TRANSCRIPTED CREDIT COURSE MENU - 2022-2023

Updated 12-16-2021

High school instructor minimum qualifications are outlined below. For General Studies courses, all HLC requirements must be met by 9/1/2023. High School Teachers with an experiential based licensure will need to submit a resume for review by NWTC to subsitute for the DPI licensures outlined for each course. Comparable Michigan licensures will be allowable for Michigan schools.

Technical College Course	Grade Level	Catalog#	Credits	Course Description	NWTC and Higher Learning Commission (HLC) Teacher Training Requirements	Required Face to Face Instruction	NWTC Area of Focus	HIGH SCHOOL Area of Focus	Career Cluster
Abnormal Psychology	11 - 12	10-809-159	3	10-809-159 ABNORMAL PSYCHOLOGY ...surveys features, causes, assessment and treatment of abnormal behavior through major theoretical perspectives. Introduces the diagnosis system of the DSM-IV, the history, cultural/social differences, current perspectives, diagnosis criteria/treatments.	Related DPI License and Master's degree in Psychology or master's degree with at least 18 graduate credits in a combination of the qualifying fields that provide a foundation in the specific subject matter being taught.	45	Social Sciences	Social Sciences	Liberal Arts and Sciences
Accounting Principles	10 - 12	10-101-106	3	10-101-106 ACCOUNTING PRINCIPLES ...teaching non-accountants to read, analyze, and interpret financial information for making informed business decisions. This class de-emphasizes the use of debits, credits, journal entries and other accounting procedures.	DPI License 250 Business Education, 281 Business and Office-Voc	60	Business/IIT	Business/IIT	Finance
Accounting I	10 - 12	10-101-110	4	10-101-110 ACCOUNTING 1 ...accounting principles, financial statements, business transactions, accounting cycles/systems, specialized journals, accounting for cash and receivables for sole proprietorships in service or merchandising businesses.	DPI License 250 Business Education, 281 Business and Office-Voc	60	Business/IIT	Business/IIT	Finance
Accounting-Quickbooks	10 - 12	10-101-190	1	10-101-190 ACCOUNTING-QUICKBOOKS...An introductory course in using QuickBooks to create vendor/employee accounts, invoices, budgets, profit/loss statements, balance sheets, A/R, A/P, journals, graphs.	DPI License 250 Business Education, 281 Business and Office-Voc	30	Business/IIT	Business/IIT	Finance
Agribusiness Economics	11 - 12	10-090-303	3	10-090-303 AGRIBUSINESS ECONOMICS ...basic knowledge of macro and micro economics will be taught, proficiency in developing basic cash flows, cost benefit analysis, enterprise analysis, budget development, profit loss statements and developing cost of production. Student should be able to develop adequate information for farm manager to analyze business proposals.	DPI License 200 Agriculture	45	Trades / Tech Ed	Agriculture	Agriculture, Food and Natural Resources
Aquaculture/Aquaponics	9 - 12	10-090-115	2	10-090-115 AQUACULTURE/AQUAPONICS ...investigate hydroponic plant growing and fish farming operations; designs, suitable species, maintenance, costs efficiencies and yields. Plan a system, develop a budget, explore markets, trends, and analyze benefits and obstacles in this business.	DPI License 200 Agriculture	30	Trades / Tech Ed	Agriculture	Agriculture, Food and Natural Resources
Auto Service Operations	11 - 12	10-602-101	1	10-602-101 AUTO SERVICE OPERATIONS ...students will perform and understand oil change and multipoint vehicle inspections; writing a repair order; battery jump starting, charging, and safety; tire inspection, removing, replacement, and repair.	DPI License 220 Technical Education and earned "B" or better in Train the Trainer course. Prior experience working in an automotive or diesel shop is required.	30	Trades / Tech Ed	Trades / Tech Ed	Transportation, Distribution, and Logistics
Automation 1 - Control Logic	10 - 12	10-664-100	1	10-664-100 AUTOMATION 1 - CONTROL LOGIC...Electric motor control components such as switches, relays, starters, transformers; and safely mount and install motor and motor control components and perform related wiring and troubleshooting of motor control circuits.	DPI License 220 Technical Education or 292 Technical Occ-Mfg and earned "B" or better in Train the Trainer course	30	Trades / Tech Ed	Trades / Tech Ed	Manufacturing
Automation 2: Motor Control	10 - 12	10-664-101	1	10-664-101 AUTOMATION 2 - MOTOR CONTROL...Electric motor control components such as sensors, timers and counters.	DPI License 220 Technical Education or 292 Technical Occ-Mfg and earned "B" or better in Train the Trainer course	30	Trades / Tech Ed	Trades / Tech Ed	Manufacturing
Basic Anatomy	11 - 12	10-806-189	3	10-806-189 BASIC ANATOMY ...examines concepts of anatomy and physiology as they relate to health careers. Learners correlate anatomical and physiological terminology to all body systems.	Science related DPI License and Master's degree in Anatomy & Pysiology or a master's degree with at least 18 graduate credits in a combination of the qualifying subfields that provide a foundation in the specific subject matter being taught. If the Master's Degree is in in a related subfield, the transcripts must identify at least 9 graduate credits in Anatomy & Physiology (i.e., the instructional discipline) and another 9 graduate credits in the related discipline.	45	Natural Sciences	Natural Sciences	Science, Technology, Engineering and Math
Basic Mechanics (New Fall 2022)	9 - 12	10-620-144	1	10-620-144 BASIC MECHANICS ...Introduction to basic mechanical devices and tools used for assembly, disassembly and adjustment.	DPI License 220 Technical Education or 292 Technical Occ-Mfg and earned "B" or better in Train the Trainer course	30	Trades / Tech Ed	Trades / Tech Ed	Manufacturing
Beekeeping & Pollinators	11 - 12	10-090-118	1	10-090-118 BEEKEEPING & POLLINATORS ...bees pollinate our crops and orchards; they are an environmental quality indicator species and they provide honey. Explore beekeeping using onsite hives; explore pollinators and habitats, and network with local beekeepers.	DPI License 200 Agriculture	15	Trades / Tech Ed	Agriculture	Agriculture, Food and Natural Resources
Building Codes - Carpentry	11 - 12	10-410-108	1	10-410-108 BUILDING CODES - CARPENTRY… the basic requirements for the erection of buildings inhabited by the public for living, work and pleasure.	DPI License 220 Technical Education and earned "B" or better in Train the Trainer course. Prior experience interpreting the Uniform Building Code is highly recommended.	15	Trades / Tech Ed	Trades / Tech Ed	Architecture and Construction
Business Law	11 - 12	10-102-150	3	10-102-150 BUSINESS LAW...common law contracts and sales contracts: formation, interpretation, performance, and discharge; the law of agency; corporations; and introduction to the American legal system: criminal and tort law, and global business issues.	DPI License 250 Business Education or 281 Business and Office-Voc	45	Business/IIT	Business/IIT	Business, Management and Administration

Course	Grades	Code	Cr	Description	Licensure	Hrs	Dept	Dept	Career Cluster
Business - Principles	10 - 12	10-102-158	3	10-102-158 BUSINESS PRINCIPLES ...economics and business; global business; ethics and social responsibility; types of business ownership; entrepreneurship; role of management: operations management; human resources; marketing; managing financial resources and legal issues impacting business.	DPI License 250 Business Education or 281 Business and Office-Voc	45	Business/IIT	Business/IIT	Business, Management and Administration
