ST JOHN VALLEY TECHNICAL CENTER

PROGRAM OF STUDIES

2025-2026

Our cutting edge technology programs are free to HS students from CHS, MHS, WHS & Home Schools.

Contact us
207-543-6606

Visit our website
SJVTC.MAINECTE.ORG

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Located in Frenchville Maine, St. John Valley Technology Center is a proud member of Maine's network of career and technical education (CTE) schools.

We offer hands-on, career-oriented education in 14 programs.

"Learning to work, working to learn!"

WHY CTE?

Discover Your Future at St. John Valley Tech!

St. John Valley Technology Center offers hands-on Career and Technical Education (CTE) programs for juniors and seniors from Fort Kent, Madawaska, and Wisdom high schools. Each year, over 100 students join our programs, getting real-world experience that prepares them for both college and careers.

Classes run year-round, five days a week, with morning or afternoon sessions. Most students stick with one program for two years, but we're flexible if you need a different schedule.

Why choose CTE? Here's why:

- CTE offers a fresh, hands-on approach to learning.
- 70% of students say CTE helps them earn better grades.
- 80% feel confident about their future career prospects.
- 91% of CTE graduates continue with college or advanced training.

Curious?

Explore all the exciting programs we offer in this guide. For more info, talk to your school guidance counselor or contact Mr. Kevin Lavoie, Director, at 543-6606 or klavoie@msad33.org.

OVER 10,500 STUDENTS IN MAINE ARE ENROLLED IN CTE 🚀

FAQS

01 — Yes, CTE! CTE has changed. Over 10,500 students in Maine are enrolled in CTE. Cutting edge equipment. Industry professionals as trainers and mentors. Earn college credit in high school. Explore a wide variety of disciplines. CTE has evolved far beyond the perception of 'basic shop class' or 'Voc. Tech.'

02 — What is a CTE Center? 🤔 As a high school student, you choose to enroll in Career and Technical Education programs because of the incredible opportunities they provide. Students learn about and use cutting edge equipment and technologies with professional mentor teachers who are deeply connected into their industry. CTE programs prepare students for college and a wide range of high-wage and high-demand careers. Maine has 27 Career and Technical Centers available to high school students that also offer adult education courses. They are free to attend, included as part of your high school education.

03 — What if I don't know what I want to study? 😳 Careers may change but skill building carries on throughout life. In every CTE program you forge incredible industry connections while also building valuable skills and credentials that transfer into any career or hobby.

04 — Do I have to leave my high school and friends there? 😊 No, you don't have to leave your high school to enroll in a CTE program. You can attend you regular high school and your CTE Center. Your CTE schedule will allow you to participate in your high school courses, and all high school extra-curricular programs.

05 — Hands-on, immersive. With peers who share your interest. 👏 You learn by doing in CTE programs. They develop and work through projects while gathering related theoretical understanding and academic skills along the way. They come to see the skills that they are developing as critical to the success of their endeavors, so investment in learning is significantly increased. Modern technical education also places a great emphasis on the acquisition of 'transferable skills,' as students often go on to a great variety of continuing education and career experiences.

Come for a tour. Meet our teaching staff. Explore the tech and training you'll get here. Imagine what it'd be like to dive in at SJVTC with peers who share your same interest ✌️

PROGRAMS

ADVANCED TECHNOLOGIES

ALLIED HEALTH

AUTO TECH

BUSINESS ACADEMY

CDL

CTE EXPLORATORY
9th & 10th GRADE

CONSTRUCTION TRADES

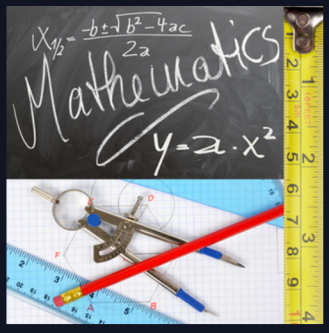
DIESEL & HYDRAULICS

EARLY CHILDHOOD
OCCUPATIONS

ELECTRICAL CONSTRUCTION

FORESTRY TECHNICIAN
TECHNOLOGY

HEAVY EQUIPMENT



MATHEMATICS

MIDDLE SCHOOL EXPLORATORY

WELDING

What's it like at SJVTC? Take a video tour!

ADVANCED TECHNOLOGIES

IS TECH INNOVATION IN YOUR DNA?

College Connected!
NMCC
UMaine @ Fort Kent

Full Year (4 Credits)
I - Juniors - PM
II - Seniors - AM

Embrace your future in the world of Information Technology with the Advanced Technologies course, where your passion for tech can take you anywhere—from IT professional to digital artist, robotics specialist, and beyond. This dynamic course is tailored to your interests, offering multiple tracks to follow based on what excites you the most.

Upon completing Advanced Technologies I during their junior year, students will be prepared to take the CompTIA (Computing Technology Industry Association) IT fundamentals exam.

Students who complete Advanced Technologies II as seniors will be prepared to take the CompTIA A+ exam. Comp TIA is the leading provider of IT certifications in the world. Credential holders are recognized as IT professionals who are prepared to take charge in our digitally connected world.

Students who earn CompTIA A+ certification also can earn six dual enrollment college credits.

Potential fields to work in are limitless, actually!

Technology is literally everywhere. Growing trends are at your fingertips in AI, bio-technology, bioinformatics, tech repair, 3D Printing, Virtual Reality, fabrication, motion capture, tech sales, game design, programming, media, robotics, video, audio. Building skills here can refine all your future work, become a career and make you highly marketable in any number of career tracks.

ADVANCED TECHNOLOGIES I & II

DETAILED DESCRIPTION PAGE

Students who earn CompTIA A+ certification also can earn six dual enrollment college credits through Northern Maine Community College. Our students also can earn four Introduction to Computer Science from the University of Maine at Fort Kent.In the Advanced Technologies program, the focus is on preparing students for Information Technology (IT) occupations in entry-level, technical, and professional careers related to the design, development, support, and management of hardware, software, multimedia, and systems integration services.

The program is divided into several different tracks for students to follow, depending on their career interests.

The world runs on technology, and the Advanced Technologies program provides students the chance to learn how to run that technology. From hardware and software to networking and programming, to robotics and circuitry, students explore the multiple aspects of modern technology and perform hands-on work with different types of technology, all while gaining real-world skills.

Upon completing Advanced Technologies I during their junior year, students will be prepared to take the CompTIA (Computing Technology Industry Association) IT fundamentals exam.

