

CTE Program Description Guide



22000 Gibraltar Road The Learning Center Building Flat Rock, MI 48134 Phone: (734) 782.3194

www.dctcschools.org

TABLE OF CONTENTS

TITLE	PAGE NUMBER
DCTC History and Description	3
DCTC Student Code of Conduct	4-6
DCTC Transportation and Scheduling	7
CAREER AREAS	
Accounting, Finance & Finance Management	8
Agriculture, Food & Natural Resources	9
Architecture & Construction	10-11
Arts, AV Technology & Communication	12
Automotive Services	13
Aviation	14
Business Management & Administration	15
Cosmetology	16
Culinary Arts	17
Education & Training	18
Health Science	19
Information Technology	20-21
JROTC	22
Manufacturing	23-24
Marketing	25



HISTORY AND DESCRIPTION

The concept of local school districts being able to share vocational programs began in 1965 with the school districts of Flat Rock, Gibraltar, and Grosse Ile initiating eight vocational education programs to be utilized jointly. The Huron School District was added in 1967, Airport (Monroe County) in 1968, Woodhaven in 1972, Riverview in 1978, Trenton in 1994, and Southgate in 1995. As the process evolved, new programs were added to meet the expanding student and employment demands.

The group of school districts was referred to as the Downriver Area Vocational Cooperative. Cooperation has been the major element of success, which has enabled the current program's growth and development. As with any other school districts, these have had experiences with financial difficulties and administrative changes, but historically the vocational programs have always received positive attention as meeting vital educational needs, and the Cooperative's ability to meet those needs in a "cost effective" manner has been recognized.

During August of 1978, the Downriver Area Vocational Cooperative was approved for Area Center Designation, which provided for a fifteen year contract among participating districts and the capability to function as a single district relative to vocational education operations. At this time, the name was changed to the Downriver Career Vocational Consortium.

In the fall of 1991, the Consortium's name was changed to Downriver Career Technical Consortium (DCTC) to better reflect what the organization represents.

Under the law, DCTC is defined as a "decentralized area center", meaning we will operate the same as the vocational area centers, but our programs will be offered at more than one site. Currently programs are offered at 13 different locations.



CODE OF CONDUCT FOR STUDENTS RIDING THE CAREER TECHNICAL EDUCATION (CTE) BUS

- Be ready to get on the bus as soon as it arrives.
- Be courteous to the bus driver and peers.
- Students must remain on their incoming bus until all buses arrive at the designated hub location and are stopped. At this time the transfer may begin. (See Transportation Hub Policy below)
- General rules similar to your home school are strictly enforced at the designated (hub) location. There is absolutely NO smoking, NO snowball throwing, and NO fighting. Also, no student is to leave the designated (hub) area.
- Students guilty of smoking, fighting, vandalism, using obscene or profane language, or any other inappropriate behavior on the bus will forfeit their right to ride the bus.
- There is no eating on the buses.
- All transfer students must ride the bus unless given written authorization from their home and receiving principal to drive cars. (See Driving Policy below)
- Transfer students are required to carry identification cards. This card will be issued by the instructor of your career technical class and completed by you. You must show this card to the bus driver upon request. The bus driver may refuse transportation to any student who does not have an I.D. card.
- In general, please behave like ladies and gentlemen.
- A student who does not abide by the above rules will jeopardize his/her privilege of participating in career technical programs.
- A <u>ZERO TOLERANCE</u> policy is in force on all CTE buses and at the hub.

STUDENT REPONSIBILITY

It is a privilege to attend classes offered by the Downriver Career Technical Consortium. Since you elected to take a career technical program, we assume you want to receive training for a career and will behave in a manner which will promote that training. Students will follow the rules and regulations of the attending school and are accountable to the principal of the school in which their class is held.

TRANSPORTATION HUB POLICY

School districts will provide transportation for students to CTE programs. Students are REQUIRED to use this bus service. All students must adhere to the Code of Conduct stated above while at the designated hub location.

TRANSPORTATION PROCESS

- Twice during the day, transfer students are transported by their home school buses to a centralized drop point (hub).
- CTE buses returning to their home school will transport transfer students who will be attending programs at their high school.
- CTE buses then transport the transfer students back to the hub.
- Home school buses transport their transfer students back to their home schools.

