



| 287

**CAREER &
TECH CENTER**



Career & Technical Education Course Guide

2025-2026

Engineering, Manufacturing, and Technology



Auto Body Repair SA

Level 2 | Semester Course

- Develop a comprehensive plan to refinish vehicles, mastering the operation of equipment and paint application while prioritizing environmental safety.
- Learn the ins and outs of handling hazardous wastes responsibly, alongside essential skills such as buffing, detailing, and creating damage reports, all while adhering to safety regulations set by EPA and OSHA.
- Dive into various aspects including paint types, color codes, paint mixing techniques, and manufacturer paint systems, culminating in hands-on practice to refine your vehicle refinishing expertise.



Articulated
College Credit
Available



*AES Entry-Level
Certification



ELA HS
Standards
Aligned

Auto Body Repair SB

Level 2 | Semester Course

- Gain mastery in utilizing Oxyacetylene Systems and MIG welders. Acquire the skills to proficiently perform Mig welds on both steel and aluminum, adapting to different positions, particularly focusing on their application in repairing automobiles.
- Learn how to use tools for shaping metal and fabricating things with them, helping you understand how to work with different materials.
- You'll learn how to fix dents, use special tools, and apply fillers, as well as remove and align car parts to make repairs like a pro.



Articulated
College Credit
Available



ELA HS
Standards
Aligned

Advanced Auto Body Repair*

Level 3 | Semester Course

**Prerequisite: Completion of Auto Body Repair SA & SB*

- Learn advanced techniques in collision repair while prioritizing safety. Learn how to sand, spray, and repair car frames using specialized tools.
- Fix real cars and research career options in Auto Body Repair. You'll make plans for your own career in this exciting industry.
- Explore various jobs in Auto Body Repair by meeting professionals, visiting a local body shop, and doing projects that help you plan for your future career in this field.



Articulated
College Credit
Available



Professional
Networking



Automotive Technology SA

Level 2 | Semester Course

- Gain exposure to Trade Knowledge, Welding Safety, Steering/Suspension, alignment angles and Introductory Automotive Electrical concepts. Develop competence in safe Oxygen Acetylene Welding operation, accurate tool utilization, steering/suspension theory, diagnosis, and repair, electrical system theory, and practical application of Ohm's Law and electrical troubleshooting on vehicles, .
- Acquire comprehensive automotive skills, including battery, alternator, and starter testing, and the ability to identify and resolve electrical system issues. Utilize internet-based learning for further knowledge enhancement.
- Engage in career research within the transportation field, attend presentations by industry professionals, and visit automotive shops. Craft a personal career action plan while exploring diverse career pathways within the transportation industry.



Articulated
College Credit
Available

Automotive Technology SB

Level 2 | Semester Course

- Delve into Trade Knowledge, Brake Operations, Anti-Lock Brake Fundamentals, Engine Theory, and Management, gaining confidence in basic services and essential areas like brake repair, and engine types.
- Acquire consumer empowerment and automotive education skills, learning to identify and diagnose brake and engine issues, understand engine operation, and efficiently use manufacturer information for repair procedures and estimate writing.
- Develop practical skills in handling high-pressure gas cylinders, setting up welding equipment, and using brake and engine repair tools, enabling the performance of basic engine repairs and the analysis of engine problems with well-rounded readiness for the automotive industry.



Articulated
College Credit
Available



*SP2 Safety &
Pollution
Certification



Outdoor Power Sports SA

Level 2 | Semester Course

- Explore the ins and outs of 2-cycle and 4-cycle engines—identify, disassemble, measure wear points, assemble, and conduct pre-operation tests. Learn fuel mixing, RPM checking, and engine operation per manufacturer's specifications.
- Investigate internal combustion engine fuels, carbureted and fuel injection systems, diesel engines, and their distinct fuel systems.
- Gain insights into workplace dynamics, legal considerations, and strategies for identifying and recovering stolen wages.