Students who complete Advanced Technologies II as seniors will be prepared to take the CompTIA A+ exam. CompTIA is the leading provider of IT certifications in the world. Credential holders are recognized as IT professionals who are prepared to take charge in our digitally connected world. Students who earn CompTIA A+ certification can also earn six dual enrollment college credits through Northern Maine Community College.

Students can also earn four Introduction to Computer Science credits from the University of Maine at Fort Kent.

Students in our program can prepare for post-secondary education and training in a range of specialties, including:

Computer Engineering
Computer Information Systems
Computer Science
Information Technology
System Administration
Web Page Design
Multimedia Design
Cybersecurity

Career opportunities for those with a background in Information Technology include:

Computer Programmer
Computer Systems Analyst
Computer User Support Specialist
Network and Computer Systems Administrator
Computer Database Administrator
Web Designer
Software Developer
Multimedia Artist and Animator
Graphic Designer
Video Game Designer
Information Security Analyst
Telecommunications Engineer

ALLIED HEALTH

Embark on a journey that goes beyond the ordinary in our Allied Health program, where your compassion becomes a key to making the world a healthier and better place.

There's no denying it, healthcare is a worldwide profession. Within the profession, you're not just offering medical support; you're nurturing the health and happiness of every person you care for, becoming a pivotal figure in their recovery and overall well-being.

Picture yourself providing vital care that does more than heal—it uplifts and empowers those around you. In this program, you'll gain not just medical skills but the heart and dedication needed to truly make a difference. This is where you'll develop the expertise to be a cornerstone of health in your community.

Take the first step toward a career that combines compassion with purpose. In the CNA program, your dedication will help shape a healthier, stronger community. Are you ready to become a beacon of care and a force for good?

College Connected!
NMCC, SMCC,
UMaine @ Fort Kent

Demand.
Worldwide.

I - Juniors - PM
II - Seniors - AM

ALLIED HEALTH

DETAILED DESCRIPTION PAGE

Our Allied Health program is designed for individuals interested in a career in the high-need, high growth healthcare field.

In Allied Health I, junior students learn about body structure and function, medical terminology, human growth and development, principles of safety and emergency care, diseases, and methods of diagnosis and treatment. The Maine Certified Nursing Assistant (CNA) course and the Personal Support Specialist (PSS) course are the primary areas of focus during Allied Health I. This component features instruction in nursing assistant skills that are developed in the classroom and practiced in a supervised clinical site. Students practice their skills at clinical sites during the second semester. Upon successful completion of the CNA/PSS training component students sit for the state exams to earn Maine State Certification as a Nursing Assistant and Personal Support Specialist.

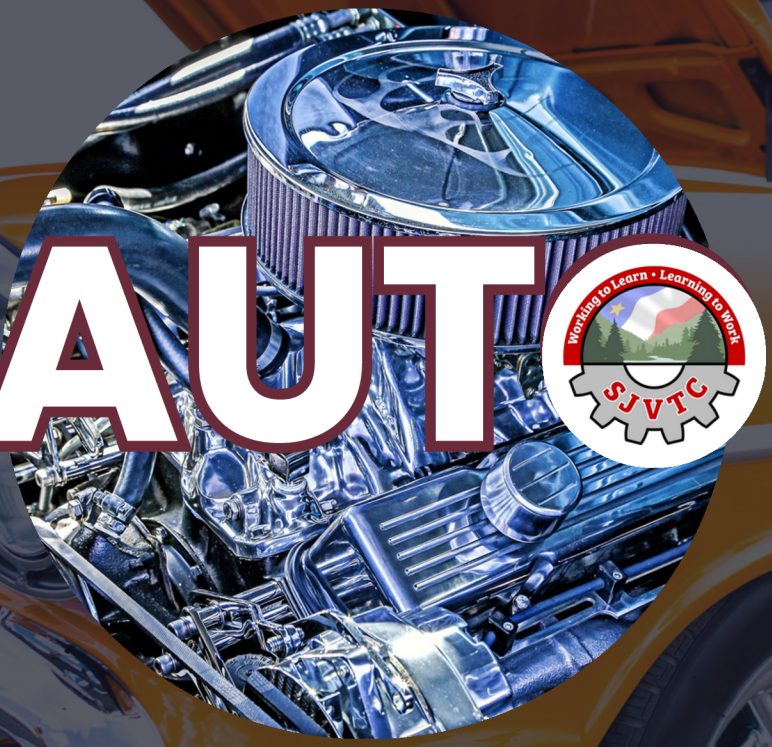
In Allied Health II, senior students can participate in a variety of specialized curriculum opportunities, including Physical Therapy, dentistry, Radiology, Medical Office Practice, Emergency Medical Technician, and more. In addition, students have the opportunity to earn healthcare industry certifications as a Phlebotomist, Certified Residential Medication Aide (CRMA) and Certified Medical Assistant. The program is modular in structure, enabling students to focus on career-specific learning opportunities and to work at an accelerated pace. Students interested in pursuing Nursing as a career have the opportunity to complete an articulated curriculum that satisfies UMFK's Introduction to Nursing (NUR 101) for which they earn four college credits.

Students who participate in our program can prepare for post-secondary education and training in a variety of specialties, including:

Nursing
Physical/Occupational Therapy
Emergency Services
Medical Dietary Science
Health Information Technology
Medical/Dental Assisting
Pharmacology
Phlebotomy

Career opportunities for those with a background in Health Occupations include:

Emergency Medical Technician
Paramedic
Registered Nurse
Medical Office Manager
Medical Transcriptionist
Personal Support Specialist
Certified Nursing Assistant
Medical/Dental Assistant
Phlebotomist/Phlebotomy Aide
Pharmacy Aide
Massage Therapist



AUTO TECH

College Connected!
CMCC, WCCC, SMCC

Earn Pro ASE Certifications

I - Juniors - PM
II - Seniors - AM

Ignite your love for cars with our Auto Tech program, where classroom lessons shift into hands-on lab work, helping you develop both the skills and mindset needed for a safe, successful career.

Get ready to dive deep into engine mechanics, starting with the basics and advancing to the complexities of gasoline engines. You'll cover everything from cooling and lubrication systems to valve mechanisms, pistons, and crankshaft assemblies.

Master fuel systems, standard transmissions, and the critical role of emissions control. Plus, you'll explore wheel alignment, clutches, hardware, measuring tools, and the electrical and electronic systems that keep today's vehicles running smoothly.

Whether you're just beginning your journey or aiming to expand your automotive expertise, this program equips you for success in the fast-paced world of automotive technology.