The transportation hub is located in the Flat Rock Assembly Plant complex. Flat Rock Assembly employees will be working nearby. Inappropriate behavior at the hub <u>will not</u> be tolerated, and will result in immediate removal from the career technical education program.

PLEASE BE ADVISED THAT THE FLAT ROCK ASSEMBLY PLANT IS A FEDERAL TRADE ZONE.

ANY LAWS BROKEN ON THE PREMISES ARE A **FEDERAL OFFENSE** AND WILL BE HANDLED BY THE FEDERAL COURTS.

Students must only enter and leave the hub via school bus. Parents are not permitted to drive their student to the hub, or pick their student up at the hub. If a student misses the bus from his/her school to the hub, parents and/or school official are allowed to drive the student to the school where the career and technical education program is housed. If a student must leave early, the student must be picked up at the school, not the hub, with the permission of the home school and notification to the educating school before a student may be picked up at the educating school.

DRIVING POLICY

Only in extreme situations that have been discussed between the student, the parent, the home school principal, and the receiving school principal will an exception be made for a student to provide his/her own transportation. It is also stressed that when a student receives a permit to drive, this is permission for that student ONLY to provide him/herself transportation, and they are absolutely not allowed to

UNAUTHORIZED DRIVING TO AND FROM CAREER TECHNICAL CLASSES

First Offense: Three day suspension from class and/or school.

Second Offense: Removal, without credit, from the career technical program. Credit loss shall be for the current semester only.

A STUDENT SHALL HAVE ONLY TWO OF THESE OFFENSES THROUGHOUT THE DURATION OF HIS/HER CAREER TECHNICAL PROGRAM BEFORE HE/SHE IS REMOVED FROM THE PROGRAM.

ATTENDANCE POLICY

All CTE transfer students leaving their home school to take a consortium class in a DCTC member district become students of the host (educating) district while in attendance there. For this reason, all transfer students will follow the attendance policy of the educating school for their CTE class and will be subject to two attendance policies - (1) the home (sending) school's policy and (2) the host (educating) school's policy. Students will also follow the absence appeal process of the host (educating) district for CTE absences. Any discrepancies will be addressed by the sending and receiving principals.

Students are encouraged to attend their CTE class when their home school is closed (with the exception of closure due to inclement weather). For example, attendance is encouraged during mid-winter break, teacher record days, staff professional development days, etc. Students are not allowed to drive to class when their home district is closed due to inclement weather. Absences will not count toward the absence limit when students' home schools are closed.

For the purpose of the Attendance Policy, only those absences caused by the student will be counted relative to the mandatory attendance policy. To appeal this, a student must appeal to the school where the program is housed, and the student must follow the educating schools appeal process and deadlines, with the exception of the Cosmetology program, which must be appealed at the student's home school.

CERTIFICATE OF ACHIEVEMENT POLICY

Certificates of Completion are to be awarded to students who have earned the status of More than a Concentrator (Completer) only. In order to receive the Certificate of Completion, a student must meet one of these two scenarios:

- Completed all 12 segments or 8 segments plus a state approved credential with a "C" or higher for each Trimester/Semester
- Completed 3 or more Perkins Course Competencies (PCCs) or 2 PCC's plus a state approved credential with a "C" or higher for each Trimester/Semester

TRANSPORTATION & SCHEDULING

DCTC HUB Schedule

Morning Transfer7:50-7:55AMMid-Day Transfer10:30-10:40AMAfternoon Transfer12:50-12:55PM



Student Schedule Examples

Semester

Hour	AM CTE Program	PM CTE Program
1	CTE Class	High School Class
2	CTE Class	High School Class
3	CTE Class	CTE Class
4	High School Class	CTE Class
	High School Class	CTE Class
6	High School Class	High School Class

Trimester

Hour	AM CTE Program	PM CTE Program
		High School Class
		High School Class
		CTE Class
		CTE Class
5	High School Class	High School Class