Articulated
College Credit
Available

Outdoor Power Sports SB

Level 2 | Semester Course

- Explore electrical, drive, brake, and charging systems, identifying motors, batteries, and wiring techniques. Learn hands-on repair skills and diagnose various drive and driven systems in the industry.
- Gain expertise in testing 12-volt batteries, repairing electrical wiring, overhauling brake systems and troubleshooting drive systems. Understand employee-employer dynamics, legal aspects, and workplace rights.
- Acquire comprehensive knowledge of power equipment systems and workplace ethics. Enhance technical skills and awareness of legal considerations for a successful career in the field.



Articulated
College Credit
Available

Advanced Outdoor Power Sports SA/SB*

Level 3 | Semester Course

**Prerequisite: Completion of Outdoor Power Sports SA & SB*

- Students will demonstrate leadership within the shop environment, through peer mentorship and demonstration of skills learned in prior Outdoor Power Sports courses.
- Throughout the semester, students will showcase their practical skills by completing six “shop level” projects, each individually designed and approved by the instructor, while under the mentorship of an industry expert.
- Students will actively contribute to the understanding of the course concepts by leading three discussions during the lecture sessions, with topics subject to instructor approval.



Articulated
College Credit
Available



Drones: Operations & Aviation Basics SA

Level 2 | Semester Course

- Learn to fly drones confidently while exploring aviation basics, FAA regulations, and safety protocols.
- Build your employability skills in identifying and resolving issues efficiently
- Uncover how drones are transforming industries and explore exciting career paths



Articulated
College Credit
Available



*FAA-Part 107
License
Certification

Drones: Enhanced Operations - Mapping, Media, and More SB

Level 2 | Semester Course

**Preferred Pathway Progression: Prior completion of Drones SA: Operations & Aviation Basics*

**Both semesters needed for FAA-Part 107 License Certification*

- Master the art of drone mapping and surveying, using advanced techniques to capture precise aerial data for industries like construction, agriculture, and environmental science.
- Explore how drones are revolutionizing industries through cross-disciplinary applications in fields like media, construction, and environmental science.
- Learn the techniques behind professional drone videography and imaging, including camera control, composition, and autonomous flight for creative and efficient shooting.



Articulated
College Credit
Available



*FAA-Part 107
License
Certification



Construction: Practicum for Independent Living SA

Level 1 | Semester Course

- Roll up your sleeves and learn practical skills for maintaining and repairing your own home, from fixing leaky faucets to patching drywall.
- Familiarize yourself with essential tools and equipment used in home maintenance, and master proper usage and safety protocols.
- Develop critical thinking and problem-solving skills as you troubleshoot and resolve a variety of household maintenance issues.



Individual &
Career Skill
Development

Construction: Practicum for Independent Living SB

Level 1 | Semester Course

- Gain the confidence to tackle common household issues independently, saving time and money while fostering a sense of self-sufficiency.
- Dive into plumbing, electrical work, HVAC systems, automotive care, bicycle repair, carpentry, and fundamental first aid,
- Discover how basic home maintenance skills can open doors to future employment opportunities.



Individual &
Career Skill
Development

Health Sciences



Nursing Assistant

Level 3 | Semester Course

- Explore basic human needs, personal care skills, health continuum, legal ethics, and infection control in a supervised lab setting.
- Combine theoretical learning with 16 hours of clinical practice, preparing you for the Nursing Assistant examination and practical application in the field of nursing assistance.
- Gain the knowledge and skills required to take the Minnesota State Nursing Assistant Competency Examination. Successful completion leads to eligibility for the Minnesota Nursing Assistant Registry, offering a pathway into the healthcare profession.



Concurrent
or Articulated
College Credit
Available



*Nursing
Assistant Registry
Certification

Exploring Health & Wellness

Level 1 | Semester Course

- Dive into a comprehensive exploration of health and wellness, covering mental, physical, and emotional well-being to foster a balanced and healthy lifestyle.
- Engage in dynamic and enjoyable physical activities and mindfulness techniques to promote physical and mental fitness while learning about the interactions of systems within the body.
- Explore the diverse fields within healthcare, gaining insights into potential career paths from counseling, nursing and medicine to public health and wellness coaching.