AUTO TECH

DETAILED DESCRIPTION PAGE

Our Automotive and Diesel Technology is a two-year program designed to provide broad fundamental training in aspects of automotive service and repair and critical mechanical aspects of light/medium/heavy truck systems.

In the first year of this program, students are introduced to the automotive field and advances in technology as they touch on a host of topics including: Hand Tools and Equipment; Oxy-Acetylene Torch Use; Brakes, Rotor Shaving; Steering and Suspension; Voltage Drop Testing; Electrical Schematic Reading; Electrical Troubleshooting; Oxy-Acetylene Welding, Cutting, and Plasma Cutting; Gas Metal Arc Welding (GMAW); and Employment Skills and Career Opportunities – all while regularly conducting oil changes, tire mounting, balancing and alignment and motor vehicle safety inspections.

In the second year of our program, students who successfully complete year-one learning activities engage in the study of diesel hydraulics. They are introduced to the diesel technician field and shop operating procedures along with preventative maintenance programs and inspections. Covered in detail are: preventative maintenance for mobile off-road equipment and the commercial transportation industry; personal, work and tool safety; laws regulating hazardous material; and shop record keeping requirements of the federal motor vehicle safety standards; hydraulic systems test and repairs; diesel engine rebuilding; and electronic controls. Students also extend their knowledge and practice of electric and arc welding.

Students who successfully complete Automotive and Diesel Technology I and II have the opportunity to sit for ASE (National Institute for Automotive Service Excellence) Certification exams and are prepared for employment as entry-level automotive or diesel hydraulics technicians. Students who participate in our program also can earn Early College credit through Northern Maine Community College and/or prepare for post-secondary education and training in a range of specialties, including:

Automotive Engine Repair
Automotive Technology
Automotive Mechanics Technician
Diesel Hydraulic Technology
Engine Machinist
Small Engine Mechanics and Repair Technician

Careers opportunities for those with a background in Automotive & Diesel Technology Include:

Automotive Service Technician and Mechanic
Automotive Specialty Technician
Bus and Truck Mechanic
Diesel Engine Specialist
Engine and Other Machine Assembler
Diesel Maintenance and Repair Technician

BUSINESS ACADEMY

Ready to turn your entrepreneurial dreams into reality?

Our Business Academy program is your launchpad to a successful career in the fast-paced world of business. Whether you're interested in marketing, finance, management, or starting your own venture, this program offers you the tools and knowledge to thrive.

You'll dive into real-world projects, collaborate with like-minded peers, and learn from industry experts who bring their experience straight to the classroom.

From understanding the fundamentals of economics to mastering the art of negotiation, this program is designed to help you develop the critical thinking and problem-solving skills that every business leader needs.

But it’s not just about learning the theory—you’ll get hands-on experience with internships, case studies, and business simulations that put your skills to the test. By the time you graduate, you'll have a solid foundation in business principles and the confidence to pursue your passion, whether that's climbing the corporate ladder or launching your own startup.

If you’re ready to take the first step toward a dynamic and rewarding career, our business program is where your journey begins.

Get ready to make your mark on the world of business!

College Connected!
NMCC, UMaine @ Fort Kent

Earn up to 24 College Credits.

I - Juniors - PM
II - Seniors - AM

BUSINESS ACADEMY

DETAILED DESCRIPTION PAGE

Participants in our Business Academy program can earn not only high school credit but also tuition-free college credits in Business through Northern Maine Community College (NMCC) and the University of Maine at Fort Kent (UMFK) while paying only for textbooks and materials/fees.

In the first year of the program, 11th graders can earn 12 college credits as they learn about personal finance, the environment in which business is transacted, the basic concepts of the business world, the vital importance of ethics in business and commerce, the components of the marketing structure, the behavioral science concepts involved in marketing, and practical skills for market identification, product development, and advertising.

In the second year of the program, 12th grade students have the opportunity to earn up to 12 additional tuition-free college credits through NMCC and UMFK as they study Accounting, Business Law, and Customer Service and while also learning to manage employees and grow a business. Program participants also have the opportunity to work with SJVTC staff to identify community-based learning opportunities through a credit-bearing internship program where they work in an Upper St. John Valley business setting, applying the skills and knowledge they acquire through their coursework.

Students in our program can prepare for post-secondary education and training in a range of specialties, including:

Business Management/Administration
Finance
Accounting
Entrepreneurship
Marketing
Human Resource Management
International Business
Economics
Operations Management
Public Relations

Career opportunities for those with a background in Business and Entrepreneurship include:

Bookkeeper
Accountant
Auditor
Customer Service Representative/Manager
Online Merchant
Financial Planner/Advisor/Manager
Advertising/Marketing Specialist/Manager
Insurance Agent
Real Estate Agent
Small Business Owner/Operator

CDL

Truck driving jobs are very much in demand in 2024. In fact, there are far more open trucking positions than truckers. This is forecasted to continue throughout the next decade, as the industry is projected to grow by 11% through 2031, according to the Bureau of Labor Statistics.

The CDL at SJVTC program is comprised of classroom and lab experiences designed to develop skills and attitudes for a safe working environment.

Students learn basic and complex engine fundamentals such as, but not limited to: safety, gasoline engine fundamentals, the cooling system, lubrication system, valve mechanisms, pistons, crankshaft and connecting rod assemblies, fuel systems, standard transmissions, emissions and emission control devices, wheel alignment, and clutches.

Units on hardware and measuring, hand tools and equipment, and electrical/electronic systems are also covered.

I - Juniors - PM
II - Seniors - AM

CDL

DETAILED DESCRIPTION PAGE

In our Commercial Driver's License training program, students learn the required skills to take the State of Maine Department of Transportation's (MDOT) written and road test examinations for Class A & B Commercial Drivers Licensing. Students will be exposed to practical knowledge concepts to prepare for MDOT examinations for Hazardous Material, Dual Trailer and Passenger endorsements. Instruction is based on state laws, industry regulations, and equipment inspection required for licensing. Since Federal law mandates that Commercial Drivers be pre-employment and random drug tested, students in the CDL program will be required to submit to all required drug testing.

To enroll in this program, students must be 16 years of age and must possess a current Class C driver's license. Students who successfully complete the program will possess entry-level skills required by the trucking industry and are able to use the school's truck and trailer to test for licensing. Program outcomes for students include, an earned competency certificate, a comprehensive skill profile, and Maine Commercial Drivers License (CDL) Class A or Class B with endorsements.

