

2021-2022  
REGISTRATION INFORMATION GUIDE  
FOR  
**HENNEPIN TECHNICAL PATHWAYS**  
OFFERED AT  
HENNEPIN TECHNICAL COLLEGE

**A**ttached 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:**

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**Joe Millard-Assistant Principal**  
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**Eden Prairie, MN 55347-2600**  
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Thank you for your assistance.

Revised 1/13/2021

## 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 use the skills and knowledge learned to branch off into a post-secondary career choice or explore employment in the area of study.

*Class activities will include:*

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

*Students will:*

- Gain an understanding of the opportunities available within their chosen field of study
- Develop a foundation of technical knowledge and skill development
- Acquire a deeper understanding of each related college offerings and how it matches their interests, abilities and aspirations

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.**

### Articulated Credit

Many of our programs offer articulated college credit with post-secondary schools within the state of Minnesota.

Students taking Pathways courses 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. To receive college credit, students must pursue a degree at the partner institution after they graduate from high school.

To find the courses and schools that offer articulated credit, please visit [www.CTEcreditmn.com](http://www.CTEcreditmn.com)

Engineering, Manufacturing, & Technology	Engineering, Manufacturing, & Technology
<i>Architecture and Construction</i>	<i>Architecture and Construction</i>
<p><b>Construction I – Fall Semester</b>  <b>8:00 a.m., 10:00 a.m. and 12:10 p.m.</b>  <b>(New instructor)</b>  <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"> <li>• Introduction to Residential Construction</li> <li>• Wall Framing</li> <li>• Basic Residential Electrical Principles</li> <li>• Materials &amp; Methods</li> <li>• Residential Blueprint Reading</li> </ul>	<p><b>Construction II – Spring Semester</b>  <b>8:00 a.m., 10:00 a.m. and 12:10 p.m.</b>  <b>(New instructor)</b>  <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"> <li>• Introduction to CAD</li> <li>• Ceramic Tile</li> <li>• Basics of Cabinetmaking</li> <li>• Deck construction</li> <li>• Intro to Stair Framing</li> <li>• Intro to Rafter Framing</li> </ul>

Business, Management, & Administration	Business, Management, & Administration
Hospitality and Tourism	Hospitality and Tourism
<p><b>Culinary Arts – Fall Semester*</b>  <b>12:10 p.m.</b> <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"> <li>• Introduction to the food service industry</li> <li>• Safety and sanitation</li> <li>• Reading and conversion of recipes</li> <li>• Tools and Equipment</li> <li>• Basic principles of cooking and food science</li> <li>• Mise En Place</li> <li>• Stocks and Sauces</li> <li>• Soups</li> <li>• ANSI accredited food handling and kitchen manager certification opportunities possible.  *Note-There is a fee associated with the manager certification.</li> </ul>	<p><b>Culinary Arts – Spring Semester*</b>  <b>12:10 p.m.</b> <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"> <li>• Vegetable cookery</li> <li>• Potato cookery</li> <li>• Legumes, grains, pasta and starch cookery</li> <li>• Meat, poultry, and seafood cookery</li> <li>• Salad dressings and Salad</li> <li>• Sandwiches</li> <li>• Breakfast Cookery</li> <li>• Intro to baking</li> <li>• ANSI accredited food handling and kitchen manager certification opportunities possible.  *Note-There is a fee associated with the manager certification.</li> </ul>

Business, Management, & Administration
Hospitality and Tourism
<p><b>Cooking for Independent Living – Fall or Spring Semester</b>  <b>8:00 a.m. and 10:00 a.m.</b> <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 personal economics. 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"> <li>• Menu planning</li> <li>• Economy - budgeting</li> <li>• Nutrition</li> <li>• Food preparation skills</li> <li>• Shopping for food</li> <li>• Knife skills</li> <li>• Sanitation and safety</li> <li>• Measurements</li> <li>• Full meal preparation</li> </ul>

**Intro to Criminal Justice –Spring 2022****10:00 a.m. and 12:10 p.m.**

This course will introduce the student to the criminal justice system. Student study will focus on the components of the criminal justice system: Laws and Government, Policing, Courts, and Corrections. Students will learn how the four components are connected and related. Topics include history, ethics, victimization, crime statistics and extent, our changing society, and advances in technology. Court cases as well as system successes and failures are discussed and analyzed. This course satisfies Minnesota Transfer Curriculum (MNTC) Goal 9: Ethical and Civic Responsibility

**Major Content:**

- Crime and the Criminal Justice System in the United States
- Nature of Crime and Victimization
- Crime statistics commonly used
- Criminal and constitutional law issues
- History of Policing
- Organization, role, and function of policing
- Community oriented policing/Problem solving policing
- Organization, role, and function of courts
- The criminal prosecution process
- Prosecution and defense attorneys
- History of corrections
- Organization, role, and function of jails and prisons
- Probation and parole; community based corrections
- Determinate and indeterminate sentencing models
- Juvenile Justice System
- Minnesota POST Board requirements