CAD	11 - 12	10-606-113	2	10-606-113 CAD (COMPUTER AIDED DRAFTING) ...computer aided drafting using AutoCAD software focusing on template settings; creating and manipulating layers; basic drawing, editing, and inquiry commands; blocks and attributes; and plotting.	DPI License 220 Technical Education or 292 Technical Occ-Mfg and earned "B" or better in Train the Trainer course	60	Trades / Tech Ed	Trades / Tech Ed	Architecture and Construction
CAD Intro	11 - 12	10-606-116	1	10-606-116 CAD (COMPUTER AIDED DRAFTING)-INTRODUCTION ...CAD terminology, drawing preliminaries, basic inquiry and setting commands, layer setting and manipulation, basic drawing and display commands, basic edit commands, and plotting, using AutoCAD software.	DPI License 220 Technical Education or 292 Technical Occ-Mfg and earned "B" or better in Train the Trainer course	30	Trades / Tech Ed	Trades / Tech Ed	Architecture and Construction
Career Planning (New Fall 2022)	9 - 12	10-105-101	1	10-105-101 CAREER PLANNING ...experiential learning introduction. Learn how personal branding allows candidates to differentiate themselves from the competition through appearance, personality, and marketing competency. Career portfolio introduced.	DPI License 250 Business Education, 281 Business and Office-Voc, 285 Marketing Education, and earned "B" or better in Train the Trainer course	15	Business/IIT	Business/IIT	Business, Management and Administration
CNC Milling and G-Code	11 - 12	31-420-363	2	31-420-363 CNC MILLING AND G-CODE ...shop safety around CNC milling machines, CNC basics, Cartesian coordinate systems, CNC milling controls and preparing basic G-Code milling programs.	DPI License 220 Technical Education or 292 Technical Occ-Mfg and earned "B" or better in Train the Trainer course	60	Trades / Tech Ed	Trades / Tech Ed	Manufacturing
College Tech Math 1A	11 - 12	10-804-113	3	10-804-113 COLLEGE TECHNICAL MATH 1A ...topics include solving linear equations; graphing; percent; proportions; measurement systems; computational geometry; and right triangle trigonometry. Emphasis will be on the application of skills to technical problems.	Math related DPI License and Master's Degree in Mathematics, Engineering, or Physics OR a Master's and 18 graduate level credits in Mathematics	45	Math	Math	Science, Technology, Engineering and Math
College Tech Math 1B	11 - 12	10-804-114	2	10-804-114 COLLEGE TECHNICAL MATH 1B ...topics include: performing operations on polynomials; solving quadratic and rational equations; formula rearrangement; solving systems of equations; and oblique triangle trigonometry. Emphasis will be on the application of skills to technical problems.	Math related DPI License and Master's Degree in Mathematics, Engineering, or Physics OR a Master's and 18 graduate level credits in Mathematics	30	Math	Math	Science, Technology, Engineering and Math
Communicating Effectively	10 - 12	31-801-386	1	31-801-386 COMMUNICATING EFFECTIVELY ...provides knowledge, skills, process and understanding of: interpersonal communication, including the function of interpersonal communication, listening techniques, perception, non-verbal communication, language, self-concept, conflict resolution, customer service.	Related DPI License and Master's degree in English/Communications or master's degree with at least 18 graduate credits in a combination of the qualifying fields that provide a foundation in the specific subject matter being taught.	30	Comm Skills	Language Arts	Liberal Arts and Sciences
Communicating-Writing	10 - 12	31-801-385	1	31-801-385 COMMUNICATING-WRITING 1 ...the nature of business writing, business letters, and the job-seeking process, including resumes, cover letters, thank-you letters, and employment interviews.	Related DPI License and Master's degree in English or master's degree with at least 18 graduate credits in a combination of the qualifying fields that provide a foundation in the specific subject matter being taught.	30	Comm Skills	Language Arts	Liberal Arts and Sciences
Courts/Jurisdiction	11 - 12	10-504-132	3	10-504-132 COURTS/JURISDICTION...Development of the American judicial system, the federal and Wisconsin court structure, Wisconsin judicial rules and procedures from complaint to sentencing as they impact police or correctional officers.	DPI License in 745 Sociology or 701 Broadfield Social Studies and minimum of 20 semester credits drawn from the recognized social science disciplines of Psychology, Sociology, Political Science, Economics, History, Anthropology, Geography, or Philosophy.	45	Law & Public Safety	Law & Public Safety	Law, Public Safety and Security
Culture of Healthcare	11 - 12	10-501-104	2	10-501-104 CULTURE OF HEALTHCARE...prepares learners to work in the healthcare environment as part of a healthcare team. Learners will investigate the healthcare community, patient privacy standards, and the professional behavior that is expected in today's medical community. Learner will examine various aspects of verbal and written communication skills, customer service principles, and problem solving techniques necessary to be a vital member of the healthcare workforce.	DPI License in Health, 210 Family and Consumer Education, and earned "B" or better in NWTC course.	30	Health, EC, EDU	Health, EC, EDU	Health Sciences
Customer Service (New Fall 2022)	10 - 12	10-104-191	3	10-104-191 CUSTOMER SERVICE ...examine customer service culture, develop communication and listening skills, explore diversity in the workplace, develop skills for handling challenging customers, and explore the impact of technology on customer service and engagement.	DPI License 250 Business Education, 281 Business and Office-Voc, 275 Basic Business Ed, or 285 Marketing Education.	45	Business/IIT	Business/IIT	Marketing, Sales and Service
DC1: Introduction	10 - 12	10-660-104	1	10-660-104 DC 1: INTRODUCTION ...introduction to the concepts of DC electricity and simple series circuits. Voltage, current, resistance, Ohm's Law, power and Kirchoff's Voltage Law are defined.	DPI License 220 Technical Education or 292 Technical Occ-Mfg and earned "B" or better in Train the Trainer course	30	Trades / Tech Ed	Trades / Tech Ed	Manufacturing
Developmental Psychology	10 - 12	10-809-188	3	10-809-188 DEVELOPMENTAL PSYCHOLOGY ...defines human development; examines theories; heredity and environmental effects; prenatal development and birth; evaluates biosocial, cognitive psychosocial development through the life span; aging, death, and dying.	Related DPI License and Master's degree in Psychology or master's degree with at least 18 graduate credits in a combination of the qualifying fields that provide a foundation in the specific subject matter being taught.	45	Social Sciences	Social Sciences	Liberal Arts and Sciences
Diesel Lab Operations	11 - 12	10-412-100	1	10-412-100 DIESEL LAB OPERATIONS ...diesel shop safety, basic equipment operation, rigging and lifting, hand and power precision tools, fasteners and hazard material handling procedures.	DPI License 220 Technical Education and earned "B" or better in Train the Trainer course. Prior experience working in an automotive or diesel shop is required.	30	Trades / Tech Ed	Trades / Tech Ed	Transportation, Distribution, and Logistics
Digital Literacy for Healthcare	11 - 12	10-501-107	2	10-501-107 DIGITAL LITERACY FOR HEALTHCARE...the course will explore the use of the electronic health record, the role of social media in health care communication, the uses of wearable technologies that monitor activity and heart rate, the use of data to manage population health and the impact of new developments on the healthcare workforce.	DPI License in Health, 210 Family and Consumer Education, and earned "B" or better in NWTC course.	30	Health, EC, EDU	Health, EC, EDU	Health Sciences