Apprenticeships are an excellent avenue for securing additional training and endorsements as a truck driver. Our program will effectively prepare you for these opportunities as well as for entry into trades programs for advanced training. Technically, there are no post-secondary education and training requirements to become a truck driver, but students can benefit from holding a college degree in Business, especially if they hope to become owner/operators of their own truck(s) or trucking company or aspire to become a transportation dispatcher after their driving career.

Career opportunities for those with a background in Commercial Driver's License training include:

Heavy and Tractor-Trailer Truck Drivers
Industrial Truck and Tractor Operators
Light Truck Drivers
Loading and Moving Machine Operator
Shuttle Driver
School Bus Driver
Delivery Driver
Transportation Dispatcher
Large Commercial Vehicle Operator
Hazardous Material Commercial Vehicle Operator
Passenger (Coach Bus) Vehicle Operator
Logging Truck Driver
Dump Truck Driver

CTE EXPLORATORY

Middle School Program

Are you curious about building cool stuff, fixing engines, or maybe even trying your hand at welding? In our CTE Exploration program, you'll get to experience all this and more over 8 ½ weeks of hands-on fun!

You'll spend time learning how to work with tools, build things in the Building Construction Trades, discover how engines run (and how to fix them) in Small Engine Repair, and even try welding to see how sparks fly! Plus, you'll have 2 weeks to explore other exciting trades that interest you.

This is your chance to see what CTE is all about and find out which path might be perfect for you!

High School Program

As a high school sophomore, the CTE Exploration program at SJVTC gives you a full year to dive into different trades and discover where your passion lies. You'll get hands-on experience in areas like Small Engine Repair, Building Construction Trades, Welding, and more, while learning essential skills like shop safety and tool handling.

This program is designed to help you see these trades in action, giving you the time and exposure you need to make an informed choice about what you want to specialize in during your junior and senior years. It's the perfect way to figure out which path excites you the most!

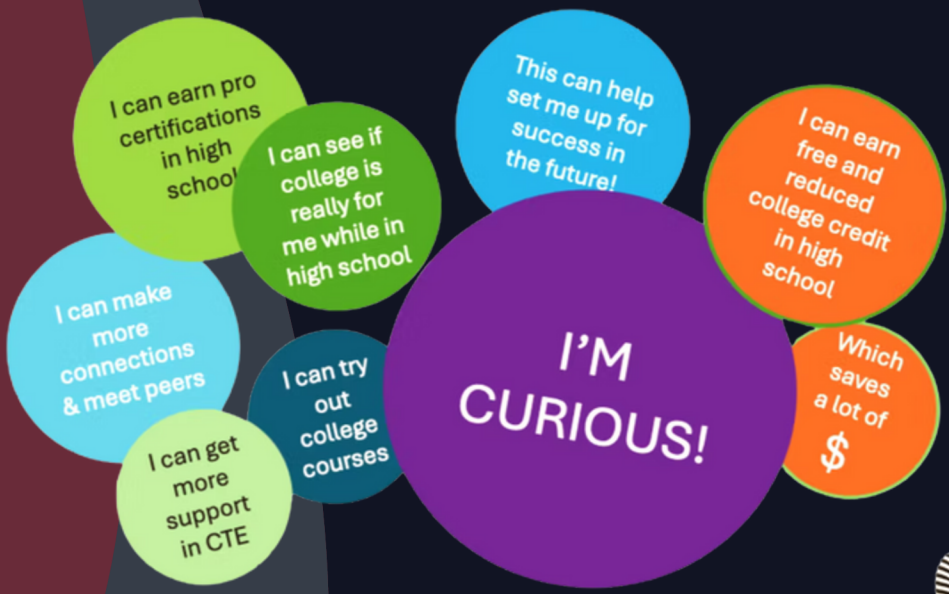
I - Sophomores - PM

CTE EXPLORATORY

DETAILED DESCRIPTION PAGE

In our Career and Technical Education (CTE) Exploration program, 10th graders spend the school year diving into different trades and discover where their passions lie. Students get hands-on learning experiences in Small Engine Repair, Building Construction Trades, Welding, and more, while learning essential skills like shop safety and tool handling.

This program is designed to provide students the opportunity to experience trades in action, giving them both the time and the exposure they need in order to make an informed choice about what "skilled trades or professions" program to specialize in during their junior and senior years.



CONSTRUCTION TRADES

I - Juniors - PM
II - Seniors - AM

COLLEGE CONNECTED @ CMCC

Step into the world of construction trades at the St. John Valley Technology Center, where you can build your future—literally.

Our Construction Trades program offers more than just a path to a well-paying career; it's your gateway to mastering the skills that shape the world around you.

Focusing primarily on carpentry, our program also gives you a solid foundation in masonry, plumbing, and electrical work. Whether you dream of constructing homes from the ground up or specializing in a specific trade, we've got you covered.

Plus, our program is certified by the National Center for Construction Education and Research (NCCER), meaning the certifications you earn here are recognized by employers and colleges across the country—and beyond.

But it's not just about learning the skills; it's about putting them into practice. Every year, our students get hands-on experience through "live work" projects, including full construction builds for local customers. You'll see your hard work come to life as you apply the math principles you've learned in geometry and algebra, gaining a new appreciation for how these concepts function in real-world settings.

Ready to roll up your sleeves and create something tangible? Join us in the Construction Trades program, where your skills will lay the foundation for a successful, fulfilling career.

CONSTRUCTION TRADES

DETAILED DESCRIPTION PAGE

In our Construction Trades program, students receive training in fundamental parts of the residential construction industry, and they learn the skills necessary to either enter employment or to enter post-secondary vocational technical education programs.

As juniors in Construction Trades I, students receive safety instruction on the use of hand and power tools to lay out, fabricate, install, and repair wooden structures and fixtures. They learn how to frame walls, roofs, windows, and doors and to build staircases. First-year students are introduced to different types of residential sidings and roofing materials and learn the skills of estimating, scale-drawing, and blueprint reading.

As seniors in Construction Trades II, students receive instruction on interior and exterior finishing, including trim work, moldings, cabinetry, the installation of doors and windows, sheetrocking, and other interior wall finishing.

Students are expected to design and construct a variety of projects in response to local demands and needs. Community service projects often are included and provide practical on-the-job training.

