Anatomy (TCC)	4
			Written Communication (AS)	3
			Oral & Interpersonal Communication (AS)	3
			Introduction to Sociology (AS)	3
			Economics (AS)	3
			Introduction to Psychology (AS)	3
College Mathematics (TCC)	3			
Therapeutic Services	10-543-1	Nursing – Associate Degree	Written Communication (AS)	3
			Oral & Interpersonal Communication (AS)	3
			Introduction to Psychology (AS)	3
Therapeutic Services	31-509-1	Medical Assistant	Medical Terminology (TCC)	3
			Introduction to Psychology (AS)	3
Therapeutic Services	31-543-1	Practical Nursing	Written Communication (AS)	3
			Oral & Interpersonal Communication (AS)	3
			Introduction to Psychology (AS)	3

HOSPITALITY & TOURISM

Pathway	Program Code	Program	Articulated with High Schools	
			Course Title	Cr
Restaurants & Food Service	10-316-1	Culinary Arts	Food Production: Cold Foods Salads (TCC)	2
			Food Production: Meat/Fish/Poultry (TCC)	2
			Sanitation and Safety (TCC)	2
			Written Communication (AS)	3
			Oral & Interpersonal Communication (AS)	3
			College Mathematics (TCC)	3
			Economics (AS)	3
			Introduction to Sociology (AS)	3
			Introduction to Psychology (AS)	3
Restaurants & Food Service	31-303-2	Food Service Production	Food Production: Cold Foods Salads (TCC)	2
			Food Production: Meat/Fish/Poultry (TCC)	2
			Sanitation and Safety (TCC)	2
			Computer Literacy-Microsoft Office (TCC)	1
			Written Communication (AS) or	3
			Oral & Interpersonal Communication (AS)	3

HUMAN SERVICES

Pathway	Program Code	Program	Articulated with High Schools	
			Course Title	Cr
EC Development & Services	10-307-1	Early Childhood Education	ECE: Foundations of Early Childhood Ed (TCC)	3
			ECE: Infant & Toddler Development (TCC)	3
			IA: Child & Adolescent Development (TCC)	3
			IA: Guiding & Managing Behavior (TCC)	3
			Written Communication (AS)	3
			Oral & Interpersonal Communication (AS)	3
			College Mathematics (TCC)	3
			Introduction to Sociology (AS)	3
			Introduction to Psychology (AS)	3
EC Development & Services	31-307-1	Childcare Services	ECE: Foundations of Early Childhood Ed (TCC)	3
			ECE: Infant & Toddler Development (TCC)	3
			IA: Child & Adolescent Development (TCC)	3
			IA: Guiding & Managing Behavior (TCC)	3
			Written Communication (AS)	3
Counseling & MH Services	10-550-1	Alcohol & Other Drug Abuse Associate	Written Communication (AS)	3
			Oral & Interpersonal Communication (AS)	3
			College Mathematics (TCC)	3
			Introduction to Sociology (AS)	3
			Introduction to Psychology (AS)	3

INFORMATION TECHNOLOGY				
Pathway	Program Code	Program	Articulated with High Schools	
			Course Title	Cr
Programming and Software Development	10-152-5	IT-Applications Developer-Business	Introduction to Business (TCC)	3
			Java Programming (TCC)	2
			Written Communication (AS)	3
			Oral & Interpersonal Communication (AS)	3
			College Mathematics (TCC)	3
			Economics (AS)	3
			Introduction to Psychology (AS)	3
Programming and Software Development Web and Digital Communications	10-152-5	IT-Applications Developer-Interactive Media	Introduction to Business (TCC)	3
			Computer Essentials (TCC)	2
			Java Programming (TCC)	2
			Written Communication (AS)	3
			Oral & Interpersonal Communication (AS)	3
			College Mathematics (TCC)	3
			Economics (AS)	3
			Introduction to Psychology (AS)	3
Network Systems	10-150-2	IT-Network Specialist	Hardware/Software Support (TCC)	3
			Written Communication (AS)	3
			Oral & Interpersonal Communication (AS)	3
			Introduction to College Mathematics (TCC)	3
			Economics (AS)	3
			Introduction to Psychology (AS)	3
			Introduction to Sociology (AS)	3

