

2018-2019
REGISTRATION INFORMATION GUIDE
FOR
HENNEPIN TECHNICAL PATHWAYS CLASSES
OFFERED AT
HENNEPIN TECHNICAL COLLEGE

Attached is course information to be included in your high school registration guide. We appreciate the inclusion of this information in your guide in the appropriate class/department category.

Should you have questions, please contact:

Eden Prairie Campus - EPC

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Thank you for your assistance.

Revised 11/1/17

Hennepin Technical Pathways Courses available at Hennepin Technical College

Intermediate District 287's Career Courses focus on career skill development experiences and exploration.

CAREER COURSES

Career courses are designed to assist students in making career decisions. Hands-on instruction is emphasized. Each course offers a broad array of information from similar careers within an industry. From here, students could branch off into a major for their college career choice.

Class activities will include:

- Exposure to equipment and practices representative of current technology
- Lab projects designed to “put it all together”

Students will:

- Gain an understanding of the opportunities available within their chosen career cluster
- Develop a foundation of technical knowledge and skill development
- Acquire a deeper understanding of each related college major and how it matches their interests, abilities and aspirations
- May earn articulated college credit through HTC or other Post-Secondary Institutions by satisfactorily completing the course requirements and by obtaining a grade of an A or B

Courses are scheduled to meet for approximately two hours during the school day, Monday through Friday. Students should see their high school counselor for additional information.

Classes: 8:00 – 9:40 a.m. 10:00 – 11:40 a.m. 12:10 – 1:50 p.m.

Pathways.district287.org

Construction Careers	Construction Careers
<p>Construction I – Fall Semester* EPC - 12:10 p.m. <i>This is an articulated course – see page 2 for more details.</i></p> <p>The goal of this course is to provide students with experiences and examples of the construction industry that will allow them to assess their own abilities and interests in the various construction disciplines.</p> <p>Students will participate in classroom, shop, and house-project activities. The activities in the shop and house project will allow the students to have hands-on opportunities in many construction disciplines.</p> <p>This experience will allow students to make informed career decisions for the future, while providing them with a useful background in the construction industry.</p> <p><i>Areas of Study may include:</i></p> <ul style="list-style-type: none"> • Introduction to Residential Construction • Wall Framing • Basic Residential Electrical Principles • Materials & Methods • Residential Blueprint Reading <p>*Note: There is a lab fee for this course.</p>	<p>Construction II – Spring Semester* EPC - 12:10 p.m. <i>This is an articulated course – see page 2 for more details.</i></p> <p>The goal of this course is to provide students with experiences and examples of the construction industry that will allow them to assess their own abilities and interests in the various construction disciplines.</p> <p>Students will participate in classroom, shop, and house-project activities. The activities in the shop and house project will allow the students to have hands-on opportunities in many construction disciplines.</p> <p>This experience will allow students to make informed career decisions for the future, while providing them with a useful background in the construction industry.</p> <p><i>Areas of Study may include:</i></p> <ul style="list-style-type: none"> • Introduction to CAD • Ceramic Tile • Basics of Cabinetmaking • Deck construction • Intro to Stair Framing • Intro to Rafter Framing <p>*Note: There is a lab fee for this course.</p>

Culinary Arts Careers	Culinary Arts Careers
<p>Culinary Arts – Fall Semester* EPC – 12:10 p.m. <i>This is an articulated course – see page 2 for more details.</i></p> <p>This course is intended to introduce students to a variety of careers in the food service industry. Students will experience a number of career areas through both technical and hands-on skills. Employment opportunities and career advancement will be discussed and explored. Food preparation experiences will range from the very basic to gourmet. Students will also explore some specialty career areas within the food service industry.</p> <p><i>Areas of Study</i></p> <ul style="list-style-type: none"> • Introduction to the food service industry • Safety and sanitation • Reading and conversion of recipes • Bakery production • Pantry production • Plate/platter garnishing • Restaurant management/food cost controls • Preparation of stocks, sauces, and soups • Appetizers, canapés, hors d’oeuvres <p>*Note: There is a lab fee for this course.</p>	<p>Culinary Arts – Spring Semester* EPC – 12:10 p.m. <i>This is an articulated course – see page 2 for more details.</i></p> <p>This course offers a more advanced level of culinary training tailored to the standards of the culinary industry. Students will be expected to perform at entry-level industry standards. Hands-on activities are about 70 percent of the coursework.</p> <p><i>Areas of Study</i></p> <ul style="list-style-type: none"> • Introduction to breakfast cookery • Introduction to range food cookery – vegetables and starches • Range food cookery techniques – meats, poultry, fish and seafood • Introduction to multicultural cuisine • Introduction to cake decorating techniques • Introduction to ice sculpting techniques • Introduction to meat fabrication • Advanced baking techniques • Intro to Garde Manger-Cold Foods Pantry <p>*Note: There is a lab fee for this course.</p>