	Accounting, Finance & Finance Management					
Program Name	Program Description	Program Location	Program	Possible College		
riogrammame	rrogram Description	riogram Description riogram Location	riogianii Location	Туре	Credit With	
Finance and Financial	This program prepares students to plan for and evaluate a business'	Airport HS	In-House	Baker College		
Management Services	operations, financial and investing decisions and how accounting	Carlson HS	In-House	Daker College		
	systems gather and communicate financial information to interanal and	Huron HS	In-House	Davenport University		
	external decision makers. Topics include an introduction to	Riveriview HS I	In-House			
	accounting, the accouting cycles, accounting information systems,	Southgate Anderson HS	In-House	Ferris State University		
	financial analysis, business law and entrepreneurship.	Woodhaven HS	In-House	rems state offiversity		
				Washtenaw		
				Community College		
				Wayne County		
				Community College		
				District		



	Agriculture, Food & Natural Resources				
Program Name	Program Description	Program Location	Program Type	Possible College Credit With	
Agriculture, Agricultural Operations and Related Sciences	This program focuses on the general principles and practice of agricultural research and production designed to prepare students to apply this knowledge to the solution of practical agricultural problems. It includes instruction in basic animal, plant and soil science; animal husbandry and plant cultivation; soil conservation; natural resources and agricultural operations such as farming, ranching and agricultural business	Airport HS	Transfer	Davenport University	
Applied Horticulture and Horticulture Operations	This program focuses on three main topics: plant biology, greenhouse management and landscape design. Students will understand how plants grow, move nutrients around and reproduce. Students will conduct laboratory experiments on providing the best growing environment for plants. Explore how horticulture can feed the world. Students will study the science behind plant propagation and horticulture relationship to human health.	Trenton HS	Transfer	Davenport University	



	Architecture & Constructi	on		
Program Name	Program Description	Program Location	Program Type	Possible College Credit With
Architectural Drafting and Design Technology	The course serves as a solid foundation course for all students, especially for students interested in the engineering field. The course time is split between manual drawing and AutoCAD. It is designed to introduce drafting students to computer-aided drafting and design. Students learn to use professional tools and a variety of the latest professional computer-aided design (CAD) software applications to create two-dimensional and parametric 3D building information model (BIM) floor plans, elevations, foundation plans, site plans, pictorials, sections, and details. Students learn to use a variety of measuring and dimensioning paradigms and tools for architecture, civil engineering, and surveying. Students design and produce 3D objects using 3D printers. Students produce full-size 24x36 drawing sets. The curriculum includes drawing fundamentals, architectural drawing, project planning, site planning, structural systems, building systems, schedules and documentation, working drawings, codes and specification, presentations, building materials, sustainability, and leadership. The students compete in a residential house design competition and collaborate to design a residential house for a community member. Students can earn one or more certified CAD user credentials.	Airport HS	Transfer	Davenport University Wayne County Community College District



	Architecture & Construction - Continued				
Program Name	Program Description	Program Location	Program Type	Possible College Credit With	
Construction Trades	This program prepares students to apply technical knowledge and skills in the building, inspection, and maintenance of structures and related properties. It includes instruction in carpentry, electrical and power transmission installation, building/construction finishing, inspection, lay out, cut, fabrication, erection, installation, and repair of wooden structures and fixtures using hand and power tools, technical mathematics, framing construction materials and selection, job estimating, blueprint reading, foundations and roughing-in, finishing carpentry techniques, and applicable codes and standards.	Carlson HS Southgate Anderson HS	Transfer Transfer	Davenport University	
HVAC	This program prepares students to apply technical knowledge and skills to repair, install, service and maintain the operating condition of heating, air conditioning, and refrigeration systems. It includes instruction in diagnostic techniques; the use of testing equipment; and the principles of mechanics, electricity, and electronics as they relate to the repair of heating, air conditioning and refrigeration systems.	Henry Ford College w/ Riverview HS	Transfer	Henry Ford College (Direct Credit) MIAT College of Technology Wayne County Community College District	