Individual &
Career Skill
Development

First Aid, CPR and Emergency Medical Response

Level 2 | Semester Course

- Learn crucial first aid techniques and how to respond confidently in emergency situations including CPR, wound care, immobilization, transporting, and more.
- Develop teamwork and leadership skills as you collaborate with classmates to assess situations, make decisions, and provide effective care under pressure.
- Be prepared for anything life throws your way, whether it's a medical emergency at home, school, or in your community, knowing you have the skills and knowledge to respond effectively.



College Credit
Under
Development



Industry
Certification

Business, Management, and Administration

Culinary Arts SA

Level 3 | Semester Course

*Completion of SA & SB will result in a [Culinary Manager Occupation Certificate](#) (18 credits) through [Hennepin Technical College](#).

- Explore culinary arts within hospitality, mastering safety, equipment, cooking techniques, pantry management, and the art of creating stocks, sauces, bakery items, and more.
- Dive into the nuances of the food service industry, sanitation, tools, nutrition, cooking principles, and culinary preparations, from stocks and sauces to the science of food.
- Gain practical skills in safety, tools, nutrition, and cooking methods, preparing you for an enriching culinary odyssey in the hospitality industry.



Concurrent
College Credit
Available



*ServSafe Food
Handler
Certification

Culinary Arts SB

Level 3 | Semester Course

*Completion of SA & SB will result in a [Culinary Manager Occupation Certificate](#) (18 credits) through [Hennepin Technical College](#).

- Work collaboratively with classmates to plan menus, execute recipes, and serve meals, fostering teamwork and communication skills.
- Learn about career opportunities in the culinary arts industry, from chef positions to food styling, and discover how your passion for cooking can translate into a rewarding career.
- Gain hands-on experience in a professional kitchen environment, honing your knife skills, mastering cooking methods, and perfecting plating techniques.



Concurrent
College Credit
Available



*ServSafe Food
Handler
Certification



Cooking For Independent Living SA

Level 1 | Semester Course

- Learn to plan, organize, and cook delicious and healthy meals for yourself, family, and friends using everyday ingredients you already have at home.
- Explore food safety, following recipes, kitchen safety rules, and cooking methods through practical sessions.
- Discover the art of culinary delights as you delve into the world of desserts, sandwiches, fruits, vegetables, menus, sauces, soups, nutrition, kitchen math, cooking methods, quick breads, and yeast bread/rolls in this comprehensive cooking and nutrition course.



Individual &
Career Skill
Development



*ServSafe Food
Handler
Certification

Cooking For Independent Living SB

Level 1 | Semester Course

- Learn fundamental cooking skills that are essential for preparing delicious and nutritious meals to fuel your independent lifestyle.
- Get hands-on experience in the kitchen as you learn how to chop, sauté, bake, and more.
- Master the essentials of kitchen safety, seasonings, proper measuring, meat, poultry, grains, legumes, pasta, fish, working in a restaurant, breakfast foods, and the art of handling knives and smallware in this hands-on course.



Individual &
Career Skill
Development



*ServSafe Food
Handler
Certification

Arts, Communications, and Information Systems



Exploring Graphic Design SA

Level 1 | Semester Course

- Dive into introductory graphic design concepts and software like Adobe Photoshop, Illustrator, and InDesign. Similar to Graphic Design: Visual Communication but at an exploratory level.
- Discover visual communication basics, terminology, and appreciate modern design techniques. Learn about tools used in graphic design and create simple design projects.
- Understand fundamental graphic design tools, terminology, and start creating basic design projects, initiating your journey into graphic design concepts.



Individual &
Career Skill
Development

Exploring Graphic Design SB

Level 2 | Semester Course

- Design projects using Adobe Photoshop, Illustrator, and InDesign.
- Incorporate graphic design principles into industry publications.
- Organize and maintain files and folders for graphic design projects.