Culinary Arts Careers	
<p>Cooking for Independent Living – Fall or Spring Semester* EPC - 8:00 a.m. and 10:00 a.m. <i>(No articulated credit is available for this course.)</i></p> <p>This course introduces the student to basic food preparation skills for use in the home setting as well as on the job. The student will learn to prepare balanced meals with emphasis on nutrition and economy. This course is designed for students who are developing transition skills.</p> <p>Students who continue in the Spring Semester will build on skills learned Fall Semester, increasing their level of independence.</p>	
<p><i>Areas of Study</i></p>	
<ul style="list-style-type: none"> • Menu planning • Economy - budgeting • Nutrition • Sanitation and safety • Measurements <p>*Note: There is a lab fee for this course.</p>	<ul style="list-style-type: none"> • Food preparation skills • Shopping for food • Knife skills • Full meal preparation

Human Services Careers	Human Services Careers
<p>Law Enforcement –Fall Semester EPC – 10:00 a.m. and 12:10 p.m. <i>This is an articulated course – see page 2 for more details.</i></p> <p>This program is designed for students interested in law enforcement careers as a police officer, crime scene investigator, probation officer, etc. This program makes it possible for students to learn through very practical, hands-on training methods. Students will learn such things as crime scene investigations, police patrol procedures, fingerprinting, search warrant application and execution, and Minnesota State Laws and Criminal Code</p> <p><i>Areas of Study</i></p> <ul style="list-style-type: none"> • The history and evolution of law enforcement • Criminals in history • Crime, criminals, and victims • U.S. Constitution and The Bill of Rights • Evidence identification and collection • Latent fingerprinting • Crime scene investigation • Case studies • Officer survival • Practical scenarios 	<p>Law Enforcement –Spring Semester EPC – 10:00 a.m. and 12:10 p.m. <i>This is an articulated course – see page 2 for more details.</i></p> <p>This course continues the exploration into a career in law enforcement. Students will learn through hands-on training and practical scenarios such things as drugs and narcotics investigations, gangs and gang investigations, use of police dogs, and ethics in policing. Students will explore post-secondary law enforcement schools, employment with a law enforcement agency, and preparation for oral board panels. No prerequisites required.</p> <p><i>Areas of Study</i></p> <ul style="list-style-type: none"> • Police policy and procedures • Gangs in the United States • Homeland security • Police Conduct • Narcotics • Search warrant and raid execution • Specialized weapons and tactics (S.W.A.T.) • Case studies • Job search and oral board preparation • Law enforcement programs

Human Services Careers
<p>Forensics – Fall or Spring Semester EPC - 8:00 a.m. <i>This is an articulated course – see page 2 for more details.</i></p> <p>This course introduces the student to the science behind forensics as well as labs and activities that enhance the student’s learning experience. Student will enjoy a hands-on approach to forensics. This course integrates science with real-life applications and case studies. There will be a virtual forensics component that explores crime scenes, autopsies, and evidence analysis.</p> <p><i>Areas of Study</i></p> <ul style="list-style-type: none"> • Crime scene investigation • Forensic Biology • Fingerprint analysis • DNA profiling • Toxicology, Botany, and Entomology • Firearms and Ballistics • Virtual Autopsies • Virtual Crime Scenes