ECE: Child Development	10 - 12	10-307-179	3	10-307-179 ECE: CHILD DEVELOPMENT...child development in the early childhood education setting. Social, cultural, and economic influences on child development; child development theories; development of children age three to eight; child development research; heredity and environment.	DPI License 210 Family and Consumer Education, WTCS Certification for Early Childhood Education preferred, and completion of NWTC course with "B" grade or better.	45	Health, EC, EDU	Health, EC, EDU	Education and Training
ECE: Foundations of Early Childhood	10 - 12	10-307-148	3	10-307-148 ECE: FOUNDATIONS OF EARLY CHILDHOOD ... integrate strategies that support diversity and anti-bias perspectives; summarize early childhood education settings; identify components of a quality program; summarize responsibilities of early childhood professionals; explore early childhood curriculum models.	DPI License 210 Family and Consumer Education, WTCS Certification for Early Childhood Education preferred, and completion of NWTC course with "B" grade or better.	45	Health, EC, EDU	Health, EC, EDU	Education and Training

Course	Grades	Number	Credits	Description	DPI License Requirements	Hours	Category 1	Category 2	Category 3
ECE: Health Safety & Nutrition	11 - 12	10-307-167	3	10-307-167 ECE: HEALTH/SAFETY/NUTRITION...health, safety, and nutrition in early childhood settings. Anti-bias perspectives; governmental regulations and professional standards; safe, healthy, and nutritionally sound early childhood programs; child abuse/neglect mandates; SIDS risk reduction; Shaken Baby Syndrome.	DPI License 210 Family and Consumer Education, WTCS Certification for Early Childhood Education preferred, and completion of NWTC course with "B" grade or better.	45	Health, EC, EDU	Health, EC, EDU	Education and Training
ECE: Infant & Toddler Development	11 - 12	10-307-151	3	10-307-151 ECE: INFANT/TODDLER DEVELOPMENT...infant and toddler development in an early childhood education setting. Development of infants/toddlers; prenatal conditions and development; child development theories; heredity and the environment; culturally and developmentally appropriate environments.	DPI License 210 Family and Consumer Education, WTCS Certification for Early Childhood Education preferred, and completion of NWTC course with "B" grade or better.	45	Health, EC, EDU	Health, EC, EDU	Education and Training
ECE: Social Studies, Art & Muisc	11 - 12	10-307-110	3	10-307-110 ECE: SOCIAL STUDIES, ART & MUSIC ...This 3-credit course will focus on beginning level curriculum development in the specific integrated content areas of social studies, art, music, & movement (SSAMM).	DPI License 210 Family and Consumer Education, WTCS Certification for Early Childhood Education preferred, and completion of NWTC course with "B" grade or better.	45	Health, EC, EDU	Health, EC, EDU	Education and Training
EDU: Child and Adolescent Development	11 - 12	10-522-106	3	10-522-106 EDU: CHILD & ADOLESCENT DEVELOPMENT...growth and development birth through adolescence. Acquaints the learner with the fundamental tasks of physical, motor, perceptual, cognitive social/emotional and language development.	DPI License 210 Family and Consumer Education	45	Health, EC, EDU	Health, EC, EDU	Education and Training
EDU: Intro to Educational Practices	9 - 12	10-522-103	3	10-522-103 EDU: INTRODUCTION TO EDUCATIONAL PRACTICES ...fundamentals of teaching methodologies, history of education, issues in trends, learning styles, instructional cycle, characteristics of diverse classroom, questioning techniques and assessment practices.	DPI License 210 Family and Consumer Education	45	Health, EC, EDU	Health, EC, EDU	Education and Training
EDU: Technology in Education	11 - 12	10-522-104	3	10-522-104 EDU: TECHNOLOGY IN EDUCATION ...students develop the knowledge and skills to use trending classroom technologies and gain experience creating and using web tools including portfolios. Students create presentations for educational environments and identify ISTE Standards.	DPI License 210 Family and Consumer Education	45	Health, EC, EDU	Health, EC, EDU	Education and Training
Energy-Intro Renew & Sustain	10 - 12	10-480-101	4	10-480-101 ENERGY-INTRO RENEW & SUSTAIN ...an overview of various renewable energy technologies and sustainable design practices and their current applications. Emphasis will be placed on energy consumption, efficiency, and conservation.	DPI License 606 Life and Environmental Science or 615 Environmental Studies or DPI License 220 Technical Education	60	Trades / Tech Ed	Natural Sciences	Agriculture, Food and Natural Resources
English Composition 1	11 - 12	10-801-136	3	10-801-136 ENGLISH COMPOSITION 1 ...learners develop knowledge/skills in planning, organizing, writing, editing. Students will also analyze audience/purpose, use elements of research, format documents using standard guidelines, and develop critical reading skills.	Related DPI License and Master's degree in English or master's degree with at least 18 graduate credits in a combination of the qualifying fields that provide a foundation in the specific subject matter being taught.	45	Comm Skills	Language Arts	Liberal Arts and Sciences
Entrepreneurial Service Management **(New Fall 2022)**	9 - 12	10-145-188	3	10-145-188 ENTREPRENEURIAL SERVICE MANAGEMENT ...the elements of your successful business with a strategic plan that focuses on servicing your customer with a winning attitude, performance, teamwork, and competition.	DPI License 250 Business Education, 285 Marketing Education	45	Business/IIT	Business/IIT	Marketing, Sales and Service
Event Marketing	10 - 12	10-104-125	3	10-104-125 EVENT MARKETING...planning, promotion execution, and evaluation of special events (entertainment, industry, meeting/convention). Students will work toward the actual staging of an event (will require time outside of the classroom setting).	DPI License 250 Business Education, 285 Marketing Education	45	Business/IIT	Business/IIT	Hospitality & Tourism
Financial Management-Small Business **(New Fall 2022)**	9 - 12	10-145-186	3	10-145-186 FINANCIAL MANAGEMENT-SMALL BUSINESS ...the importance of good recordkeeping systems, reports, and the records necessary for a small business. Financial analysis techniques are explored through hands-on Income statements and cash flow projections for small businesses.	DPI License 250 Business Education, 285 Marketing Education	45	Business/IIT	Business/IIT	Marketing, Sales and Service
Floor Framing Systems - **Requires project**	11 - 12	10-410-104	3	10-410-104 FLOOR FRAMING SYSTEMS ...this course teaches all aspects of floor construction and flooring system construction. □	DPI License 220 Technical Education, earned "B" or better in Train the Trainer course, and meeting NWTC FQAS Carpenty instructor qualifications required (contact NWTC Associate Dean, Construction, for details).	90	Trades / Tech Ed	Trades / Tech Ed	Architecture and Construction
Fluids 1: Basic Pneumatics	10 - 12	10-620-100	1	10-620-100 FLUIDS 1: BASIC PNEUMATICS ...what fluid power is, differentiate between hydraulics and pneumatics, implement basic pneumatic circuits, utilize schematics, apply Pascal's Law, define properties of fluids, implement airflow control and hydraulics cylinder circuits.	DPI License 220 Technical Education or 292 Technical Occ-Mfg and earned "B" or better in Train the Trainer course	30	Trades / Tech Ed	Trades / Tech Ed	Manufacturing