**Juvenile Justice - Fall 2021**

**10:00 a.m. and 12:10 p.m.**

This course emphasizes the origin, development, organization, functions, and jurisdiction of the Juvenile Justice System in America from its historical roots to the present. Special emphasis is placed on the MN Juvenile Justice System and associated statutes. Topic areas include the processes and detention of juveniles; constitutional protections extended to juveniles; case disposition, juvenile statutes and court procedures relative to juvenile offenders, laws and procedures regarding child abuse, child neglect, juvenile records and the juvenile court process. United States and Minnesota Supreme Court cases are discussed and analyzed. Differences between the treatment of adults and juveniles in our society will be highlighted.

Major Content:

- Juvenile Crime and Victimization Data Overview
- Psychological and Emotional Development of Juveniles
- Theories of Delinquency
- Influences on Delinquency
- History of the Juvenile Justice System
- Placements and Detentions
- Juvenile Data Practices
- Juvenile Crime: Status offenses through felonies
- Juvenile Dispositions: Diversion through certification
- Rules of Juvenile Court in Minnesota
- Juvenile Traffic Court
- Juvenile Interview and Interrogation
- Types of Child Abuse and Neglect
- Mandated Reporting
- Referral Resources Available to Peace Officers

**Emergency Medical Responder (EMR) –  
Fall or Spring Semester 10:00 a.m. & 12:10 p.m.**

*This course has concurrent college credit worth 3 semester credits.*

This course prepares students to provide immediate lifesaving prehospital assessment and care for patients of all ages until additional medical help arrives. Students will learn about responder roles, responsibilities, and legal concerns as well as patient assessment, care and stabilization. Additional topics of study include an introduction to emergency medical services systems, anatomy and physiology, responder safety and career opportunities. Practical skills required for EMR's to deal with medical and traumatic emergencies will be taught and students will be trained in professional rescuer CPR.

*Areas of Study*

- The Emergency Medical System
- Responder Safety and Wellness
- Medical, Legal, and Ethical Issues
- Communication, Documentation and Terminology
- Anatomy and Physiology
- Airway Management
- Patient Assessment
- Medical Emergencies
- Bleeding, Shock, and Musculoskeletal Injuries
- Childbirth
- Pediatric and Geriatric Emergencies
- Patient Extrication, Movement and Transport

Health Science Technology	Health Science Technology
<p data-bbox="354 134 548 163" style="text-align: center;">Health Science</p> <p data-bbox="107 184 557 247"><b>Nursing Assistant – Spring and Fall 8:00 a.m., 10:00 a.m. &amp; 12:10 p.m.</b></p> <p data-bbox="107 252 706 315"><i>This is an articulated course – see page 2 for more details.</i></p> <p data-bbox="107 352 784 751">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 data-bbox="107 789 289 819"><i>Areas of Study:</i></p> <ul data-bbox="155 823 643 1138" style="list-style-type: none"> <li>• Resident rights</li> <li>• Safety and infection control</li> <li>• Communication</li> <li>• Death and dying</li> <li>• Nutrition</li> <li>• Personal care</li> <li>• Vital signs</li> <li>• Mental health rehabilitation</li> <li>• Introduction to Medical Terminology</li> </ul>	<p data-bbox="1068 134 1263 163" style="text-align: center;">Health Science</p> <p data-bbox="821 184 1271 247"><b>Health Careers Fall: 12:10 p.m. Fall or Spring 10:00 a.m. &amp; 12:10 p.m.</b></p> <p data-bbox="821 348 1507 546">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 data-bbox="821 785 1003 814"><i>Areas of Study:</i></p> <ul data-bbox="870 819 1490 1125" style="list-style-type: none"> <li>• Medical terminology</li> <li>• Safety and infection control</li> <li>• Personal characteristics, legal and ethical responsibilities</li> <li>• Career exploration in Diagnostics, Therapeutics, Health Informatics, Support Services and Biotechnology Research and Development</li> <li>• First Aid</li> <li>• Team member and leadership skills</li> </ul>



Engineering, Manufacturing, & Technology	Engineering, Manufacturing, & Technology
Manufacturing	Manufacturing
<p><b>Auto Body Repair – Fall Semester*</b>  <b>8:00 a.m., 10:00 a.m. and 12:10 p.m.</b>  <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"> <li>• Automotive refinishing</li> <li>• Detailing</li> <li>• Estimating</li> <li>• Safety Practices</li> </ul> <p>*Note: There is a lab fee for this course.</p>	<p><b>Auto Body Repair – Spring Semester*</b>  <b>8:00 a.m., 10:00 a.m. and 12:10 p.m.</b>  <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"> <li>• Cutting and heating processes</li> <li>• Welding</li> <li>• Non-structural repair</li> <li>• Disassembly, assembly, and alignment of bolt-on components</li> <li>• Advanced welding project</li> </ul> <p>*Note: There is a lab fee for this course.</p>