Health Careers	Health Careers
<p>Nursing Assistant – Fall Semester ONLY AHA CPR/First Aid – Fall Semester Only EPC - 10:00 a.m. and 12:10 p.m. <i>This is an articulated course – see page 2 for more details.</i></p> <p>This course prepares students for entry-level patient-care employment. Students will acquire skills in basic nursing, human-needs rehabilitation, and restorative services. Skills are practiced in a supervised laboratory and in a long-term care facility. Upon successful completion, students will be eligible to take the MN State Nursing Assistant Competency exam. Successful completion of this course requires 80 percent or higher scores on each written test, completion of all skill demonstrations, completion of ALL scheduled clinical hours, and 90 percent or better attendance in classroom and lab. A mantoux test within 90 days of clinical is required.</p> <p><i>Areas of Study:</i></p> <ul style="list-style-type: none"> • Resident rights • Safety and infection control • Death and dying • Nutrition • Personal care • Vital signs • Emergency procedures including CPR and First Aid • Mental health rehabilitation 	<p>Health Careers – Spring Semester ONLY EPC – 10:00 a.m. and 12:10 p.m. <i>Part of this course is an articulated course – see page 2 for more details.</i></p> <p>This exciting course is for students interested in exploring a career in the medical field. In addition to career exploration students will also develop career goals, identify personal characteristics, learn medical terminology and be introduced to anatomy and physiology.</p> <p><i>Areas of Study:</i></p> <ul style="list-style-type: none"> • Medical terminology • Safety and infection control • Personal characteristics, legal and ethical responsibilities • Career job exploration: emergency medical careers, nursing/doctor, dental, dietary, radiology, biomedical engineering, medical laboratory, and medical office • Introduction to anatomy and physiology • Team member and leadership skills • Health Care Systems

Transportation Careers	Transportation Careers
<p>Auto Body Repair – Fall Semester* EPC – 10:00 a.m. and 12:10 p.m. <i>This is an articulated course – see page 2 for more details.</i></p> <p>This introductory course to auto body technology teaches non-structural repair, collision damage estimating, and refinishing. This is a skill-building course that starts students on their way towards becoming proficient in the auto body industry.</p> <p><i>Areas of Study</i></p> <ul style="list-style-type: none"> • Automotive refinishing • Detailing • Estimating • Safety Practices <p>*Note: There is a lab fee for this course.</p> <p>Painting/Welding for Auto Repair – Fall Semester EPC – 8:00 a.m. <i>This is an articulated course – see page 2 for more details.</i></p> <p>Students will learn oxyacetylene cutting and welding, MIG welder set up, removal of welded components on vehicles and replacement, plastic welding and plastic repair.</p> <p><i>Areas of Study</i></p> <ul style="list-style-type: none"> • Oxyacetylene cutting and welding • MIG welding/set up • Weld drilling and cutting • Plastic welding/repair • Surface Prep • Undercoats • Finish coats • Polish <p>*Note: There is a lab fee for this course.</p>	<p>Auto Body Repair – Spring Semester* EPC – 8:00 a.m., 10:00 a.m. and 12:10 p.m. <i>This is an articulated course – see page 2 for more details.</i></p> <p>In this course, students learn MIG welding, dent repair, and alignment of bolts on parts.</p> <p><i>Areas of Study</i></p> <ul style="list-style-type: none"> • Cutting and heating processes • Welding • Non-structural repair • Disassembly, assembly, and alignment of bolt-on components • Advanced welding project <p>*Note: There is a lab fee for this course.</p> <p>Advanced Auto Body Repair - Fall or Spring Semester (Instructor approval required) EPC – 8:00 a.m., 10:00 a.m. and 12:10 p.m. <i>This is an articulated course – see page 2 for more details.</i></p> <p>Students refine their skills in repairing today’s technologically advanced cars that require knowledge of metals and plastics and proficiency in performing structural repairs using specialized equipment. Students will restore and refinish vehicles, using skills learned in class.</p> <p><i>Areas of Study</i></p> <ul style="list-style-type: none"> • Frame repair • Welding • Metal finishing • Painting • Alignment of body components <p>(Prerequisite: Student must have completed both Fall and Spring Semester Auto Body Repair courses.)</p>

Transportation Careers	Transportation Careers
<p>Automotive Technology – Fall Semester * EPC –10:00 a.m. and 12:10 p.m. <i>This is an articulated course – see page 2 for more details.</i></p> <p>Students learn basic automotive systems and begin mastering tools, techniques, and maintenance procedures regularly performed on automobiles. Students will perform work on donated vehicles or their own vehicles, and conduct repair and maintenance procedures on tires, steering, suspension, and electrical systems. In addition, students will acquire shop safety habits essential to work in an automotive service shop. Experiences include using on-line automotive resources similar to those at automotive service centers to find information on all mass-produced vehicles.</p> <p><i>Areas of Study</i></p> <ul style="list-style-type: none"> • Suspension and steering • Automotive electrical systems <p>*Note: There is a lab fee for this course.</p>	<p>Automotive Technology – Spring Semester * EPC –10:00 a.m. and 12:10 p.m. <i>This is an articulated course – see page 2 for more details.</i></p> <p>This course continues the study of fundamental automotive theories and operating systems. Students learn about automotive brake systems through lecture and hands-on activities. Students will learn brake theory, diagnosis, and repair. In addition, basic engine theory, fuel injection, ignition, and engine performance will be covered. (Fall Semester is not a prerequisite for the Spring Semester course.)</p> <p><i>Areas of Study</i></p> <ul style="list-style-type: none"> • Brakes • Engine theory • Engine performance <p>*Note: There is a lab fee for this course.</p>