	Arts, A/V Technology & Commu	nications		
Program Name	Program Description	Program Location	Program Type	Possible College Credit With
Graphic Communications	This program prepares students to apply technical knowledge and skills in the manufacturing and distribution or transmission of graphic communications products. This includes instruction in the pre-press, press, and post-press phases of production operations; and processes such as offset lithography, flexography, gravure, letterpress, screen printing, foil stamping, digital imaging, and other reproduction methods.	Southgate Anderson HS Trenton HS Woodhaven HS	Transfer In-House Transfer	Davenport University Ferris State University Washtenaw Community College
Radio & TV Broadcasting Technology	This program prepares students to apply technical knowledge and skills to the production of radio and television programs; and related operations under the supervision of broadcast and studio managers, directors, editors, and producers. This program includes instruction in sound; lighting; camera operation and maintenance; power and feed control; studio operations; production preparation; broadcast engineering; related computer applications; and specialized applications such as news, entertainment, live talk, sports, commercials, and taping. This course links to the knowledge and skills critical in Broadcast, Film and Journalism; and Audio Video Communication Technology.	Carlson HS Trenton HS	Transfer Transfer	Davenport University Ferris State University Washtenaw Community College



	Automotive Services				
Program Name	Program Description	Program Location	Program Type	Possible College Credit With	
Automotive Technician (NATEF Certified)	This program prepares students to engage in the servicing, maintenance, adjustment, and repair of automotive components and systems. It also provides a sequence of learning experiences related to the National Automotive Technicians Education Foundation (NATEF), ASE Education Foundation, and repair categories requiring certification. This program may include diesel engine repair. Learning activities in the classroom, laboratory, shop, and actual work setting are combined to provide students with the opportunity to become knowledgeable of nomenclature; safety principles and practices; and job entry level skills in disassembling, assembling, inspecting, repairing, and replacing components or systems.	Airport HS Huron HS Trenton HS	Transfer Transfer Transfer	Davenport University Washtenaw Community College Henry Ford College Wayne County Community College District	
Collision Repair Technician (NATEF Certified)	This program prepares students to apply technical knowledge and skills to repair, reconstruct, and finish automobile bodies, fenders, and external features. It provides a sequence of learning experiences related to the National Automotive Technicians Education Foundation (NATEF), ASE Education Foundation and repair categories requiring certification. Learning activities in the classroom, laboratory, shop, and actual work setting are combined to provide students with the opportunity to become knowledgeable of nomenclature; safety principles and practices; and job-entry level skills.	Huron HS	Transfer	Davenport University Washtenaw Community College	



	Aviation			
Program Name	Program Description	Program Location	Program Type	Possible College Credit With
Power Plant Technology (Aircraft)	This program prepares students to apply technical knowledge and skills to repair, service, and maintain all types of aircraft power plant and related systems. Instruction includes engine inspection and maintenance; lubrication and cooling; electrical and ignition systems; carburetion; fuels and fuel systems; and propeller and fan assemblies. Upon completion of Aviation Technology I and Aviation Technician II, the student is prepared and eligible to apply for licensing by the FAA as either an Airframe or Power Plant Technician.	Contracted With Grosse Ile HS MIAT College Of Technology (Canton) and WCCCD (Downriver Campus)	Transfer	Davenport University Western Michigan University *Others may be available through MIAT College of Technology
Avionics Maintenance Technology	This program prepares students to apply technical knowledge and skills to repair, service and maintain electronics aboard an aircraft as well as the wiring that connects to the electrical system. Through the close coordination of power plant and electronics curriculum, the student is prepared to enter aviation and non-aviation industry at an entry level. Upon completion of Avionics Technician I and Avionics Technician II, the student is prepared and eligible to apply for licensing by the FAA as a certified Powerplant Technician.	Contracted With Flat Rock HS MIAT College Of Technology (Canton) and WCCCD (Downriver Campus)	Transfer	MIAT College Of Technology





	Business Management & Administration				
Program Name	Program Description	Program Description Program Location	Program	Possible College	
riogrammame	r rogram Description	riogram Location	Туре	Credit With	
Business	This program prepares students to plan, manage, supervise, and	Airport HS	In-House	Baker College	
Administration	market business operations, products, and services. It includes	Carlson HS	In-House	Baker College	
Management and	instruction in business administration; information management;	Riverview HS	In-House	Davenport University	
Operations	human resource management; business law; ethics; business	Southgate Anderson HS	In-House	Davemport offiversity	
	communications utilizing application software; preparing and delivering presentations; planning and organizing projects; and decision making	Woodhaven HS	In-House	Ferris State University	
	in a business environment.			Washtenaw	
				Community College	
				Wayne County	
				Community College	
				District	