Students who participate in our program can prepare for post-secondary education and training in a variety of specialties, including:

Construction Technology
Building Codes and Enforcement
Commercial Maintenance
Supervisory Maintenance
Building/Construction Management
CAD/CADD Drafting Technician
Mechanical Drafting

Career opportunities for those with a background in Construction Trades include:

Carpenter
Carpenter's Helper/Laborer
Cabinet Maker
Furniture Maker
Draftsman/Designer
Hardware Store Clerk/Manager
Construction Worker
Iron Worker/Steel Worker
Lumber Mill Yardman
Lumber Yard Worker/Manager

From small wood splitters and garden tractors to engines that power locomotives and ships, diesel and hydraulic mechanics are in high demand.

Ready to power up your future with a hands-on, high-demand skill set? Our Diesel and Hydraulic Mechanics program is your gateway to a successful career in the world of heavy machinery. Whether you're interested in working on diesel engines, mastering hydraulic systems, or becoming an expert in industrial maintenance, this program gives you the tools and knowledge to thrive.

You'll get down to business with real-world projects, working side-by-side with industry professionals who bring their experience straight to the shop floor. From understanding the intricacies of diesel engines to diagnosing and repairing complex hydraulic systems, this program is designed to sharpen your technical skills and problem-solving abilities—skills that are essential in today's fast-paced, technology-driven world.

DIESEL & HYDRAULICS

But it's not just about learning the mechanics—you'll gain hands-on experience through internships, live work projects, and equipment simulations that put your skills to the test. By the time you graduate, you'll have a solid foundation in diesel and hydraulic systems and the confidence to tackle any challenge, whether you're looking to join a leading company or start your own business.

If you're ready to take the first step toward a dynamic and rewarding career, our Diesel and Hydraulic Mechanics program is where your journey begins. Get ready to make your mark on the world of heavy machinery!

DIESEL & HYDRAULICS

DETAILED DESCRIPTION PAGE

The Diesel and Hydraulic Mechanics program at SJVTC is your launchpad to an exciting and essential career in the world of heavy equipment and machinery.
In this comprehensive program, students dive deep into the mechanics of diesel engines and hydraulic systems—the lifeblood of industries like construction, transportation, agriculture, and logging. From the first day, you'll be elbow-deep in real-world learning experiences that mirror what professionals face in the field. Whether you're rebuilding an engine, troubleshooting fuel systems, or repairing hydraulic cylinders, every day brings new challenges and skills to master.

Here's what you'll learn:

- Diesel Engine Fundamentals – Explore the inner workings of diesel engines, including combustion theory, fuel delivery, air intake, exhaust systems, and cooling and lubrication systems.
- Hydraulic Systems & Components – Understand how hydraulic pumps, motors, valves, and actuators work, and learn to diagnose and repair complex hydraulic circuits.
- Preventive Maintenance & Diagnostics – Learn how to conduct inspections, perform maintenance, and use diagnostic tools to keep equipment running safely and efficiently.
- Electrical & Electronic Systems – Discover how modern diesel systems integrate electronics, sensors, and computer controls, and how to use advanced diagnostic scanners to pinpoint issues.
- Welding & Fabrication Basics – Gain essential skills in welding and metalwork to support repairs and modifications.
- Shop Safety & Professional Standards – Master shop safety procedures, tool use, and industry best practices that prepare you for a professional environment.
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This program is all about hands-on learning. You won't just sit in a classroom—you'll train on real equipment, participate in live work projects, and take part in internships that connect you with local businesses and industry leaders. Simulators and mock-ups will allow you to test your skills in controlled settings before tackling real machines.

By the time you complete the Diesel and Hydraulics program, you'll be equipped with the technical knowledge, mechanical confidence, and work ethic that employers look for. Whether you choose to enter the workforce immediately or continue your education, you'll have a strong foundation in a trade that's always in demand—and a career path that's full of opportunities.

Career opportunities for those with a background in Construction Trades include:

Diesel Technician
Heavy Equipment Technician
Hydraulic Systems Technician
Field Service Technician
Fleet Maintenance Manager
Truck and Transport Mechanic
Marine Diesel Mechanic
Agricultural Equipment Technician
Off-Highway Diesel Technician
Power Generation Technician
Hydraulics Manufacturing Technician
Industrial Maintenance Technician

EARLY CHILDHOOD OCCUPATIONS

Curious about how young minds grow and develop?

I - Juniors - PM
II - Seniors - AM

Ready to explore a career where you can make a lasting impact on the next generation? Our Early Childhood Education program is where your journey begins.

Ever wondered when development really starts? Or how to make math and science exciting for preschoolers? Want to know what fuels a young child's brain and why their environment matters so much? In our program, you'll dive into these questions and more, uncovering the secrets of early childhood development.

You'll be at the forefront of the latest research, exploring fascinating topics like prenatal memory, curriculum design, autism, developmental disorders, attachment, and brain development. But it's not just about theory—you'll learn practical strategies and hands-on skills that will prepare you to work with young children in a variety of settings, from classrooms to community centers.

COLLEGE CONNECTED
UMAINE @ PRESQUE ISLE, NMCC

CREATING THE FUTURE.
ONE KID AT A TIME.

EARLY CHILDHOOD OCCUPATIONS

DETAILED DESCRIPTION PAGE

In our Early Childhood Occupations program, students learn about the latest research findings on topics such as relationships, guidance/discipline, the importance of play, early language development, healthy learning environments, prenatal memory, teaching math and science to preschoolers, curriculum design, attachment, brain development, autism, and other developmental disorders. Students learn strategies and develop skills to work successfully with young children in a variety of situations and settings. During their time in our program, students have the opportunity to earn the state recognized Certified Early Childhood Assistant (CECA) credential. They also can earn college credits which are recognized by campuses in the Maine Community College System and University of Maine System.

In Early Childhood Occupations I, junior students are introduced to the latest ideas and theories concerning child development from conception through the school-age years. They also learn the difference between typical and atypical development, analyze trends that affect families and communities, and explore methods of child observation. Students also operate our 1-2-3 playgroup for area preschoolers, creating lesson plans and age appropriate activities for these children. In Early Childhood Occupations II, senior students engage in more in-depth study of child development and learn how to use formal and informal assessments to determine skills, interests, temperament, and learning styles of individual children. Students also gain an understanding of the National Association for the Education of Young Children (NAEYC) developmentally appropriate practice, and explore how young children gain social competence. Business management practices, curriculum design, and career opportunities also are explored in this half of the program. Students also continue to operate our 1-2-3 playgroup as well as our Parent/Infant program.