Engineering, Manufacturing, & Technology
Manufacturing
<p><b>Advanced Auto Body Repair (Year 2)*</b>  <b>Prerequisite:</b> Student must have completed both Fall and Spring Semester Auto Body Repair courses and have instructor approval.  <b>Fall or Spring Semester</b>  <b>8:00 a.m., 10:00 a.m. and 12:10 p.m.</b>  <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"> <li>• Frame repair</li> <li>• Welding</li> <li>• Metal finishing</li> <li>• Painting</li> <li>• Alignment of body components</li> </ul> <p>*Note: There is a lab fee for this course.</p>

Engineering, Manufacturing, & Technology	Engineering, Manufacturing, & Technology
<p style="text-align: center;"><b>Manufacturing</b></p> <p><b>Automotive Technology – Fall Semester *</b>  <b>8:00 a.m., 10:00 a.m. and 12:10 p.m.</b>  <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"> <li>• Suspension and steering</li> <li>• Automotive electrical systems</li> </ul>	<p style="text-align: center;"><b>Manufacturing</b></p> <p><b>Automotive Technology – Spring Semester *</b>  <b>8:00 a.m., 10:00 a.m. and 12:10 p.m.</b>  <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"> <li>• Brakes</li> <li>• Engine theory</li> <li>• Engine performance</li> </ul>

Engineering, Manufacturing, & Technology	Engineering, Manufacturing, & Technology
<p style="text-align: center;"><b>Manufacturing</b></p> <p><b>Outdoor Motor Sports/Power Equipment I – Fall or Spring Semester EPC – 10:00 a.m. and 12:10 p.m.</b> <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"> <li>• Engine rebuilding</li> <li>• Repair and overhaul</li> <li>• Shop safety</li> <li>• Trouble-shooting techniques</li> </ul> <p><b>Power Sports for the Enthusiast/Home Shop – Fall or Spring Semester EPC – 8:00 a.m.</b> <i>This is an articulated course – see page 2 for more details.</i></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"> <li>• How to bleed hydraulic brakes</li> <li>• How to tighten a chain on a dirt bike</li> <li>• How to align the skis on a snowmobile</li> <li>• How to lower a motorcycle</li> <li>• How to wire in an integrated tail light</li> <li>• How to change impeller on an outboard</li> </ul>	<p style="text-align: center;"><b>Manufacturing</b></p> <p><b>Outdoor Motor Sports/Power Equipment II – Fall or Spring Semester EPC – 10:00 a.m. and 12:10 p.m.</b> <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. Electrical motors and the various charging systems will be introduced. Students will learn to use a multimeter in coordination with manufacturer specific service manuals to diagnose, troubleshoot and correct electrical problems. Students will learn about various braking systems, starting systems and accessories common in the power sports field. Students will learn to diagnose, problem solve and repair these systems or accessories.</p> <p><i>Areas of Study</i></p> <ul style="list-style-type: none"> <li>• Electrical components</li> <li>• Reading schematics</li> <li>• Repair and overhaul</li> <li>• Electrical motors and battery power</li> <li>• Brake Systems</li> <li>• Drive Systems</li> <li>• Accessories.</li> </ul> <p><i>(Prerequisite: Student must have passed Outdoor Motor Sports/Power Equipment I.)</i></p>

## Arts, Communications, & Information Systems

### Information Technology

#### **Introduction to Information Technology – Fall and Spring 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 IT professional as well as introduce concepts that will be covered more fully in the 10 a.m. and 12:10 pm classes. This course will utilize hands –on experiences to maximize instruction.

#### *Areas of Study*

- IT Exploration (8:00 a.m.) Articulated
- The 10:00 a.m. & 12:10 p.m. courses will focus on the following areas
- Information Systems- Articulated
  - Animation ( Stop Motion & 2D & 3D) Students will learn to animate your own project
  - Build their dream computer in presentation form and present to the class
  - PC Operating Systems Windows 10 -Articulated
  - Open Source Operating Systems Redhat Linux Mint Fedora
  - App Development

## Foundation Knowledge & Skills

### Career Exploration

#### **Taste of Tech – Fall and Spring Semester**

**8:00 a.m.**

Taste of Tech is a class that is designed to help students explore different Career and Technical careers. Students who take this class will be exposed to all of the Pathways courses that are taught at the times mentioned above for a two week period. This class is open for students to enroll at any time throughout the semester.

*While the students are exposed to the Pathways courses they will focus their learning on:*

- Career investigation
- Job outlook
- Salary potential
- Industry specific safety
- Tools and techniques
- Industry specific project