Individual &
Career Skill
Development

Video Production: Videography SA

Level 2 | Semester Course

**Adobe Professional Certification if SA & SB completed*

- Dive into the world of video creation, learning camera operation, script writing, lighting, sound, and digital editing techniques.
- Gain practical skills in camera operation, audio-video equipment setup, basic camera movements, shot differentiations, and digital editing. Evaluate and refine your work based on aesthetic principles and techniques.



Articulated
College Credit
Available



*Adobe
Professional
Certification



ELA & Art
Standards
Aligned



Video Production: Editing Techniques SB

Level 2 | Semester Course

**Adobe Professional Certification if SA & SB completed*

- Explore Adobe Premiere Pro to plan, edit, and enhance videos. Learn assembly methods, transitions, sound editing, and effects, with a chance to earn Adobe Certified Professional certification.
- Engage in practical creation using storyboards, scripts, and DSLR cameras. Learn lighting, audio setup, camera movement, and video formats for comprehensive video production knowledge.
- Master non-linear editing software, diverse video formats, and effective exporting techniques. Create impactful videos suitable for various purposes through proper compression and formats.



*Adobe
Professional
Certification



ELA & Art
Standards
Aligned

Graphic Design: Visual Communications SA

Level 2 | Semester Course

**Adobe Professional Certification if SA & SB completed*

- Discover how graphic design communicates visually. Covering digital images, typography, color theory, design elements, software, and history, this college-level course dives into modern graphic design.
- Gain hands-on knowledge of design techniques, terminology, and tools used in graphic design and illustration. Learn the design process, concept development, and create relevant design projects.
- Explore the world of graphic design and illustration software, understanding their role in today's design landscape. Gain insights into professional design techniques and media used in the industry.



Articulated
College Credit
Available



*Adobe
Professional
Certification



ELA & Art
Standards
Aligned

Graphic Design: Software Applications SB

Level 2 | Semester Course

**Adobe Professional Certification if SA & SB completed*

- Dive into designing a range of graphic documents using industry-standard software like Adobe Photoshop and Illustrator. This course offers the chance to pursue Adobe Certified Professional certification in both software.
- Learn to manage project requirements, utilize design elements, and develop expertise in Adobe Photoshop and Illustrator through hands-on activities. Explore image manipulation, digital publishing, and graphic creation for various media.
- Gain knowledge in preparing graphics for web, print, and video, honing skills essential for a multifaceted graphic design landscape.



Articulated
College Credit
Available



*Adobe
Professional
Certification



ELA & Art
Standards
Aligned



Computer Repair SA

Level 1 | Semester Course

- Develop practical knowledge of Personal Computer (PC) hardware and printers.
- Install PC hardware, discover electrical concepts, diagnose component problems, and resolve PC driver and networking issues.
- Jumpstart your hobby or career in Information Technology.



College Credit
Under
Development



Industry
Certification

Computer Repair SB

Level 2 | Semester Course

- Acquire practical knowledge of the Windows Operating System (OS) configuration, software installation and utility management needed to provide technical support to computer users.
- Build your critical thinking and problem solving skills to troubleshoot the electronics that surround you.
- Lay the foundation of knowledge and skills needed for future careers in IT support, computer engineering, or technology repair services.



College Credit
Under
Development



Industry
Certification

Cybersecurity

Level 2 | Semester Course

- Develop a comprehensive understanding of cybersecurity, including the nature of attacks and their economic impact, legal aspects and ethical behavior, and elementary cryptography.
- Stay one step ahead of cybercriminals by learning about the latest cybersecurity trends, tools, best practices and how to maintain a secure environment.
- Prepare for a future in the high-demand field of cybersecurity, where you'll be at the forefront of protecting digital assets and shaping the future of technology.