Flux Cored Arc Welding 1	11 - 12	31-442-329	1	31-442-329 FLUX CORED ARC WELDING 1...Course provides the opportunity for the learner to develop the knowledge, skills, process and understanding of surfacing welds in the flat position as well as fillet and groove welds in the flat, horizontal position using gas shielded flux cored arc welding.	DPI License 220 Technical Education or 292 Technical Occ-Mfg and earned "B" or better in Train the Trainer course	30	Trades / Tech Ed	Trades / Tech Ed	Manufacturing
G-Code and Cam	11 - 12	31-420-364	2	31-420-364 G-CODE AND CAM ...learn basic programming with computer-aided manufacturing (CAM) software, along with G-and M-code programming of computer numerically controlled (CNC) milling and turning machines.	DPI License 220 Technical Education or 292 Technical Occ-Mfg and earned "B" or better in Train the Trainer course	60	Trades / Tech Ed	Trades / Tech Ed	Manufacturing
Gas Metal Arc Welding 1	11 - 12	31-442-348	1	31-442-348 GAS METAL ARC WELDING ...course provides the opportunity for the learner to develop the knowledge, skills, process and understanding of welding in the flat and horizontal positions, fillet, pipe to plate and groove welds on plain carbon steel.	DPI License 220 Technical Education or 292 Technical Occ-Mfg and earned "B" or better in Train the Trainer course	30	Trades / Tech Ed	Trades / Tech Ed	Manufacturing
Gas Tungsten Arc Welding 1	11 - 12	31-442-359	1	31-442-359 GAS TUNGSTEN ARC WELDING 1...Course provides the opportunity for the learner to develop the knowledge, skills, process and understanding of GTAW equipment set-up as well as the basic skills needed to make welds on plain carbon steel. Weld quality will be discussed but this course is only used to understand the basics of the GTAW process.	DPI License 220 Technical Education or 292 Technical Occ-Mfg and earned "B" or better in Train the Trainer course	30	Trades / Tech Ed	Trades / Tech Ed	Manufacturing

Course	Grade	Number	Cr	Description	Requirements	Hrs	Category 1	Category 2	Cluster
General Anatomy & Physiology	11 - 12	10-806-177	4	10-806-177 GENERAL ANATOMY & PHYSIOLOGY ...overview of the human anatomy/physiology using a body-systems approach, emphasizing the interrelationships between form/function at the gross and microscopic levels. (Prerequisite: 10-806-155, Chemistry-Basic, OR High School Chemistry with a C or better).	Science related DPI License and Master's degree in Anatomy & Pysiology or a master's degree with at least 18 graduate credits in a combination of the qualifying subfields that provide a foundation in the specific subject matter being taught. If the Master's Degree is in in a related subfield, the transcripts must identify at least 9 graduate credits in Anatomy & Physiology (i.e., the instructional discipline) and another 9 graduate credits in the related discipline. NWTC course completion with a "B" grade or better.	75	Natural Sciences	Natural Sciences	Science, Technology, Engineering and Math
General Chemistry	10 - 12	10-806-134	4	10-806-134 GENERAL CHEMISTRY ...covers chemistry fundamentals. Topics: metric system, problem-solving, periodic relationships, chemical reactions, chemical equilibrium, properties of water; acids, bases, and salts; and gas laws.	Science related DPI License and Master's degree in Chemistry or master's degree with at least 18 graduate credits in a combination of the qualifying fields that provide a foundation in the specific subject matter being taught.	75	Natural Sciences	Natural Sciences	Science, Technology, Engineering and Math
General Physics 1	11 - 12	10-806-154	4	10-806-154 GENERAL PHYSICS I . . . Applications/theory of basic physics principles: problem solving, laboratory investigation, and applications including unit conversion and analysis, vectors, translational and rotational kinematics/dynamics, heat/temperatie, and harmonic motion and waves.	Science related DPI License and Master's degree in Physics or if the Master's Degree is in in a related subfiled, the transcripts must identify at least 9 graduate credits in Physics (i.e., the instructional discipline) and another 9 graduate credits in the related discipline.	75	Natural Sciences	Natural Sciences	Science, Technology, Engineering and Math
Horticulture - Intro	9 - 12	10-001-110	3	10-001-110 HORTICULTURE-INTRODUCTION ...explore the horticulture industry, plant culture, identification, propagation, physiology, selected aspects of horticulture industry including fruits, vegetables, ornamentals, greenhouse systems, landscape techniques, home gardens, and turf.	DPI License 200 Agriculture	60	Trades / Tech Ed	Agriculture	Agriculture, Food and Natural Resources
Illustrator Fundamentals (Replaced Digital Illustration/Illustrator Fundamentals)	10 - 12	10-111-161	3	10-111-161 ILLUSTRATOR FUNDAMENTALS ...develop basic knowledge and skills using digital illustration software (i.e. Adobe Illustrator), apply vector graphic strategies into graphic design medias and integration into other software packages. Course content covers creating basic shapes, drawing, transforming elements, working with type, blending, layers and special effects.	DPI License 250 Business Education, 285 Marketing Education, Art Education 550, Technical Education 220 and Adobe Creative Suite Experience	60	Business/IIT	Business/IIT or Art	Arts, Audiovisual Technology and Communication
Interm Algebra with Applications	11 - 12	10-804-118	4	10-804-118 INTERM ALGEBRA WITH APPLICATIONS . . . Algebra content with application. Topics include properties of real numbers, orders of operations, algebraic solution for linear equations and inequalities, operations with polynomial and rational expressions, operations with rational exponents and radicals, algebra of inverse, logarithmic and exponential functions.	Math related DPI License and Master's degree in Mathematics or master's degree with at least 18 graduate credits in a combination of the qualifying fields that provide a foundation in the specific subject matter being taught.	60	Math	Math	Science, Technology, Engineering and Math
Intro to American Government	11 - 12	10-809-122	3	10-809-122 INTRO TO AMER GOVERNMENT ...introduces American political processes and institutions: focusing on rights/responsibilities of citizens and the process of participatory democracy. Examines separation of powers and checks/balances & the roles of different groups.	Related DPI License and Master's Degree in Political Science or History OR Master's degree with 18 graduate credits in any combination of Political Science and/or History.	45	Social Sciences	Social Sciences	Liberal Arts and Sciences
Intro to Carpentry	11 - 12	10-410-110	1	10-410-110 INTRODUCTION TO CARPENTRY ...the carpentry profession, tools of the trade, job site etiquette and safety, and carpentry math.	DPI License 220 Technical Education and earned "B" or better in Train the Trainer course	30	Trades / Tech Ed	Trades / Tech Ed	Architecture and Construction
Intro to Dairy Science	10 - 12	10-090-326	3	10-090-326 INTRO TO DAIRY SCIENCE ...this course provides basic knowledge of the dairy science field. Topics include animal health, anatomy and physiology, genetics and reproduction, basic breed characteristics and animal feedstuffs.	DPI License 200 Agriculture	45	Trades / Tech Ed	Agriculture	Agriculture, Food and Natural Resources
Intro to Diversity Studies	11 - 12	10-809-172	3	10-809-172 INTRO TO DIVERSITY STUDIES...basic American values of justice and equality by teaching vocabulary, history of immigration/conquest, transcultural communication, legal liability, multicultural majority/minority relations, ageism, sexism, gender, sexual orientation, the disabled/ADA.	Related DPI License and Master's degree in Sociology or master's degree with at least 18 graduate credits in a combination of the qualifying fields that provide a foundation in the specific subject matter being taught.	45	Social Sciences	Social Sciences	Liberal Arts and Sciences