Web and Digital Communications	10-152-7	IT-Web Designer/Developer	HTML/XML (TCC)	3
			Principles of Graphic Design (TCC)	2
			Written Communication (AS)	3
			Dreamweaver/Flash (TCC)	2
			Image Editing	2
			Microsoft Word (TCC)	2
Information Support and Services	10-154-4	IT-Technical Support Specialist	Hardware/Software Support (TCC)	3
			Microsoft Powerpoint (TCC)	2
			Written Communication (AS)	3
			Oral & Interpersonal Communication (AS)	3
			Introduction to College Mathematics (TCC)	3
			Economics (AS)	3
			Introduction to Psychology (AS)	3
			Introduction to Sociology (AS)	3

LAW, PUBLIC SAFETY & SECURITY				
Pathway	Program Code	Program	Articulated with High Schools	
			Course Title	Cr
Correction Services	10-504-2	Criminal Justice-Corrections	Written Communication (AS)	3
			Oral & Interpersonal Communication (AS)	3
			College Mathematics (TCC)	3
			Introduction to Psychology (AS)	3
			Introduction to Sociology (AS)	3
Emergency & Fire Mgmt Services	10-531-1	Paramedic Technician	Written Communication (AS)	3
			Oral & Interpersonal Communication (AS)	3
			Introduction to Psychology (AS)	3
			Introduction to Sociology (AS)	3

MANUFACTURING

Pathway	Program Code	Program	Articulated with High Schools	
			Course Title	Cr
Production	32-444-2	CNC/Tool & Die Technologies	Basic Machining (YA)	1
			Basic Machining Applications (YA)	4
			Computer Aided Manufacturing MasterCAM (TCC)	1
			Computer Literacy-Microsoft Office (TCC)	1
Production	31-442-1	Welding	Introduction to Welding Processes (TCC)	4
			*Intro to Welding Process Part A (TCC)	2
			*Intro to Welding Process Part B (TCC)	2
			(Successful completion of Part A and Part B equal the 4 credit Process course)	
		College Mathematics (TCC)	3	
Production	31-457-2	Metal Fabrication	Introduction to Welding Processes (TCC)	4
			*Intro to Welding Process Part A (TCC)	2
			*Intro to Welding Process Part B (TCC)	2
			(Successful completion of Part A and Part B equal the 4 credit Process course)	
		College Mathematics (TCC)	3	
		Computer Literacy-Microsoft Office (TCC)	1	
Production	10-457-1	Fabrication Technologies	Introduction to Welding Processes (TCC)	4
			*Intro to Welding Process Part A (TCC)	2
			*Intro to Welding Process Part B (TCC)	2
			(Successful completion of Part A and Part B equal the 4 credit Process course)	
			College Mathematics (TCC)	3
		Computer Literacy-Microsoft Office (TCC)	1	

Production	10-620-2	Mechatronics	Technical Math 1A (TCC) Technical Math 1B (TCC) Written Communication (AS) Introduction to Psychology (AS) Computer Literacy-Microsoft Office (TCC)	3 2 3 3 1
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MARKETING, SALES & SERVICES				
Pathway	Program Code	Program	Articulated with High Schools	
			Course Title	Cr
Professional Sales Merchandising Marketing Communication Marketing Management Marketing Research	10-104-3	Digital Marketing	Marketing Principles (TCC) Introduction to Business (TCC) Digital Graphic Design (TCC) Video/Sound Editing (TCC) Economics (AS) Introduction to Psychology (AS) Introduction to Sociology (AS) Written Communication (AS) Oral & Interpersonal Communication (AS) Introduction to College Mathematics (TCC)	3 3 3 3 3 3 3 3 3 3
Professional Sales Merchandising Marketing Communication Marketing Management Marketing Research	10-102-3	Business Management-Marketing	Marketing Principles (TCC) Introduction to Business (TCC) Business Law (TCC) Economics (AS) Introduction to Sociology (AS) Written Communication (AS) Oral & Interpersonal Communication (AS) Introduction to College Mathematics (TCC)	3 3 3 3 3 3 3 3