College Credit
Under
Development



Industry
Certification

Networking Systems

Level 2 | Semester Course

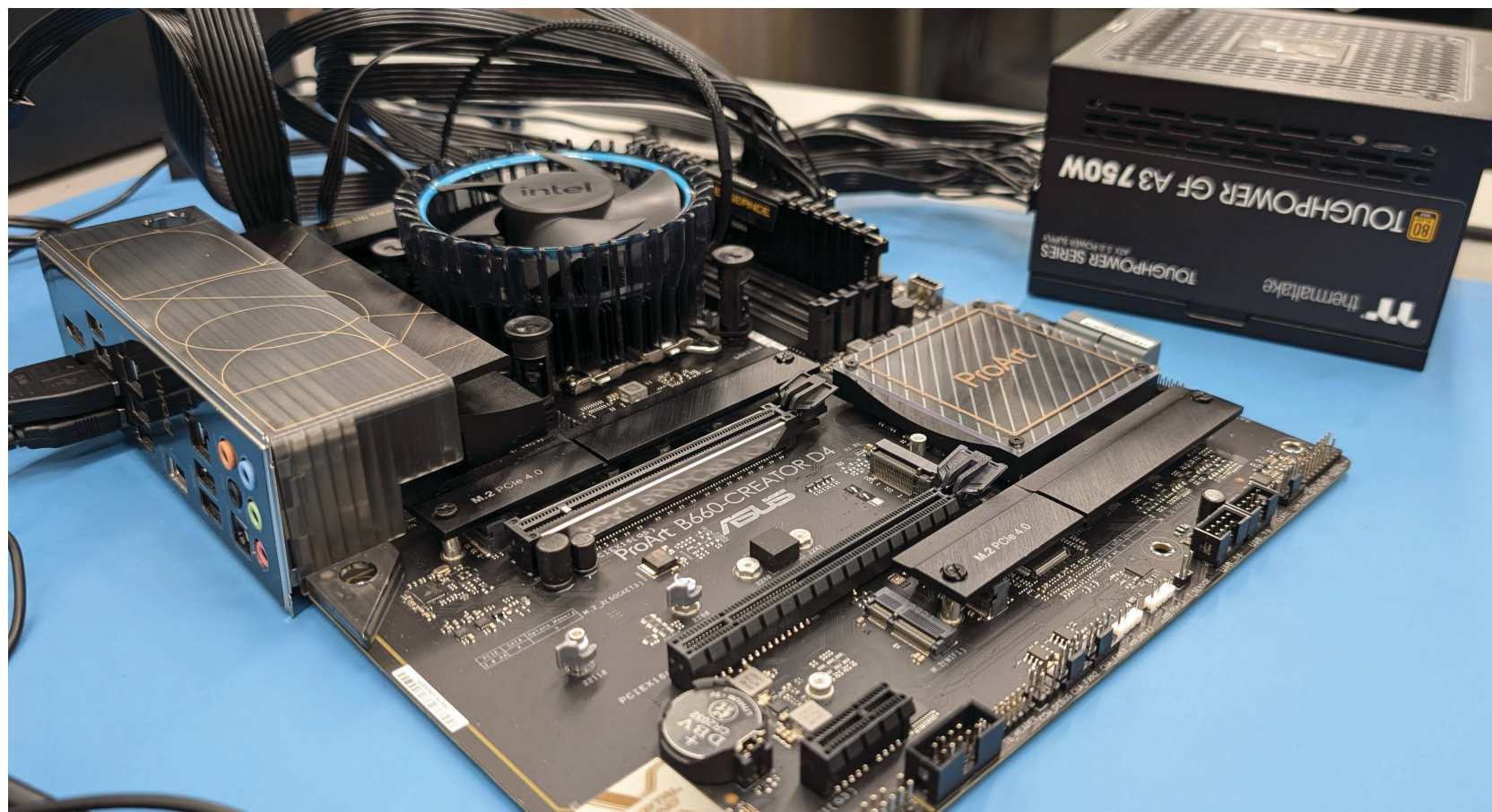
- Discover how the internet works, from the basics of IP addressing and routing to the complexities of backbone infrastructure and global connectivity.
- Examine networking concepts through hands-on lab activities where you'll configure routers, switches, and servers to build your own network infrastructure.
- Explore hubs, switches, and routers, gaining insights into local area networks (LAN), wide area networks (WAN), wireless connectivity, and Internet-based communications, including cloud-based computing.