Intro to Electrical Systems	11 - 12	10-412-153	1	10-412-153 INTRO TO ELECTRICAL SYSTEMS ...focus on the theory of electricity. This will include studying Ohms, Kirchoff's, and Newton's Laws and how they apply to the circuits on various electrical systems on a vehicle. Students will apply these theories to troubleshoot simple circuits.	DPI License 220 Technical Education and earned "B" or better in Train the Trainer course. Knowledge of basic electrical theory and understanding of basic automobile DC wiring required.	30	Trades / Tech Ed	Trades / Tech Ed	Transportation, Distribution, and Logistics
Intro to Environmental Science	11 - 12	10-506-146	3	10-506-146 INTRO TO ENVIRONMENTAL SCIENCE ...an introduction to the basic principles of environmental science including ecology, energy, resources, waste management, air, water, and soil pollution.	DPI License 606 Life and Environmental Science or 615 Environmental Studies Minimum of 20 semester credits drawn from the recognized science disciplines of Biology, Chemistry, Earth Science, or Physics, with a minimum of 12 credits in Chemistry.	45	Trades / Tech Ed	Natural Sciences	Science, Technology, Engineering and Math
Introduction to Human Services	11 - 12	10-520-101	3	10-520-101 INTRODUCTION TO HUMAN SERVICES...Examine the evolution of the human services field. Distinguish the various types of human service agencies and occupations available in the field. Demonstrate the qualities of the field professionals. Complete 10 hours of community service at an agency of learner's choice outside of class time. Assess boundaries and ethical issues commonly found in the human services profession. Apply reflective practitioner techniques.	DPI License in 745 Sociology or 701 Broadfield Social Studies and minimum of 20 semester credits drawn from the recognized social science disciplines of Psychology, Sociology, Political Science, Economics, History, Anthropology, Geography, or Philosophy.	45	Law & Public Safety	Law & Public Safety	Law, Public Safety and Security
Intro to IT (New Fall 2022)	9 - 12	10-107-107	1	10-107-107 INTRO TO IT ...This course provides an overview of Information Technology by comparing and contrasting the various fields within the broader IT industry. Students will be exposed to hardware, software, networking, programming, and analyst roles to understand how each plays an integral role in IT.	DPI License 250 Business Education, 281 Business and Office-Voc, 275 Basic Business Ed, 285 Marketing Education, 405 Computer Science or 400 Math and "B" or better in Train the Trainer course.	15	Business/IIT	Business/IIT	Information Technology

Course	Grade	Number	Cr	Description	License Requirements	Hrs	Cluster	Dept	Career Cluster
Introduction to Law Enforcement	10 - 12	10-504-194	3	10-504-194 INTRODUCTION TO LAW ENFORCEMENT ...in this course, learners will discover the history and evolution of policing and explore thought-provoking issues that underscore the challenging and rewarding world of policing. Learners will examine the role of law enforcement in a democratic society, covering concepts such as law enforcement services; crime deterrence; discretion, and the expanded role of today's police officers. This course will also explore evolving law enforcement strategies and attitudes that build effective law enforcement and community relationships including the use of problem-oriented policing. Learners will also consider how professional law enforcement officers work in conjunction with the courts, corrections and other agencies to administer criminal justice in Wisconsin.	DPI License in 745 Sociology or 701 Broadfield Social Studies and minimum of 20 semester credits drawn from the recognized social science disciplines of Psychology, Sociology, Political Science, Economics, History, Anthropology, Geography, or Philosophy.	45	Law & Public Safety	Law & Public Safety	Law, Public Safety and Security
Intro to Psychology	10 - 12	10-809-198	3	10-809-198 INTRODUCTION TO PSYCHOLOGY ...survey of theoretical foundations of human behavior such as sensation and perception, motivation, emotions, learning, personality, psychological disorders, therapy, stress, and human diversity in personal, social and vocational settings.	Related DPI License and Master's degree in Psychology or master's degree with at least 18 graduate credits in a combination of the qualifying fields that provide a foundation in the specific subject matter being taught.	45	Social Sciences	Social Sciences	Liberal Arts and Sciences
Intro to Sociology	10 - 12	10-809-196	3	10-809-196 INTRODUCTION TO SOCIOLOGY ...the nature and variety of groups; inequality, race and ethnicity; family, population, social integration, and change; collective behavior; politics, economics, religion, education, and the effects of technology.	Related DPI License and Master's degree in Sociology or master's degree with at least 18 graduate credits in a combination of the qualifying fields that provide a foundation in the specific subject matter being taught.	45	Social Sciences	Social Sciences	Liberal Arts and Sciences
IT:Network:Cisco 1	10 - 12	10-150-163	3	10-150-163 IT:NETWORK:CISCO 1 …cable characteristics and termination, structured cabling systems, OSI reference model, IP addressing and subnetting, network architectures and basic protocols, Ethernet switches, basis router operation and configuration.	DPI License 250 Business Education, 281 Business and Office-Voc, 275 Basic Business Ed, 405 Computer Science or 400 Math and CISCO certification. Teacher's experience in IT will be assessed to determine if Trainer the Trainer is required.	60	Business/IIT	Business/IIT or Tech Ed	Information Technology
IT: Network: Network Essentials	10 - 12	10-150-177	2	10-150-177 IT:NETWORK:NETWORK ESSENTIALS...develop the knowledge, skills, process, and understanding of client OS installation, configuration, administration, and troubleshooting; network connectivity; standard system maintenance procedures; command line introduction; and basic PowerShell script writing.	DPI License 250 Business Education, 281 Business and Office-Voc, 275 Basic Business Ed, 405 Computer Science or 400 Math and CISCO certification. Teacher's experience in IT will be assessed to determine if Trainer the Trainer is required.	60	Business/IIT	Business/IIT or Tech Ed	Information Technology
IT: Program:Logic-Intro (New Fall 2022)	9 - 12	10-152-140	1	10-152-140 IT:PROGRAM:LOGIC-INTRO ...techniques for developing computer programs to solve business problems; includes logic, structure, flowcharting, comparing, looping, variables, arrays, file processing, objects, methods, properties, events, data validation, testing procedures.	DPI License 250 Business Education, 281 Business and Office-Voc, 275 Basic Business Ed, 405 Computer Science or 400 Math. Teacher's experience in IT will be assessed to determine if Train the Trainer is required.	30	Business/IIT	Business/IIT	Information Technology
IT: Program:Part 1 (C#) (New Fall 2022)	9 - 12	10-152-173	3	10-152-173 IT:PROGRAM:PART 1 (C#) ...provides a foundation of syntax/semantics of C# .NET programming language to develop Windows-based applications. Covers the architecture of Microsoft's .NET platform where C# is the native language.	DPI License 250 Business Education, 281 Business and Office-Voc, 275 Basic Business Ed, 405 Computer Science or 400 Math. Teacher's experience in IT will be assessed to determine if Train the Trainer is required.	60	Business/IIT	Business/IIT	Information Technology