Students who participate in our program can prepare for post-secondary education and training in a variety of specialties, including:

Early Childhood Education
Special Education
Early Elementary Education
Social Work
Early Childhood Development
Developmental Therapy
Speech Therapy

Career opportunities for those with a background in Early Childhood Occupations include:

Early Interventionist
Developmental Therapist
Early Childhood Educator
Elementary School Teacher
Center-Based Childcare Provider
Home-Based Childcare Owner/Operator/Provider
Social Worker
Childcare Center Supervisor
Childcare Business Manager
Childcare Licensing Worker

ELECTRICAL CONSTRUCTION

POWER BIZ

Curious about what it takes to power a home?

In our program, you'll dive into the world of residential wiring, mastering the methods that bring modern homes to life, businesses, community centers. You bring power that heats, cools, shines and makes things run.

You'll start by focusing on electrical safety and the essential tools of the trade—because understanding the fundamentals is key to success.

Then, through hands-on practice with realistic mock-ups, you'll learn the wiring techniques used in today's homes.

Every technique you master meets or exceeds National Electrical Code (NEC) standards, ensuring you're ready for the real world.

Ready to light up your future? Join us and become skilled in the wiring methods that keep so very much in our lives running smoothly.

COLLEGE CONNECTED!
CMCC, EMCC, KVCC, NMCC, SMCC, WCCC

I - Juniors - PM
II - Seniors - AM

ELECTRICAL CONSTRUCTION

DETAILED DESCRIPTION PAGE

In our Electrical Construction program, students learn various wiring methods of residential buildings through a focus on electrical safety and tools of the trade.

Students also use various mock-ups to perform the typical wiring featured in today's modern homes. All wiring techniques learned and covered meet or exceed National Electrical Code (NEC) standards.

Juniors who successfully complete the Electrical Construction I program enter Electrical Construction II where they extend their learning experiences to more complex projects that include Electrical Metal Tubing (EMT) bending, and wiring a complete 100 amp electrical service. Concentrated studies around the introduction of (Photovoltaic) Solar Energy are conducted within the last quarter.

Students in the program earn experience hours that can be counted towards their journeyman licensing requirements.

Second year students interested in a career in the Manufacturing industry will have the alternative option of participating in an Industrial Electrical Instrumentation and Motor Control pathway.

Program participants will earn a 10-hour OSHA safety certificate, and will have the opportunity to pursue an ACT WorkKeys National Career Readiness Certificate (NCRC) at the Silver level.

The ACT WorkKeys NCRC helps employers hire and retain a high-performance workforce. Some colleges and universities also award credit for the NCRC.

Students in our program can prepare for post-secondary education and training in a range of specialties, including:

Electrical Construction
Electrical Systems Maintenance
Electrical Power Technology
Electrical Drafting and Design
Electrical Engineering
Electrical Engineering Technology
Electrical and Industrial Instrumentation
Energy Management and Systems Technology
Electromechanical Instrumentation Technology
Industrial Electrical Instrumentation

Career opportunities for those with a background in Electrical Construction include:

Electrician
Electrician Apprentice
Electrical/Energy Systems Manager
Electrical Engineer
Electrical Engineer Technician
Electrical Power Line Technician
Electrical Power Plant Operator
Electrical Construction Manager
Residential Wireman
Electrical Installation Technician
Renewable Energy Technician

FOREST TECHNICIAN TECHNOLOGY

COLLEGE CONNECTED!
UMaine @ Fort Kent

I - Juniors - AM
II - Seniors - AM

Ready to explore the great outdoors and make a career out of it?

Our Forest Technician Technology program, launched in 2019-2020, is your gateway to the dynamic world of forestry. Designed for sophomores, juniors, and seniors, this program offers an in-depth look at the forest industry and opens doors to exciting career opportunities.

Imagine diving into topics like tree biology, forest ecology, and silviculture, where you'll learn how to nurture and manage our forests. Get hands-on with skills in land and forest measurement, GPS, and GIS, and discover how to harness technology for conservation and management.

From the intricacies of forest ecosystems to the adventure of wild-land fire management, every lesson equips you with the knowledge and experience to thrive in this field.

And the career possibilities? They're as vast as the forests you'll explore. Whether you're interested in becoming a harvesting equipment operator, a forester, or pursuing another path in this essential industry, our program sets you up for success.

The great outdoors needs your help!

FOREST TECHNICIAN TECHNOLOGY

DETAILED DESCRIPTION PAGE

Our Forest Resource Management program provides a thorough overview of the forest industry for both juniors and seniors.

Topics covered include tree biology, forest ecology, silviculture, dendrology, entomology, land and forest measurement, harvesting systems, recreation, global positioning systems (GPS), geographic information systems (GIS), watershed management, woodlot management, forest ecosystems, conservation practices, wild-land fire and use, forest economics, and an array of career pathways, ranging from harvesting equipment operator to forester and others.

Outdoor laboratories, featuring tool and equipment use and operation, and forest harvesting equipment simulators provide practical hands-on experiences that enhance classroom learning.

The forest industry provides steady employment and varied reliable careers for thousands of workers throughout America. Numerous career opportunities are available both in Maine and right here in the St. John Valley. Forestry professionals enjoy a full range of careers managing forests and woodlots, harvesting wood, replanting trees and as arborists, equipment operators, managers/supervisors and small to large business owners.

The majority of forest industry careers fall into one of four categories:
1. foresters and conservation scientists;
2. forest and conservation technicians;
3. forest and conservation workers; and
4. logging professionals, including equipment operators.

Career opportunities for those with a background in Forest Resource Management include:

Wood Cutter/Chopper
Logging Equipment Operator
Tree Nursery Worker/Manager
Wood Buyer/Purchasing Agent
Wildlife Biologist
Environmental Engineer/Technician
Environmental Compliance Inspector
Park Worker/Manager
Tree Trimmer/Pruner
Forest Ranger
Fire Warden
Forest Firefighter
Log Grader/Scaler

Students in our program can prepare for post-secondary education and training in a range of specialties, including:

Forestry
Forest Technology/Technician
Forest Science and Biology
Forest Management
Forest Engineering
Forest Resource Production
Natural Resource Conservation
Natural Resource Management
Mechanized Logging Equipment Operation and Maintenance
Wood Science
Pulp and Paper Technology

I - Juniors - PM
II - Seniors - PM

HEAVY EQUIPMENT

Imagine commanding the power of massive machines, shaping landscapes, and building the world around you.

As a heavy equipment operator, you're not just working a job—you're mastering the art of precision and control, making an impact on everything from highways and bridges to skyscrapers and parks.

In this field, every day brings new challenges and opportunities to operate the most advanced machinery on the planet. Whether it's maneuvering a bulldozer, excavator, or crane, you'll learn to handle these powerful tools with confidence and skill, all while playing a crucial role in major construction projects.

