CVTECH

2023-2024 Program Syllabi

Table of Contents

Canadian Valley Technology Center

Our mission is to prepare people to succeed through
quality career and technical education programs and services.

Since 1970, we have been providing educational opportunities for high school students and adults. Our programs and services help you if you're ready to enter the workforce, if you're going to college, if you're an adult ready to make a career change or simply ready to expand your skills. CV Tech is ready to help you focus on your future.

CV Tech's student body is a diverse group of high school students from 14 sending schools and adults from the communities we serve. We have three campuses and offer training in 29 career fields.

Each year, hundreds of students choose to maximize their education by adding Canadian Valley's career-focused curriculum to their class schedules. Students are taught the fundamental concepts of their chosen field and learn to apply them in a professional lab/shop environment, all while learning to apply math, science, literacy, and employment readiness into their studies. This approach helps our students master highly technical procedures and gives them a head start on developing the work ethic employers demand from employees. As a result, our graduates are prepared to keep up with today's rapidly changing job market.

At CV Tech, instructors utilize instructional delivery that consists of individualized, standards-based learning through the use of an online learning management system and hands-on, skills-driven, project-based learning that includes work-based learning opportunities and capstone projects. Employability skills and academic skills instruction are incorporated with occupational skills education throughout the program.

El Reno	Cowan	Chickasha

CV Tech Information

Schedule

We offer two daytime class sessions:

AM 8:00 - 11:00   PM 12:10 - 3:00

Class sessions are approximately three hours with a ten minute break. Students will spend the entire time in their program unless they are taking a math class at CV Tech.

Transportation

Bus transportation is provided from each high school campus or students may choose to drive to campus.

Industry Certifications

The District will pay for up to four industry or trade-specific certification examinations and licenses related to the student's approved program of study, not to exceed $350.00 per student, per program. To receive this benefit, a student must be:
- taking their first attempt; does not count for retakes
- currently enrolled or recently completed (within the current year)
- in district student in good standing
- have the program instructor's recommendation to take the exam.

High School Credit

Courses that qualify for credit are marked with this symbol 🖥 on the program syllabus. They will also be marked with one of the following symbols to identify the type of credit earned.

🧪 = Science Credit   🖥 = Computer Science Credit   π = Math Credit

All 🖥 marked courses qualify for OHLAP credit. OCAS codes are listed on the program syllabus. Awarding of high school credit for courses shall be at the option of the local independent board of education.

Check ODCTE website for continuous updates.
https://oklahoma.gov/careertech/educators/ocas-codes.html

College Credit

Community colleges and universities that offer technical college certificates may award college credit for courses taught at technology centers through Prior Learning Assessments (PLA's). See current Statewide PLA Technical Inventory at
https://showwhatyouknowok.org/careertech-occupational-licenses/
For more information contact a CV Tech counselor. (see next page)

Contact Information

|	
Chickasha Campus (405) 224-7220 1401 W Michigan Ave Chickasha, OK 73018	**Program Administrators**
	Ronnie Bogle (405) 222-7527
	Wendi Williams (405) 222-7524
	Counselor
	Traci McNeff (405) 222-7553
	Special Needs Counselor / Assessment
	Denise Burns (405) 222-7557
	Outreach and Recruitment Specialist
	Breann Dowdle (405) 222-7503

Program Counselor and Administrator

Please direct questions to the counselor and/or administrator that supports each program.