IT:Support: Hardware-Intro	9 - 12	10-154-150	3	10-154-150 IT:SUPPORT: HARDWARE-INTRO...Computer network terminology, component identification, computer/peripheral configuration and maintenance, basic operating systems concepts and installations, basic networking concepts and configurations and troubleshooting using the Cisco IT Essentials curriculum.	DPI License 250 Business Education, 281 Business and Office-Voc, 275 Basic Business Ed, 405 Computer Science or 400 Math. Teacher's experience in IT will be assessed to determine if Train the Trainer is required.	60	Business/IIT	Business/IIT or Tech Ed	Information Technology
IT:Support: Software-Intro	10 - 12	10-154-160	3	10-154-160 IT:SUPPORT:SOFTWARE-INTRO ...an introductory course for the Computer Support Specialist program and covers the fundamental capabilities and functions of Windows, Word, Excel, Power Point, and Access.	DPI License 250 Business Education, 281 Business and Office-Voc, 275 Basic Business Ed, 405 Computer Science or 400 Math. Teacher's experience in IT will be assessed to determine if Train the Trainer is required.	60	Business/IIT	Business/IIT or Tech Ed	Information Technology
IT:Web: Database Development	10 - 12	10-154-125	3	10-154-125 IT:WEB:DATABASE DEVELOPMENT ...database uses, database terminology, analyzing information requirements, data models, database design phases, entity relationships, normalization processes, database management systems, database objects, development environments, creating tables, writing queries using SQL, testing.	DPI License 250 Business Education, 281 Business and Office-Voc, 275 Basic Business Ed, 405 Computer Science or 400 Math. Teacher's experience in IT will be assessed to determine if Train the Trainer is required.	60	Business/IIT	Business/IIT or Tech Ed	Information Technology
Landscape Installation Practices (Replaced Landscape Installation Intro)	11 - 12	10-001-180	2	10-001-180 LANDSCAPE INSTALLATION PRACTICES ...investigate safety and techniques used in landscape construction practices. These include the use of specific landscape tools, plan implementation methods, preliminary site survey methods, proper planting, equipment operations and installation techniques of basic landscape features.	DPI License 200 Agriculture	45	Trades / Tech Ed	Agriculture	Agriculture, Food and Natural Resources
Marketing Principles	10 - 12	10-104-110	3	10-104-110 MARKETING PRINCIPLES ...marketing management, market segmentation, market research, consumer behavior, product decisions and management of distribution, pricing, promotional decisions for strategy planning.	DPI License 250 Business Education, 285 Marketing Education	45	Business/IIT	Business/IIT	Marketing, Sales and Service
Marketing Your Small Business (New Fall 2022)	9 - 12	10-145-187	3	10-145-187 MARKETING YOUR SMALL BUSINESS ...implement and evaluate a marketing plan for their small business. Students will develop a marketing plan for a selected small business. Components of the plan include market research, customer focus, quality, pricing, and advertising.	DPI License 250 Business Education, 285 Marketing Education	45	Business/IIT	Business/IIT	Marketing, Sales and Service
Math & Logic	11 - 12	10-804-133	3	10-804-133 MATH & LOGIC ...Students will apply problem solving techniques from discrete mathematics.Topics include symbolic logic, sets, algebra and base number systems	DPI License 400 and Master's degree in Mathematics or master's degree with at least 18 graduate credits in a combination of the qualifying fields that provide a foundation in the specific subject matter being taught.	45	Math	Math	Science, Technology, Engineering and Math
Mathematical Reasoning	11 - 12	10-804-134	3	10-804-134 MATHEMATICAL REASONING ...This course provides an alternative pathway to earning credit for a college level liberal arts mathematics course. All college students, regardless of their college major, need to be able to make reasonable decisions about fiscal, environmental, and health issues that require quantitative reasoning skills. An activity based approach is used to explore numerical relationships, graphs, proportional relationships, algebraic reasoning, and problem solving using linear, exponential and other mathematical models. Students will develop conceptual and procedural tools that support the use of key mathematical concepts in a variety of contexts. This course is not designed for Science, Technology, Engineering, or Math (STEM) students and/or others who require calculus.	DPI License 400 and Master's degree in Mathematics or master's degree with at least 18 graduate credits in a combination of the qualifying fields that provide a foundation in the specific subject matter being taught.	45	Math	Math	Science, Technology, Engineering and Math

Course	Grade	Number	Credits	Description	DPI License	Hours	Dept 1	Dept 2	Cluster
Mechanical Design-Exploring (New Fall 2022)	9 - 12	10-606-111	1	10-606-111 MECHANICAL DESIGN EXPLORING ...philosophy/organization/procedure of the Mechanical Design Technology Program, brief overview of the engineering profession by involvement in a design project to illustrate basic concepts/methods of machine design.	DPI License 220 Technical Education and earned "B" or better in Train the Trainer course	30	Trades / Tech Ed	Trades / Tech Ed	Science, Technology, Engineering and Math
Medical Terminology	11 - 12	10-501-101	3	10-501-101 MEDICAL TERMINOLOGY ...focuses on the component parts of medical terms: Prefixes, suffixes, and root words. Students practice formation, analysis and reconstruction of terms. Emphasis on spelling, definition and pronunciation. Introduction to operative, diagnostic, therapeutic and symptomatic terminology of all body systems, as well as systemic and surgical terminology.	DPI License 605 Biology/Life Science; 210,211,213 or 214 F/CS (with biology and/or anatomy/physiology) - transcript review and completion of NWTC course with a "B" grade or better	45	Health, EC, EDU	Health, EC, EDU or Natural Science	Health Sciences
Micro: Access-Intro	9 - 12	10-103-141	1	10-103-141 MICRO: ACCESS-INTRODUCTION ...creating and modifying database tables, compacting a database, managing records, defining table relationships, creating queries, calculations, and aggregate functions, sorting, and using form and report wizards. Requires Windows experience.	DPI License 250 Business Education, 281 Business and Office-Voc, 275 Basic Business Ed	30	Business/IIT	Business/IIT	Business, Management and Administration
Micro: Excel-Intro	9 - 12	10-103-131	1	10-103-131 MICRO: EXCEL-INTRODUCTION ...creating a worksheet, enhancing worksheet appearance, moving and copying data, using formulas and functions, creating charts and using clip art. Windows experience improves success.	DPI License 250 Business Education, 281 Business and Office-Voc, 275 Basic Business Ed	30	Business/IIT	Business/IIT	Business, Management and Administration
Micro: Excel-Part 2	9 - 12	10-103-132	1	10-103-132 MICRO: EXCEL-PART 2 ...Advanced formatting techniques and functions, working with templates, collaborating with multiple Excel users, creating macros, Excel's database features and analysis tools.	DPI License 250 Business Education, 281 Business and Office-Voc, 275 Basic Business Ed	30	Business/IIT	Business/IIT	Business, Management and Administration
Micro: PowerPoint-Intro	9 - 12	10-103-151	1	10-103-151 MICRO: POWERPOINT-INTRODUCTION ...presentation development skills such as: graphics, tables, diagrams, shapes, design themes, sounds, animations, slide transitions, and integration with other software. Requires Windows and MS Word experience.	DPI License 250 Business Education, 281 Business and Office-Voc, 275 Basic Business Ed	30	Business/IIT	Business/IIT	Business, Management and Administration