If you're ready to take the controls and build a future with your own hands, heavy equipment operation is your path to an exciting, well-paid career where the sky's the limit.

COLLEGE CONNECTED!
NMCC

HEAVY EQUIPMENT

AILED DESCRIPTION PAGE

Designed for individuals looking for a steady and rewarding career as one of America's highly respected and well paid heavy equipment operators in the Construction industry, our Heavy Equipment Construction Operation (HECO) program emphasizes preventative maintenance and proper operation of heavy equipment.

In both HECO I and II, class work is based on the National Center for Construction Education and Research handbook. Class and lab work will be supplemented with field trips to job sites, local gravel pits, heavy equipment dealerships, and skills development work on a lab-based simulator. All instruction will focus on critical elements of Site Construction, Gravel Pit/Mining Safety, Blueprint Reading, Site and Road Layout, Setting Grades, Laser Levels, Soils, Safety, and Heavy Equipment Maintenance.

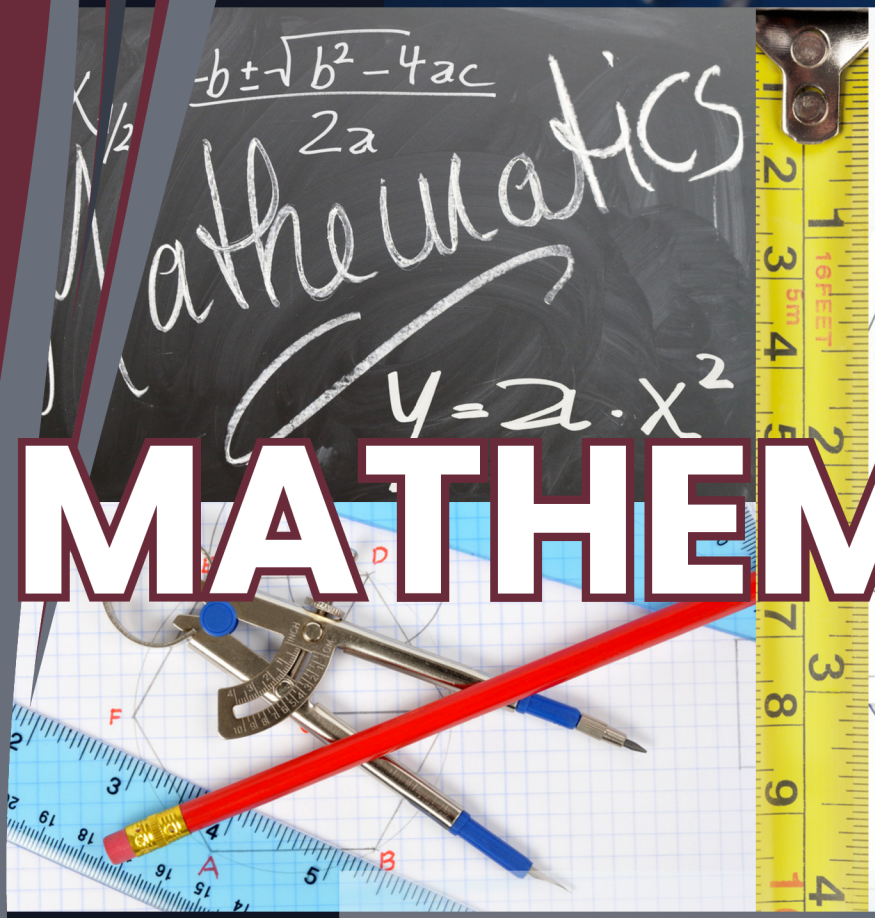
In both HECO I and II, juniors and seniors learn skid steer, excavator, loader, and dump truck operation and maintenance skills and will have the opportunity to pursue an ACT WorkKeys National Career Readiness Certificate (NCRC) at the Silver level. The ACT WorkKeys NCRC helps employers hire and retain a high-performance workforce. Some colleges and universities also award credit for the NCRC.

Career opportunities for those with a background in Heavy Equipment Operation include:

Loader Operator
Dozer Operator
Excavator Operator
Grader Operator
Crane Operator
Construction Heavy Equipment Operator
Heavy Fire Equipment Operator
Farm Equipment Operator
Forest Road Construction Operator
Mechanized Forest Equipment Operator
Heavy Equipment Repair Technician and Mechanic

Solid Reasons

Consumer math, & math in trades! We offer additional support to build your skills in this area to do the work you need. Finance, taxes, book keeping, geometry, fractions, equations. We've got you covered. You never know how additional math skills will simplify the work you love to do and also help you in life.



MATHEMATICS

Consumer Mathematics

This course focuses on the mathematics involved in making wise consumer decisions. Students explore the many ways in which mathematics affects their daily lives. The first semester will cover paychecks and wages, taxes, insurance, budgets, bank accounts, credit cards, interest calculations, and comparison shopping. Second semester topics include vehicle and home purchasing, investing, and business and employee management.

WELDING

Imagine stepping into a career where there's a huge demand for your skills, offering you endless job opportunities and the potential for excellent pay. That's what welding offers—and it's a path you can start right here at the SJVTC.

Welding isn't just a skill; it's an art form. It's easy to learn the basics, but mastering it takes practice and precision. In our program, you'll get hands-on training in fundamental welding techniques and positions, with plenty of opportunities to perfect your craft. You'll also learn to work with different metals and electrode sizes, giving you the versatility needed in the industry.

Your journey starts with test plates and practice materials, but soon enough, you'll be tackling "live work" projects for real customers. This is where your skills truly come to life, preparing you for a career in a field that's both rewarding and in high demand.

I - Juniors - PM
II - Seniors - AM

COLLEGE CONNECTED!
NMCC, SMCC

WELDING

DETAILED DESCRIPTION PAGE

Our Welding and Fabrication program is designed for individuals interested in employment in the fields of Steel Building Construction, Heavy Metal Fabrication and Repair, Light Gauge and Sheet Metal Welding, Mechanical Repair, Pipe Fitting, and Welding and for those who want to pursue entry level employment in production plants, paper mills, machine shops, shipyards, and apprenticeship programs. The program also prepares students to enter post-secondary vocational technical education and training.

Gas Tungsten Arc Welding (GTAW) is introduced to students who practice and apply welding on ferrous and non-ferrous metals such as carbon steel, stainless steel, and aluminum. Students advance in this process according to skill level and attempt to weld stainless steel, carbon steel, and aluminum in all positions. Fabrication and repair is a priority objective of the program.