Program	Counselor	Administrator
Automotive Collision Technology	McNeff / Burns	Ronnie Bogle
Automotive Service Technology	McNeff / Burns	Wendi Williams
Business and Medical Administration	McNeff / Burns	Wendi Williams
Computer Aided Drafting & Design	McNeff / Burns	Wendi Williams
Computer Information Systems	McNeff / Burns	Ronnie Bogle
Digital Media Technology	McNeff / Burns	Ronnie Bogle
Early Care and Education	McNeff / Burns	Ronnie Bogle
Electrical Trades	McNeff / Burns	Ronnie Bogle
Graphic Design	McNeff / Burns	Ronnie Bogle
Health Careers (HS)	McNeff / Burns	Ronnie Bogle
Heating, Ventilation, Air Conditioning & Refrigeration	McNeff / Burns	Wendi Williams
Math	McNeff / Burns	Wendi Williams
Practical Nursing (Adult)	McNeff / Burns	Laurie Jones
Pre-Engineering (HS)	McNeff / Burns	Wendi Williams
Precision Machining Technology	McNeff / Burns	Ronnie Bogle
Service Careers - Building and Grounds	McNeff / Burns	Wendi Williams
Service Careers - Hospitality	McNeff / Burns	Wendi Williams
Surgical Technology (Adult)	McNeff / Burns	Ronnie Bogle
Welding	McNeff / Burns	Wendi Williams
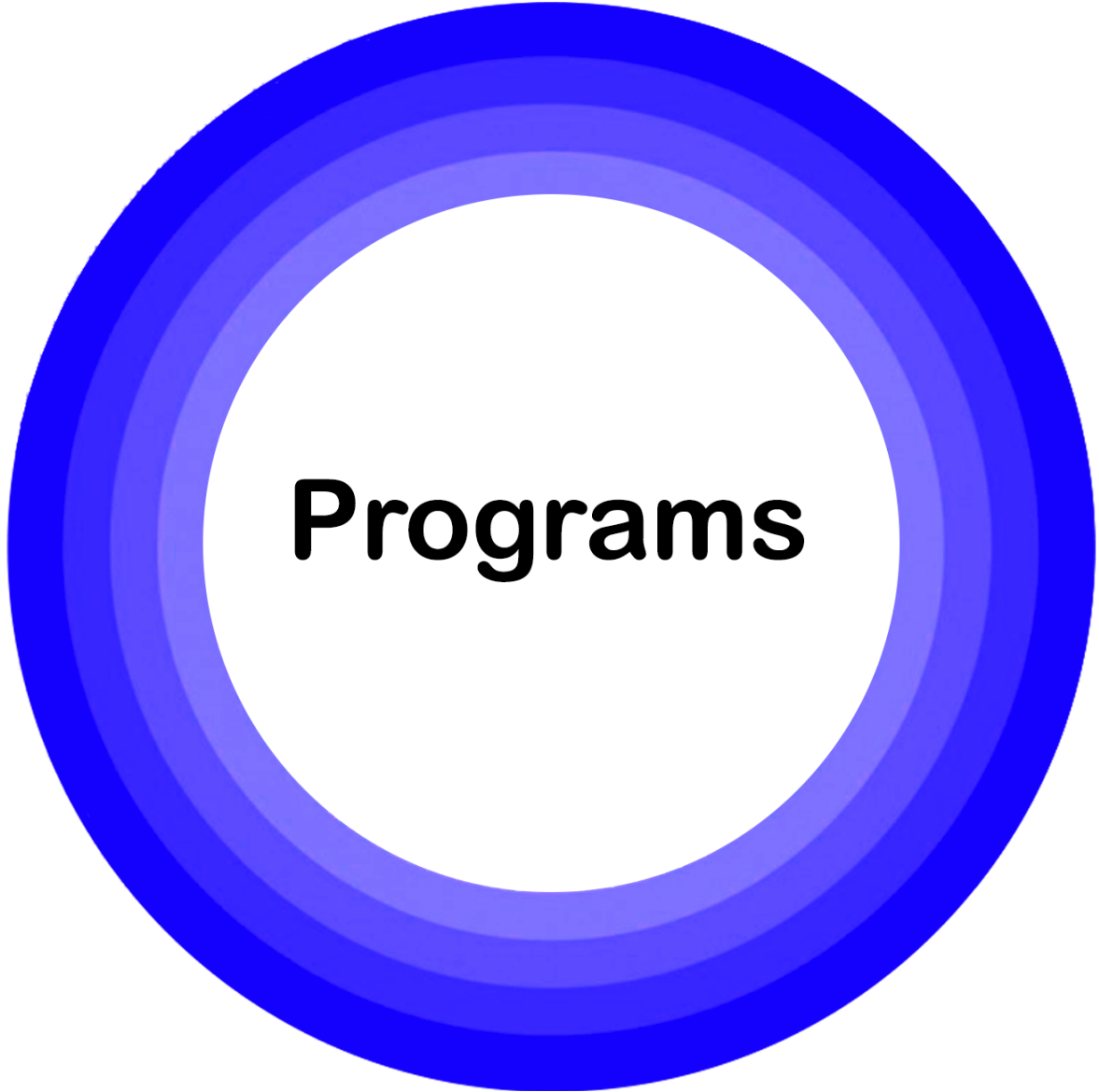
Programs

Accounting and Business Management

The Accounting and Business Management program at CV Tech provides students with technology and managerial skills needed for success in competitive business careers as well as valuable prerequisite skills for success in college business majors such as accounting, finance, marketing and management. Students choose an emphasis on either accounting, entrepreneurship and event planning, or medical office assistant. Every student begins with a focus on professional business communication, office procedures, and advanced Microsoft Office software programs including word processing, spreadsheet, database, and presentation software. Students then select their area of interest.