Micro: Word-Intro	9 - 12	10-103-121	1	10-103-121 MICRO: WORD-INTRODUCTION ...word processing basics including creating, revising, formatting, and printing; sections, tabs, multiple-page numbering; manipulating text; creating headers/footers; creating and formatting tables, graphics; creating charts; applying styles; and merging documents. Requires Windows experience.	DPI License 250 Business Education, 281 Business and Office-Voc, 275 Basic Business Ed	30	Business/IIT	Business/IIT	Business, Management and Administration
Micro: Word-Part 2 (New Fall 2022)	9 - 12	10-103-122	1	10-103-122 MICRO: WORD-PART 2 ...advanced word processing features including working with headers/footers, inserting quick parts, themes, styles, sort and select; footnotes/endnotes, images, shapes, shared documents; specialized tables and indexes; forms; and sharing data. (Corequisite: 10-103-121, Micro: Word-Intro)	DPI License 250 Business Education, 281 Business and Office-Voc, 275 Basic Business Ed.	30	Business/IIT	Business/IIT	Business, Management and Administration
Nutrition	9 - 12	10-316-128	1	10-316-128 NUTRITION ...focuses on the major nutrients (carbohydrates, proteins, fats, minerals, vitamins and water) in the planning of well-balanced diets and the nutritional analysis of well-balanced diets.	DPI License 210, 211 in F/CS and completion of NWTC Course with a "B" or better.	15	Business/IIT	Health, EC, EDU or Natural Science	Hospitality & Tourism
Oral/Interpersonal Communications	10 - 12	10-801-196	3	10-801-196 ORAL/INTERPERSONAL COMMUNICATION ...the communication process, perception and self-concept, language, listening, nonverbal communication, interpersonal relationships, communication in groups and public communication; prepare and deliver an oral presentation.	Related DPI License and Master's degree in English/Communications or master's degree with at least 18 graduate credits in a combination of the qualifying fields that provide a foundation in the specific subject matter being taught.	45	Comm Skills	Language Arts	Liberal Arts and Sciences
Organic Livestock Practices	11 - 12	10-090-120	2	10-090-120 ORGANIC LIVESTOCK PRACTICES... How do organic farmers manage livestock successfully? Principles covered include organic health care, strategies for reproduction, feeding, housing, and young stock. Review rules and organic certification standards.	DPI License 200 Agriculture	30	Trades / Tech Ed	Agriculture	Agriculture, Food and Natural Resources
Organizing Your Small Business (New Fall 2022)	9 - 12	10-145-185	3	10-145-185 ORGANIZING YOUR SMALL BUSINESS ...the components of small business ownership; examining a variety of small business startup and operation scenarios. Assesses your own readiness to begin the entrepreneurial adventure.	DPI License 250 Business Education, 285 Marketing Education	45	Business/IIT	Business/IIT	Marketing, Sales and Service
Outlook	9 - 12	10-103-161	1	10-103-161 OUTLOOK ...create and organize E-mail, schedule meetings, create tasks, and manage contacts.	DPI License 250 Business Education, 281 Business and Office-Voc, 275 Basic Business Ed	30	Business/IIT	Business/IIT	Business, Management and Administration
Personal Brand - Development	9 - 12	10-104-182	2	10-104-182 PERSONAL BRAND-DEVELOPMENT ...learn how personal branding allows you to differentiate yourself from the competition through appearance, personality, and marketing competency.	DPI License 250 Business Education, 285 Marketing Education, 210 Family Consumer Education	30	Business/IIT	Business/IIT	Marketing, Sales and Service
Personal Financial Literacy (New Fall 2022) (Not in a Program at NWTC)	9 - 12	10-102-176	1	10-102-176 PERSONAL FINANCIAL LITERACY ...develop the knowledge skills process and understanding of how to develop a sound financial plan for yourself and others to afford you multiple avenues for earning a living. Students are equipped to analyze lending, saving, and investing options to accurately select the best product for individual circumstances. Financial literacy provides lifelong lessons to participants that relieve stress and promote confidence in their own ability to choose the best options for their lives.	DPI License 250 Business Education, 281 Business and Office-Voc, 275 Basic Business Ed, or 285 Marketing Education.	15	Business/IIT	Business/IIT	Finance
Photography- Digital	10 - 12	10-203-104	3	10-203-104 PHOTOGRAPHY-DIGITAL ...capturing digital images, exposure, shutter speed, aperture, composition, camera operations, lenses, lighting, camera accessories, types of photography, photo challenges, importing, editing and storing images. Access to a digital camera required.	DPI License 250 Business Education, 285 Marketing Education , 550 Art Education, 220 Technical Education and Adobe Creative Suite Experience.	60	Business/IIT	Business/IIT or Art	Arts, Audiovisual Technology and Communication
Photoshop Fundamentals	10 - 12	10-111-101	3	10-111-101 PHOTOSHOP FUNDAMENTALS ...perform raster Image Editing. Course content covers functions of Adobe Photoshop. Create image selections, extractions and composite files using Adobe software, and apply common photo adjustments using fundamental design solutions, creating composite images.	DPI License 250 Business Education, 285 Marketing Education , 550 Art Education, 220 Technical Education and Adobe Creative Suite Experience.	60	Business/IIT	Business/IIT or Art	Arts, Audiovisual Technology and Communication
Plant and Soil Science (New Fall 2022)	9 - 12	10-001-107	2	10-001-107 PLANT AND SOIL SCIENCE ...this course provides the opportunity for the learner to develop the knowledge skill process for understanding of plant structure and biological functions. The role of soils in plant development and best management practices for soils will also be examined.	DPI License 200 Agriculture	45	Trades / Tech Ed	Agriculture	Agriculture, Food and Natural Resources

Course	Grade	Number	Cr	Description	DPI License	Hrs	Dept 1	Dept 2	Career Cluster
Plant - Woody Ornamental	11 - 12	10-001-158	3	10-001-158 PLANT-WOODY ORNAMENTAL ...physiology, culture, identification, and use of primarily temperate woody plant materials appropriate for landscapes in northeastern Wisconsin.	DPI License 200 Agriculture	60	Trades / Tech Ed	Agriculture	Agriculture, Food and Natural Resources
Principles of Civil Engineering **(New Fall 2022)**	11 - 12	10-607-103	3	10-607-103 PRINCIPLES OF CIVIL ENGINEERING ...provides fundamentals of Civil Engineering from concept to completion. Civil Engineering ethics, resume and portfolio creation, and Microsoft Word and Excel will also be introduced.	DPI License 220 Technical Education and earned "B" or better in Train the Trainer course	60	Trades / Tech Ed	Trades / Tech Ed	Science, Technology, Engineering and Math
Principles of Sanitation	9 - 12	10-316-118	1	10-316-118 PRINCIPLES OF SANITATION ...food service sanitation principles of contamination/food borne illness with National Restaurant Association ServSafe Certification upon successful completion.	DPI License 210, 211 in F/CS and completion of NWTC Course with a "B" or better.	15	Business/IIT	Health, EC, IA or Natural Science	Hospitality & Tourism
Revit 1	11 - 12	10-614-291	1	10-614-291 REVIT 1...Highlights essential building information modeling software characteristics. Learners will explore fundamental modeling and documenting features of Revit, including general detailing tools and project printing parameters.	DPI License 220 Technical Education and earned "B" or better in Train the Trainer course	30	Trades / Tech Ed	Trades / Tech Ed	Architecture and Construction