In Welding and Fabrication I, students are introduced to the welding and thermal cutting process using a Plasma Arc Cutting Unit as well as Oxy-Acetylene equipment. Students also learn Shielded Metal Arc Welding (SMAW) or Stick Welding in the flat, horizontal, and vertical positions, using the 6011, 6013, 7018, and 110-18 electrodes. Basic Gas Metal Arc Welding (GMAW) and Flux Cored Arc Welding (FCAW) are introduced on carbon steel plates, and brazing, joint identification, blueprint reading, basic drafting, and metal identification are covered. Students who successfully complete Welding and Fabrication I move to Welding and Fabrication II which consists of advanced SMAW, GMAW and FCAW welding techniques with an emphasis on preparing students for the American Welding Society (AWS) national certification test at the conclusion of the program.

Students who participate in our program can prepare for post-secondary education and training in a variety of specialties, including:

Welding Technology
Welding and Fabrication
Welding Machine Operation
Boilermaker Technology
Production Welding
Custom Fabrication

Career opportunities for those with a background in Welding include:

Construction
Structural Iron and Steel Worker
Welder/Solderer/Brazer
Welding, Soldering, and Brazing Machine Setter, Operator, and Tender
Structural Metal Fabricator and Fitter
Pipefitter
Boilermaker
Sheet Metal Worker

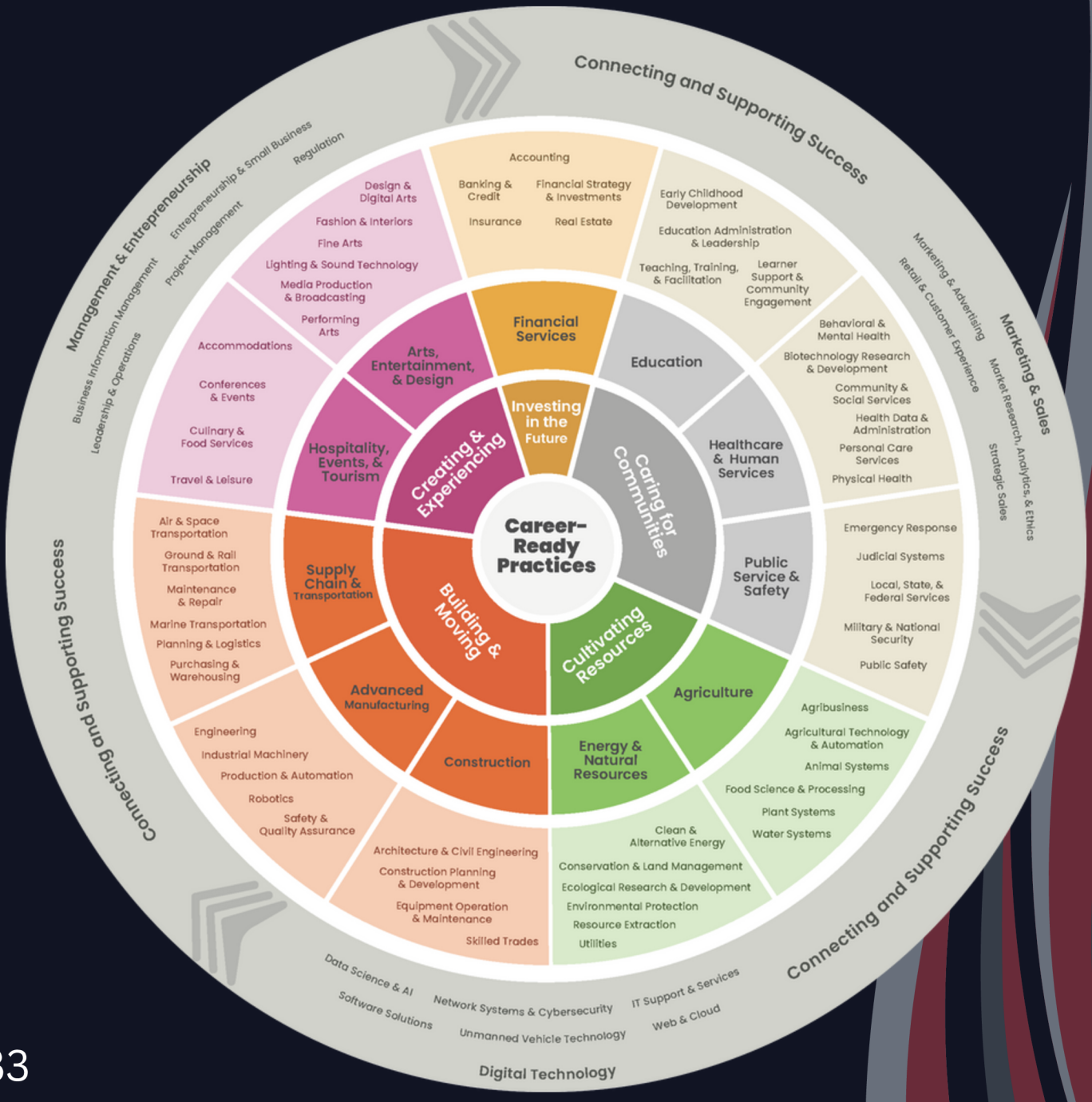
DEPTH OF CTE

Knowing what you want to do after graduation can be a challenge.

Find job? Go to college?

CTE gives you a chance to explore your passions. Try things out. With peers who share your interest. With professional mentors. Who can get you connected to industry professionals.

Exploring... takes a sense of adventure!



Working to Learn • Learning to Work

SJVTC

HANDS-ON
HIGH-TECH
COLLEGE CREDIT
PRO MENTORS
PRO CERTIFICATIONS
IN HIGH SCHOOL

EQUAL OPPORTUNITY STATEMENT: The St. John Valley Technology Center does not discriminate in its education and employment programs on the basis of religion, age, race, color, national origin, gender, sexual orientation, marital or parental status, or disability; and provides equal access to designated youth groups; and complies with Title VI of the Civil Rights Act of 1964, Title IX Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act (ADA) of 1990. Inquiries regarding Title VI, Title IX, 504 and ADA may be made to Kevin Lavoie, St. John Valley Technology Affirmative Action Officer, P.O. Box 509, Frenchville, Maine, 04745, (207) 543-6606 or by writing to U.S. Department of Education, Office of Civil Rights, 33 Arch Street, Suite 900, Boston, MA 02110-1491.