College Credit
Under
Development



Industry
Certification



Our Vision

We aim to offer Career and Technical Education programming in a variety of [career fields & clusters](#) that range from initial exploratory courses to industry aligned/certified and/or courses for college credit. Every Career and Technical Education course incorporates career exploration and experiences.

General Information

Location: Hennepin Technical College - Eden Prairie Campus

Time Schedule:

- 8:30 – 10:10 a.m.
- 10:25 a.m. – 12:05 p.m.
- 12:35 – 2:15 p.m.

Transportation: Bus Transportation may be provided to and from the 287 Career & Tech Center daily by member schools. Please check with your school's counseling office.

Member Districts

Brooklyn Center, Eden Prairie, Edina, Hopkins, Minnetonka, Orono, Osseo, Richfield, Robbinsdale, St. Louis Park, Wayzata, Westonka

Understanding Our Approach To Levels

The 287 Career and Tech Center offers Career and Technical Education (CTE) courses designed for students of all abilities. If you're uncertain whether a course suits you, reach out to your guidance counselor or our CTE Manager. Don't let the course Level discourage you—success is achievable in all our course offerings!

Level 1 - Career exploratory courses that also develop students' independent living skills. No specific math or reading proficiency required. Opportunities may exist to obtain industry certification.

Level 2 - Course may be aligned with High School Core Content Standards. Offers chances for industry certifications and/or articulated college credit. Academic content and pacing are aligned with the college-level curriculum.

Level 3 - Aligns with post-secondary curriculum and industry standards. Proficiency at grade-level in reading and math is preferred. Attainment of industry certification and/or concurrent college credit is expected, along with industry expert partnership. Requires Instructor approval if prerequisite courses are listed.

Preferred Pathway Progression

Certain courses within the catalog will indicate a Preferred Pathway Progression to best prepare students for successful course completion. This should not be used as a barrier for enrollment, but is meant to indicate prior knowledge, skills, and/or experience that may be needed to be successful. An example of this would be for a student to have the knowledge and skills needed to pass a certification, they may need the scaffolded instruction that the progression offers.

Definitions

Articulated College Credit - A student is enrolled in a course that meets both High School & College standards. The High School Teacher and College Faculty have a [signed agreement](#) that [the credit](#) could be counted if the student enrolls in the participating colleges listed on the agreement.

Concurrent College Credit Course (also known as dual enrollment) - A student is enrolled as a part-time college student. The course is applied to a student's High School Transcript as well as a college transcript is generated with the course. This college credit can be taken to other institutions as it is transcribed.

Need to Know Information

SA/SB - A change in nomenclature from previous: A/B, I/II, Fall/Spring, Advanced/Basic, Tech/Mech. Does not note course sequencing, only a “preference” of order - i.e: The preference is that a student take the SA section of the course prior to the SB section. However, a student may enroll in an “SB” course before an “SA” course, and vice-versa. “Advanced” is only used in Level III courses.

Prerequisite - Denoted by an asterisk (*). Criteria included below course title.

Ribbon Below Course Title - Course Level | Length of Course | College Credit Option | Additional Course Focus | Industry Certification (as indicated by course syllabi) | ELA Standard Alignment

Advanced Courses Elements

- Prerequisite class(es) completed
- Student partnership with an Industry Expert
- Teacher Assistant/Student Mentor Role
- Student selected, broad scope content-based project

Application Process

To apply for a 287 Pathways course, please see your school counselor.

For additional information regarding the registration process, please contact:

Rachel Macht - Administrative Support

Email: rjmacht@district287.org

Phone: (952) 374-5747

For any other Career & Technical Education information, including course information, please contact:

Scott Swanson - Assistant Principal

Email: saswanson@district287.org

Phone: (952)-653-1646