Robotics - Introduction to	11 - 12	10-620-170	1	10-620-170 ROBOTICS - INTRODUCTION TO...Introductory study of the application, operation, programming and troubleshooting of industrial robots.	DPI License 220 Technical Education or 292 Technical Occ-Mfg and earned "B" or better in Train the Trainer course	30	Trades / Tech Ed	Trades / Tech Ed	Manufacturing
Safety Devices and Application **(Replaced Machine Wiring & Safety)**	11 - 12	10-664-170	1	10-664-170 SAFETY DEVICES AND APPLICATIONS ...introduction to the function of commonly used machinery safety devices, wiring of these devices to complete safety circuits, overview of safety system design.	DPI License 220 Technical Education or 292 Technical Occ-Mfg and earned "B" or better in Train the Trainer course	30	Trades / Tech Ed	Trades / Tech Ed	Manufacturing
Shielded Metal Arc Welding 1	11 - 12	31-442-342	1	31-442-342 SHIELDED METAL ARC WELDING 1 ...course provides the opportunity for the learner to develop the knowledge, skills, process and understanding of surfacing welds in the flat position, fillet and groove welds on plain carbon steel.	DPI License 220 Technical Education or 292 Technical Occ-Mfg and earned "B" or better in Train the Trainer course	30	Trades / Tech Ed	Trades / Tech Ed	Manufacturing
Smart Start to Building Automation Systems **(New Fall 2022)**	10 - 12	10-481-103	1	10-481-103 SMART START TO BUILDING AUTOMATION SYSTEMS ...identify and understand how building mechanical systems including ventilation and air handling, heating, cooling, and lighting components are used to provide human comfort. The course focus is on Building Automation System (BAS) components, including system architecture and sequences of operation.	DPI License 606 Life and Environmental Science or 615 Environmental Studies or DPI License 220 and earned a "B" or better in Train the Trainer course.	30	Trades / Tech Ed	Trades / Tech Ed	Science, Technology, Engineering and Math
Solidworks Fundamentals	11 - 12	10-606-160	1	10-606-160 SOLIDWORKS FUNDAMENTALS ...introduces terminology; software operation and interface layout. It also exposes the student to creating basic models, assemblies & using the drawing environment.	DPI License 220 Technical Education and earned "B" or better in Train the Trainer course	30	Trades / Tech Ed	Trades / Tech Ed	Architecture and Construction
Solidworks Intermediate	11 - 12	10-606-106	2	10-606-106 SOLIDWORKS INTERMEDIATE ...introduces using intermediate features such as patterns, revolve, and sweep. Students learn how to measure center of gravity on assemblies and to create completely dimensioned orthographic drawings. (Prerequisite: 10-606-160, Solidworks Fundamentals)	DPI License 220 Technical Education and earned "B" or better in Train the Trainer course	60	Trades / Tech Ed	Trades / Tech Ed	Architecture and Construction
Sustainable AG: Issues & Practices	11 - 12	10-090-111	2	10-090-111 SUSTAINABLE AG: ISSUES & PRACTICES ...use critical thinking skills to compare organic and sustainable agricultural practices with industrial agriculture. Explore food production issues including antibiotics, herbicides, hormones, GMOs, animal welfare, crop yields, nutrients, and pollution.	DPI License 200 Agriculture	30	Trades / Tech Ed	Agriculture	Agriculture, Food and Natural Resources
Transportation Service Operations	11 - 12	10-412-125	1	10-412-125 TRANSPORTATION SERVICE OPERATIONS ...introduces the auto and diesel shop environment, safety and the use of basic hand/power tools in accordance with industry standards, use of manufacturer's service information and literature, handling hazardous materials, and emphasizes general shop safety and general shop practices	DPI License 220 Technical Education and earned "B" or better in Train the Trainer course. Prior experience working in an automotive or diesel shop is recommended.	30	Trades / Tech Ed	Trades / Tech Ed	Transportation, Distribution, and Logistics
Trigonometry with Apps	11 - 12	10-804-196	3	10-804-196 TRIGONOMETRY WITH APPLICATIONS ...topics include circular functions, graphing of trigonometry functions, identities, equations, trigonometric functions of angles, inverse functions, solutions of triangles complex numbers, DeMoivre's Theorem, polar coordinates, and vectors.	DPI License 400 and Master's degree in Mathematics or master's degree with at least 18 graduate credits in a combination of the qualifying fields that provide a foundation in the specific subject matter being taught.	60	Math	Math	Science, Technology, Engineering and Math
Vocational Math A: **Replaced Math Trades 1**;Voc Math A (1 credit) + Voc Math B (1 credit) = Replaces Math Trades 1 (2 credit)	10 - 12	10-804-301	1	10-804-301 VOCATIONAL MATH A ...This course provides the opportunity for the learner to develop the knowledge and skills to apply the concepts of whole numbers, fractions, decimals, measurement, proportions, and percent to their career.	DPI License 400 and Master's degree in Mathematics or master's degree with at least 18 graduate credits in a combination of the qualifying fields that provide a foundation in the specific subject matter being taught.	30	Math	Math	Science, Technology, Engineering and Math
Vocational Math B: **Replaced Math Trades 1**;Voc Math A (1 credit) + Voc Math B (1 credit) = Replaces Math Trades 1 (2 credit)	10 - 12	10-804-302	1	10-804-302 VOCATIONAL MATH B ...This course provides the opportunity for the learner to develop the knowledge and skills to apply the concepts of algebra, geometry, and trigonometry to their career. (Pre-requisite: Completion of 10-804-301 Vocational Math A with a "C" or better)	DPI License 400 and Master's degree in Mathematics or master's degree with at least 18 graduate credits in a combination of the qualifying fields that provide a foundation in the specific subject matter being taught.	30	Math	Math	Science, Technology, Engineering and Math
Website Coding	10 - 12	10-152-185	3	10-152-185 WEBSITE CODING...Create code for generating the structure, function, and design of static websites using standards-based HTML5 and CSS3; validate code; test multi-browser and multi-device functionality.	DPI License 250 Business Education, 281 Business and Office-Voc, 275 Basic Business Ed, 405 Computer Science and "B" or better in NWTC course.	60	Business/IIT	Business/IIT	Information Technology
Welding Transportation 1	11 - 12	10-412-170	1	10-412-170 WELDING TRANSPORTATION 1 ...focuses on welding and cutting safety; develops skills in welding and cutting of metals used in the transportation trades. Methods of welding include gas metal arc welding (MIG) in the horizontal, vertical, and overhead positions. Methods of cutting include oxy-fuel and plasma arc cutting of metals. Students will learn to set up and maintain welding equipment and weld and cut a variety of types and thicknesses of materials commonly used in the transportation trades.	DPI License 220 Technical Education and earned "B" or better in Train the Trainer course. Prior experience with basic MIG welding and oxy-fuel and plasma arc cutting is required.	30	Trades / Tech Ed	Trades / Tech Ed	Transportation, Distribution, and Logistics
Writing a Business Plan-Small Business **(New Fall 2022)**	9 - 12	10-145-189	3	10-145-189 WRITING A BUSINESS PLAN-SMALL BUSINESS ...as a necessary component to beginning a small business, from addressing facets of the business plan, observing various types of plans, to realizing readiness to begin. Plan preparation/presentation are required	DPI License 250 Business Education, 285 Marketing Education	45	Business/IIT	Business/IIT	Marketing, Sales and Service