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SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS

Pathway	Program Code	Program	Articulated with High Schools	
			Course Title	Cr
Engineering & Technology	10-606-1	Mechanical Design Technology	Computer Aided Manufacturing-SurfCam (TCC)	1
			CAD 2-D, AutoCAD (TCC)	3
			Manufacturing Processes (TCC)	3
			Technical Math IA (TCC)	3
			Technical Math IB (TCC)	2
			Introduction to Psychology (AS)	3
			Written Communication (AS)	3
			Oral & Interpersonal Communication (AS)	3
			Economics (AS)	3
Engineering & Technology	10-623-8	Process Engineering Technology: Quality Assurance Track Industrial/Manufacturing Track	CAD 2-D, AutoCAD (TCC)	3
			CAD 3-D, Solidworks (TCC)	3
			Computer Aided Manufacturing-SurfCam (TCC)	1
			Manufacturing Processes (TCC)	3
			Technical Math IA (TCC)	3
			Technical Math IB (TCC)	2
			Written Communication (AS)	3
			Oral & Interpersonal Communication (AS)	3
			Economics (AS)	3
			Introduction to Sociology (AS)	3
			Introduction to Psychology (AS)	3
Engineering & Technology	10-602-2	Engine Research & Development Technician	Engine Fundamentals (TCC)	3
			Technical Math IA (TCC)	3
			Technical Math IB (TCC)	2
			Manufacturing Processes (TCC)	3
			CAD 2-D, AutoCAD (TCC)	3
			Computer Essentials (TCC)	2
			Written Communication (AS)	3
			Oral & Interpersonal Communication (AS)	3
			Economics (AS)	3
			Introduction to Psychology (AS)	3

Engineering & Technology	10-617-1	Tool Design Engineering Technology	CAD 2-D, AutoCAD (TCC) CAD 3-D Solidworks (TCC) Manufacturing Processes (TCC) Computer Aided Manufacturing -SurfCam(TCC) Technical Math IA (TCC) Technical Math IB (TCC) Written Communication (AS) Economics (AS) Intro to Psychology (AS)	3 3 3 1 3 2 3 3 3
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TRANSPORTATION, DISTRIBUTION & LOGISTICS

Pathway	Program Code	Program	Articulated with High Schools	
			Course Title	Cr
Facility & Mobile Equipment Maintenance	32-404-2	Automotive Technician	Automotive Service Fundamentals (TCC)	2
			Engine Repair 1(TCC)	2
			Electrical & Electronic Systems 1 (TCC)	2
			Computer Literacy-Microsoft Office (TCC)	1
			Written Communication (AS)	3
Facility & Mobile Equipment Maintenance	10-602-3	Automotive Technology	Automotive Service Fundamentals (TCC)	2
			Engine Repair 1(TCC)	2
			Electrical & Electronic Systems 1 (TCC)	2
			Computer Literacy-Microsoft Office (TCC)	1
			Written Communication (AS)	3
			College Mathematics (TCC)	3
Oral & Interpersonal Communication (AS)	3			

Additional Courses to serve as elective credit:

Personal Finance 3 credits

Careers in Allied Health 3 credits

Marketing Basics 1 credit

Project Grill participants: 3 elective credits into a program at Moraine Park Technical College

Project Lead the Way participants: 3 elective credits into Mechanical Design Technology, Process Engineering and Tool Design Engineering Technology

Youth Apprenticeship: Please provide an Admissions Specialist a copy of your Youth Apprenticeship Graduation Certificate for possible college credits to be applied.