	Cosmetology			
Program Name	Program Description	Program Location	Program Type	Possible College Credit With
Cosmetology	This program prepares students to cut, trim, and style scalp, and facial hair; apply cosmetic preparations; perform manicures and pedicures; massage the head and extremities; and prepares students for practice as licensed cosmetologists in specialized or full-service salons. It includes instruction in hair shampooing, cutting and styling; manicures; pedicures; facial treatments; chemical applications; esthetics; shop management; sanitation and safety; customer service; and applicable professional and labor laws and regulations.	Monroe County Students Including Airport HS Michigan College of Beauty Wayne County Students Riverview School of Cosmetology	In-House	Davenport University Ferris State University Washtenaw Community College



	Culinary Arts					
Program Name	Program Description	Program Location	Program Type	Possible College Credit With		
Cooking & Related Culinary Arts, General	This program focuses on preparing students for a variety of jobs within the food service industry. It includes instruction is food preparation, cooking techniques, equipment operation and maintenance, sanitation and safety, communication skills, applicable regulations, and principles of food service management.	Riverview HS	Transfer	Baker College Davenport University Ferris State University		



	Education & Training			
Program Name	Program Description	Program Location	Program Type	Possible College Credit With
Education General	This program focuses on the general theory and practice of learning and teaching. It includes instruction in the basic principles of	Grosse Ile HS	Transfer	Baker College
	educational psychology; the art of teaching; the planning and administration of educational activities; school safety and health issues;			Davenport University
	and the social foundations of education. Possible areas of concentration include teaching and training, professional support			Ferris State University
	services, administration, and administrative support.			Schoolcraft College
				Wayne County Community College
				District



	Health Services				
Program Name	Program Description	Program Location	Program Type	Possible College Credit With	
Therapeutic Services	This program provides students the needed skills in health careers which focus primarily on changing the health status of the patient over	Flat Rock HS Health Occupations I	Transfer	Baker College	
	time. Careers in the Therapeutic Services course work directly with patients and may also provide care, treatment, counseling, and health	Health Occupations II: Pharmacy Technician		Ferris State University	
	education information. Additional subject areas are Nursing Occupations, Dental Occupations, Pharmacy Assisting, Medical/Rehab	Grosse Ile HS Health Occupations I	Transfer	Davenport University	
	Services, Emergency Medical Services, Medical Services, and Veterinary Science.	Health Occupations II: Nursing & Allied Health		Wayne County Community College	
		Health Occupations II: Sports Medicine		District Washtenaw	
		Wyandotte Hospital Health Occupations I & II		Community College	
		Woodhaven HS Dental Occupations I & II	Transfer		



	Information Technology					
Program Name	Program Description	Program Location	Program Type	Possible College Credit With		
Digital/Multimedia and Information Resources Design	This program prepares students to utilize programming software, graphics applications, and other authoring tools to design, edit, and publish (launching) documents, images, graphics, sound, and multimedia products on the internet. It includes instruction in internet theory; web page standards and policies; elements of web page design; web programming and hosting; databases; email and personal information management; security; as well as creating media product specifications; user interfaces; vector tools; special effects; interactive and multimedia components; search engines; navigation; e-commerce tools; emerging web technologies; project management; and providing customer support.	Airport HS Carlson HS	Transfer In-House	Baker College Davenport University Ferris State University Washtenaw Community College		
System Administration/ Administrator	This program prepares students to manage computer operations and control system configurations emanating from a specific site or network hub. It includes instruction in computer hardware and software applications; managing software systems; evaluating application software packages; basic web programming; web hosting; systems analysis and design; system installation and maintenance; local area network (LAN) and wide area (WAN) networking; principles of information systems security; disk space and traffic load monitoring; data backup; resource allocation; setup and takedown procedures; customer service, and project management.	Airport HS	Transfer	Baker College Davenport University Schoolcraft College (Direct Credit)		



	Information Technology - Continued					
Program Name	Program Description	Program Location	Program Type	Possible College Credit With		
Computer and Information Systems Security/Information Assurance	The program prepares students for a mid-level understanding of the technological needs, threats, and vulnerabilities of hardware, software, operating systems, networks and the Internet. Students will examine operating systems, networks, tools and protocols needed to navigate, use, and mange security technologies as well as gain insight into the legal, social, and political dynamics of the cyber universe. Designed for students interested in cyber defense seeking a fundamental understanding of cybersecurity.	MTech Center Henry Ford College w/ Carlson HS	Transfer	Baker College Henry Ford College (Direct Credit)		



