

TCD Manufacturing, Engineering, Technology and Trades Pathway Programs

Program	COD Dual Credit	Total Hours	Work-Based Learning	Certifications	Career Opportunities
Construction Trades 1-2 years (Junior or Senior)	Construction Methods I - ARCH 1141 COD	2	Potential 2nd Year Employer Internship or Advanced Curriculum	OSHA 10 (Year 1) OSHA 30 (Year 2)	<ul style="list-style-type: none"> ❖ Surveying and Mapping Technician ❖ Mechanical Drafter ❖ Mechanical Engineering Technician ❖ Architectural and Civil Drafter ❖ Civil Engineer Technician ❖ Construction and Building Inspector ❖ Electrical and Electronics Drafter ❖ Industrial Engineering Technician ❖ Mechanical Engineering Technician ❖ Civil Engineer ❖ Industrial Engineer ❖ Mechanical Engineer ❖ Chemical Engineer ❖ CTE Instructors
Heating, Ventilation, AC and Refrigeration/Residential Wiring 1-2 years (Junior or Senior)	HVACR 1105- Introduction to Safety, Materials and Equipment (3 Credits)	4		OSHA 10 EPA 608 refrigerant Certification	
	HVACR 1108 - Refrigerant Certification (1 Credit)				
Robotics and Automation 1-2 years (Junior or Senior)	<p>Year 1 ELECT 1100 – Electronics Fundamentals (3 Credits) ELMEC 1171 – Introduction to Robotic Technology (3 Credits) ELMEC 1110 – Motor and Generator Fundamentals (3 Credits)</p> <p>Year 2 ELMEC 1141 – Hydraulics and Pneumatics (3 Credits) ELECT 1141 – Digital Fundamentals (3 Credits)</p>	15		FANUC Certification	<ul style="list-style-type: none"> ❖ Packaging and Filling Machine Operator ❖ Multiple Machine Tool Operator ❖ Machinist ❖ Welder, Cutter, Solderer, and Brazier ❖ CNC ❖ Programmer ❖ Industrial Machinery Mechanic ❖ Robotic Operator ❖ Robotic

						Diagnostics ❖ CTE Instructors
Welding Technology 1 -2 years (Junior or Senior)	<p>Year 1 Welding 1100 - Welding 1 (3 Credits)</p> <p>Year 2 Welding 1122 - Shielded ARC Welding (SMAW) (3 Credits) Welding 1132 - Metal Inert Gas (MIG) (3 Credits)</p>	9		OSHA 10 (Year 1)		
Automotive Technology Tentative 1 -2 years (Junior or Senior)	<p>Year 1 AUTO 1040 - Automotive for Non-Majors (3 Credits)</p> <p>Year 2 AUTO 1110 Engine Design and Operation (3 Credits) AUTO 1140 Suspension, Steering and Alignment (3 Credits)</p>	9	Potential Community Work hours	ASE - Automotive Service Excellence		<ul style="list-style-type: none"> ❖ Automotive Engineer ❖ Transportation, Storage, and Distribution Managers ❖ Engineering Teachers, Postsecondary ❖ Automotive Service Technician ❖ Bus, Truck, and Diesel Engine Mechanic ❖ Mobile Heavy Equipment Mechanic
Auto Body Repair and Refinishing			Potential Community Projects	I-CAR Certification S/P 2 Safety Training		<ul style="list-style-type: none"> ❖ Automotive Glass Installer and Repairer ❖ Automotive Body Repairer ❖ CTE Instructors

TCD Information Technology Pathway Program

Program	COD Dual Credit (Year 1)	Total Hours	Work-Based Learning	Certifications	Career Opportunities
Computer Information Systems and Game Design 1-2 years (Junior or Senior)	CIS 1211 - DC 101 2D Game Development (3 Credits) <hr/> CIS 1199 - DC 101 Intro to Game Design (3 Credits) <hr/> CIS 1400 - DC 101 Programming Logic and Technique (4 credits) • <i>May require additional components</i>	10	Potential 2nd Year Employer Internship or Advanced Curriculum		<ul style="list-style-type: none"> ❖ Computer User Support Specialist ❖ Web Developer ❖ Computer System Analyst ❖ Software Developer ❖ Information Security Analyst ❖ Blockchain Engineers ❖ Cybersecurity Digital Forensic Analyst ❖ Information Security Engineerings ❖ CTE Instructors