Local Program

Option 1 - Accounting Clerk, OCAS 9258/9266
Option 2 - Entrepreneurship and Event Planning, OCAS 9235/9236
Option 3 - Medical Office Assistant, OCAS 9230/9231

Courses	Hours	OCAS
Fundamentals of Administrative Technologies	120	8103
Office Administration & Management	120	8105
Foundations of Business	120	
Accounting I *Option 1* Accounting Basics *Option 2 and 3*	120	
Accounting II *Option 1* Introduction to Entrepreneurship, Hospitality, & Tourism *Option 2* Foundations of Medical Office *Option 3*	120	
Payroll Accounting *Option 1* Business Development and Management *Option 2* Patient Billing *Option 3*	120	
Integrated Projects *Option 1* Digital Marketing *Option 2* Medical Terminology *Option 3*	60	
Computerized Accounting *Option 1* Event and Convention Planning Management *Option 2* Medical Insurance *Option 3*	120	8109
Employment Essentials Capstone	60	
TOTAL HOURS	**960**	

Occupations
Administrative Assistant
Receptionist
Financial Clerk
Accounts Payable/Receivable Clerk
Payroll Clerk
Medical Office Assistant
Event Planning Assistant
Entrepreneur
Marketing Assistant

Entry Level Salary Range
$12.00 - $23.00 per hour

Licensure/Certification
Microsoft Office Specialist
Quickbooks Certified User
Entrepreneurship and Small Business

Resources
Microsoft Office
Foundations of Business
The Office: Procedures and Technology
Records Management
The Office Specialist
Customer Service
Accounting General Journal
QuickBooks Pro
Payroll Accounting
Administrative & Clinical Competencies
Insurance Handbook for the Medical Office
Exploring Electronic Health Records

Suggested Entry Level Skills
10th grade reading level; Basic math skills

CV TECH

Program Information Sheet

Automotive Collision Technology

The Automotive Collision Technology program at CV Tech is an I-CAR affiliate program. Students will learn auto detailing, nonstructural collision repair, refinishing, structural collision repair, shop management, and customer service.

Local Program

Combination Collision Repair Technician, OCAS 9904/9905

Courses	Hours	OCAS
Shop Safety / OSHA 10 Automotive Safety	15	
Introduction to Collision Repair	75	
Nonstructural: Metal Straightening, Body Fillers, Plastic Repair	155	
Nonstructural: Panel Repair / Replace Trim, Hardware, Glass	75	
Welding: MIG (GMAW), Resistance (STRSW), Aluminum Cutting; Gas, Plastic	155	
Refinish: Surface Preparation and Priming	100	
Auto Detailing: Detail, Wet Sanding, Buffing, Cleaning	45	
Structural: Unibody/Frame Analysis and Repair, Computerized Measuring, Tram Gauge	75	
Structural: Repair/Replace Inner Structure Unibody	75	
Supplemental Restraint System	15	
Collision Damage Analysis: Computer Estimating	30	
Refinish: Application, Blending, Color Adjustment	80	
Mechanical Repair / Collision Related	40	
Workforce Staging	25	
TOTAL HOURS	**960**	

Occupations
Painter Helper
Body Technician Helper
Auto Detailer
Refinishing Technician
Collision Technician
Estimator / Appraiser
Service Writer
Industrial Refinishing
Parts Manager

Entry Level Salary Range
$10.00 - $18.00 per hour

Licensure/Certification
I-Car/PDP-EE Pro Level 1
I-CAR Platinum Refinishing
I-CAR Platinum Nonstructural

Student ASE:
Painting and Refinishing
Structural Analysis and
   Damage Repair
Non-structural Analysis and
   Damage Repair
Mechanical and Electrical

Resources
I-CAR Collision Repair PDP
   Online
Auto Collision Repair and
   Refinishing
Chief Measuring System
CCC Estimating Software

Suggested Entry Level Skills

9th grade reading level; Basic math skills; Algebra, Geometry

Clothing Requirement

Students must wear long pants and close-toe shoes. Must wear clothes that can get dirty; be prepared to get dusty.