	JROTC			
Program Name	Program Description	Program Location	Program Type	Possible College Credit With
Army JROTC	This program prepares and refines the traits of leadership within individual students by emphasizing the qualities of a leader and the challenges to leadership. The four-year program is designed to motivate students to become better citizens. It includes instruction in the precepts of citizenship and emphasizes self-confidence, self-discipline, and community service. Students also receive CERT (Community Emergency Response Team) certification as part of this program.	Southgate Anderson HS	Transfer	Cadets that attend a college or university and enroll in a Senior ROTC college program will receive one year of Senior ROTC college credit upon successful graduation from the high school JROTC Baker College Davenport University
Criminal Justice	This program prepares students for the criminal justice system. Law enforcement officers protect lives and property. Detectives and criminal investigators gather facts and collect evidence of possible crimes. Law enforcement officers' duties depend on the size and type of their organization. This program is designed to provide the academic and professional training necessary for careers in these fields.	Trenton HS	Transfer	Baker College Davenport University Ferris State University Wayne County Community College District (Direct Credit)



	Manufacturing Manufacturing					
Program Name	Program Description	Program Location	Program Type	Possible College Credit With		
Mechanical Drafting	This program prepares students to apply technical knowledge and skills to develop working drawings and electronic simulations in sup- port of mechanical and industrial engineers and related professionals. Instruction includes manufacturing materials and processes, mechanical drafting, electrode-mechanical drafting, basic metallurgy, geometric dimensioning and tolerance, blueprint reading, and technical communication.	Flat Rock HS	Transfer	Davenport University Henry Ford College		
Mechatronics	This program prepares students to apply mathematical and scientific principles to the design, development, and operational evaluation of computer controlled electromechanical systems and products with embedded electronics, senses, and actuators, and which includes, but is not limited to, automated robots and automation systems. Instruction includes mechanical engineering, electronic and electrical engineering, computer and software engineering, and control engineering.	Airport HS Southgate Anderson HS *Program is located at the Ford Flat Rock Assembly Plant	In-House Transfer	Schoolcraft College *Direct Creditfor Airpo ONLY Henry Ford College *Direct Creditfor Southgate ONLY Baker College Daven port University MIAT College Of		



	Manufacturing - Continue	d		
Program Name	Program Description	Program Location	Program Type	Possible College Credit With
Welding, Brazing and Soldering	This program prepares students to apply technical knowledge and skills to join or cut metal surfaces. It includes instruction in arc and resistance welding; brazing and soldering; welding and cutting; solid state welding; ferrous and non-ferrous materials; oxidation-reduction reactions; welding metallurgy; welding processes and heat treating structural design; safety; and the applicable codes and standards.	Airport HS Flat Rock HS Woodhaven HS	Transfer Transfer Transfer	Monroe Community College Ferris State University Davenport University Wayne County Community College Washtenaw Community College
Woodworking General	This program prepares students to apply technical knowledge and skills to prepare and execute furniture design projects; lay out and shape stock; assemble wooden articles or subassemblies; mark, bind, saw, carve, and sand wooden products; and repair wooden articles. Instruction also includes the use of a variety of hand and power tools.	Trenton HS	Transfer	Delta College Northern Michigan University Davenport University



Marketing Marketing				
Program Name	Program Description	Program Location	Program	Possible College
1 Togram Name	1 Togram Description	1 Togram Location	Туре	Credit With
Marketing Sales &	This program focuses on planning, managing, and performing	Airport HS	In-House	Baker College
Service	wholesaling and retailing services and related marketing and	Carlson HS	Transfer	Daker College
	distribution support services including merchandise/product	Huron HS	In-House	Danis and Hadrania
	management and promotion. Various specialty areas are included.	Southgate Anderson HS	In-House	Davenport University
	Skills acquired in this course include customer service; problem	Trenton HS	In-House	Ferris State University
	solving; process/system thinking; project management;	Woodhaven HS	In-House	rems state offiversity
	communication; and decision making.			Wayne County
				Community College
				District