TCD Human and Public Service Pathway Programs

Program	COD Dual Credit	Total Hours	Work-Based Learning	Certifications	Career Opportunities
Early Childhood Education and Care 1 -2 years (Junior and/or Senior)			1st and 2nd year Preschool Experience	Level 1 ECE CPR Training	<ul style="list-style-type: none"> ❖ Preschool teacher ❖ Municipal and Licensure Clerk ❖ Elementary, Middle, or High School Teacher
Cosmetology Phase 1 and Phase 2 (Junior and/or Senior)	COD Course Opportunities	50+ Hours	1,500 Clock hours	Illinois State Certified Cosmetology Program	<ul style="list-style-type: none"> ❖ Hairdresser ❖ Hair Stylist ❖ Cosmetologist ❖ Aesthetician ❖ Manicurist ❖ Pedicurist
Criminal Justice 1 year (Junior or Senior)	CRIMJ 1100 Introduction to Criminal Justice (3 Credits) CRIMJ 1110 Police Operations and Procedures (3 Credits)				<ul style="list-style-type: none"> ❖ Security Guard ❖ Police and Sheriffs Patrol Officer ❖ Computer System Analyst ❖ Information Security Analyst ❖ Lawyer ❖ CTE Instructors

TCD Health Science and Technology Pathway Programs

Program	COD Dual Credit	Total Hours	Work-Based Learning	Certifications	Career Opportunities
Fire Science 1 year (Junior or Senior)	Fire Science 1100 Introduction to Fire Science (3 Credits)	7		<ul style="list-style-type: none"> • CPR/AED Certification • NIMS 100, 200, 700, 800 • Courage To Be Safe 	<ul style="list-style-type: none"> ❖ Ambulance Driver and Attendant ❖ Hazardous Materials Removal ❖ Public Safety Telecommunicator ❖ EMT or Paramedic ❖ Firefighter
	Fire Science 1150 CPR - Basic Life Support for Healthcare Providers (1 Credit)				
	Fire Science 2221 - Tactics I (3 Credits)				
Emergency Medical Technician 1 year (Senior)	Fire Science 2271 Emergency Medical Technician (10 Credits) Fire Science 1150 CPR - Basic Life Support for Healthcare Providers (1 Credit)	11	13 hours with fire department 12 hours with Private Ambulance 16 hours hospital 41 Clinical Hours	<ul style="list-style-type: none"> • CPR/AED Certification 	
Medical Terminology 1 year (Junior or Senior)	HS 1100 Survey of Health Care Careers (2 Credits) HS 1110 Biomedical Terminology (3 Credits)	5			<ul style="list-style-type: none"> ❖ Nursing Assistant ❖ Phlebotomist ❖ Physical Therapist ❖ Registered Nurse ❖ Nurse Practitioner ❖ Medical Assistant ❖ Medical Administrative Assistant ❖ Medical Records and Health Information
Nursing Assistant Training Program 1 year (Junior or Senior)	NURSA 1105 Basic Nursing Asst. Training (6 Credits) CSPD 1111 Central Sterile Processing and Distribution (3 credits) SURGT 1000 Ethical Considerations in the Healthcare Industry (3 credits) CPR - Basic Life Support for Healthcare Providers (1 Credit)	13	40 Clinical Hours	<ul style="list-style-type: none"> • Illinois Nurse Assistant Competency Exam • Adult/Infant/Child CPR/AED Certification 	
Medical Assisting 1 year (Junior or Senior)			160 Clinical Hours	Registered Medical Assistant	

TCD Arts and Communication Pathway Programs

Program	COD Dual Credit (Year 1)	Total Hours	Work-Based Learning	Certifications	Career Opportunities
Multimedia and Television Production 1-2 years (Junior or Senior)	MPTV 1011- Introduction to Motion Pictures and Television (3 Credits)	9	Potential 2nd Year Employer Internship or Advanced Curriculum		<ul style="list-style-type: none"> ❖ Motion Picture Projectionist ❖ Producers and directors ❖ Camera operators, television, and video and film ❖ Animator ❖ Film and video editors ❖ Audio and Video Equipment Technician ❖ Graphic Designer ❖ Public Relations Specialist ❖ Multi-Media Artist and Animator ❖ Librarian
	MPTV 1020 - Editing for Motion Pictures (3 Credits)				
	MPTV 1220 Introduction to Television Production (3 Credits)				

TCD Business and Finance Pathway Programs

Program	COD Dual Credit (Year 1)	Total Hours	Work-Based Learning	Certifications	Career Opportunities
Professional Cooking, Baking, and Service 1-2 years (Junior or Senior)	CULIN 1120 - Food Service and Sanitation (COD)(1 Credit) CA 112 - Principles of Food Preparation(JJC) (3 Credits) CA 152 - Quantity Food Preparation II (JJC) (3 Credits)	6	Potential 2nd Year Employer Internship or Advanced Curriculum	ServSafe Food Handler Certification ServSafe Managers Certification ServSafe Allergen Certificate American Culinary Federation Certification Wisconsin Milk Marketing Board Cheese Certification Sustainability Stewardship SP/2 safety/ Professional Skills Training	<ul style="list-style-type: none"> ❖ Business and Finance ❖ Hospitality and Tourism ❖ Business Management Operations ❖ Manager Training ❖ Supervisor ❖ Chef or Head Cook ❖ Meeting, Convention and Event Planner ❖ Restaurant Manager ❖ Sales Representatives ❖ Entrepreneur ❖ Private Chef ❖ CTE Teacher ❖ Self-Enrichment Teacher