Transportation Careers	Transportation Careers
<p>Outdoor Motor Sports/Power Equipment I – Fall or Spring Semester EPC – 10:00 a.m. and 12:10 p.m. <i>This is an articulated course – see page 2 for more details.</i></p> <p>Students will learn how to maintain and repair ATVs, motorcycles, mini bikes, snowmobiles, personal watercraft, and small internal combustion engines used on power equipment such as lawn tractors, generators, trimmers, and leaf/snow blowers. Students will also learn engine maintenance, preventive care, problem solving, minor and major engine rebuilding, and how to achieve customer satisfaction. The curriculum focuses on skill building projects and troubleshooting. Students learn industry standards and current technology using both factory and after-market manuals and text.</p> <p><i>Areas of Study</i></p> <ul style="list-style-type: none"> • Engine rebuilding • Repair and overhaul • Shop safety • Trouble-shooting techniques <p>Power Sports for the Enthusiast/Home Shop – Fall or Spring Semester EPC – 8:00 a.m. This is an articulated course – see page 2 for more details.</p> <p>Power Sports for the Enthusiast focuses on both preventative and routine maintenance of power sports equipment. Students will learn how to properly store their seasonal equipment. Students will also set up and maintain a “home shop” learning how to budget and purchase tools and equipment, maintain their “shop” and perform projects required with the resources they have at their “shop”. Problem solving and critical thinking are two of the “tools” the students will frequently use.</p> <p><i>Areas of Study</i></p> <ul style="list-style-type: none"> • How to bleed hydraulic breaks • How to tighten a chain on a dirt bike • How to align the skis on a snowmobile • How to lower a motorcycle • How to wire in an integrated tail light • How to change impeller on an outboard 	<p>Outdoor Motor Sports/Power Equipment II – Fall or Spring Semester EPC – 10:00 a.m. and 12:10 p.m. <i>This is an articulated course – see page 2 for more details.</i></p> <p>Students in this advanced course will focus on skill building, diagnostics, trouble-shooting, preventive care, and minor and major engine rebuilding. A large emphasis will be placed on time management which will include ordering parts, customer communications, invoicing, and computer skills. Electrical components, along with reading schematics and the repair of these items, will also be a component of this course.</p> <p><i>Areas of Study</i></p> <ul style="list-style-type: none"> • Electrical components • Reading schematics • Repair and overhaul <p><i>(Prerequisite: Student must have passed Outdoor Motor Sports/Power Equipment I.)</i></p>

Career Exploration

Women in Industry (*NEW COURSE*)

-All are welcome to attend this course-

EPC –8:00 am

(No articulated credit is available for this course.)

This course is designed to give students an understanding of non-traditional employment in the Trades and Industry world. The course will rotate through the selected areas of employment highlighting opportunities for women and non-traditional workers. Guest speakers and real-life scenarios will be part of each area of study.

Areas of Study

- Electrical
- Auto Tech
- Auto Body
- Cabinetmaking/Carpentry
- Culinary
- Small Engines
- Law Enforcement
- IT
- Plumbing

Information Technology

Introduction to Technology Integration – Fall Semester

EPC – 8:00 a.m., 10:00 a.m. and 12:10 p.m.

This is an articulated course – see page 2 for more details.

This course will introduce the student to an overview of the IT principles which every business and computer student should understand. This course will present the changing role of the IS professional as well as introduce concepts that will be covered more fully in advanced classes. This course will utilize hands –on experiences to maximize instruction.

Areas of Study

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- Video Game design (8:00 am)
- Define terms
- Label computer components
- Utilize application software
- Describe data communications
- Apply business and computer ethics
- Identify computer security issues
- Characterize database functions
- Explore future job opportunities
- Apply decision making practices
- Explain artificial intelligence technologies
- Explore emerging technologies
- Build their dream computer in presentation form and present to the class

Learn to disassemble and reassemble a computer