CV TECH

Program Information Sheet

Automotive Service Technology
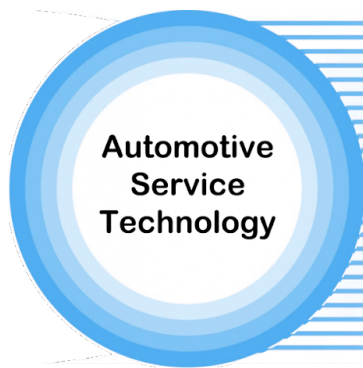
The Automotive Service Technology program at CV Tech is a NATEF certified program that focuses on diagnosing and repairing passenger cars and light trucks, including current computer controlled models. Students learn about the following systems: brakes, steering and suspension, electrical, heating and air-conditioning, automatic transmission, manual transmission and drivetrain, and engine repair and performance.

Local Program

Automotive Technician (NATEF Aligned), OCAS 9906/9907

Courses	Hours	OCAS
Fundamentals of Auto Service	45	
Automotive Brakes	60	
Automotive Heating and Air-Conditioning	45	
Automotive Electrical/Electronics	240	
Automotive Steering and Suspension	135	
Automotive Manual DriveTrain and Axle Introduction 1	45	
Automotive Automatic Transmission	80	
Automotive Engine Repair	105	
Automotive Engine Performance	175	
Workforce Staging	30	
TOTAL HOURS	**960**	

Occupations
Automotive Technician
Automotive Service Advisor
Maintenance/Light Repair Tech
Parts Counter Associate

Entry Level Salary Range
$15.00 - $25.00 per hour

Licensure/Certification
Student ASE:
Brakes
Suspension and Steering
Electrical and Electronic
  Systems
Heating and Air Conditioning
Maintenance and Light Repair
Engine Performance
Engine Repair
Manual DriveTrain and Axles
Automatic
  Transmission/Transaxle
Automobile Service Technology

Resources
CDX Online Fundamentals of
  Automotive Technology
Identifix
ProDemand website

Suggested Entry Level Skills
10th grade reading level; Basic math skills; Algebra; Geometry

Clothing Requirement
Work shirt and work pants; valuable clothing should not be worn, as it could be ruined by contact with dirt and grease. Closed-toe shoes are required; leather, high top, steel toe work shoes, or boots with oil resistant non-slip soles are preferred. Safety glasses are required (1st pair provided).

CVTECH

Program Information Sheet
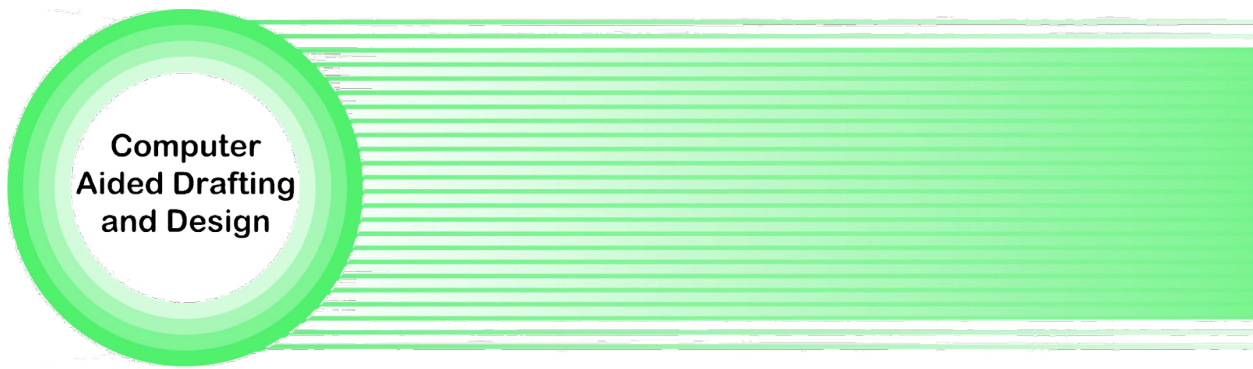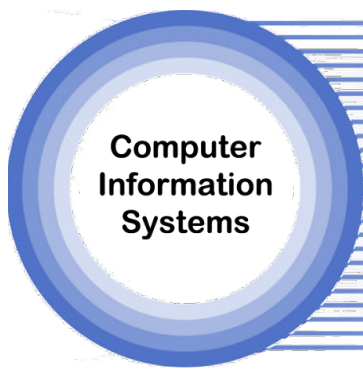
Computer Aided Drafting and Design

The CADD program at CV Tech emphasizes communication design through 3D modeling, texturing, animating, rigging, and game design. Students gain introductory skills in traditional design software (AutoCAD, Revit, Civil 3D, Solidworks) to prepare for skills and techniques of emerging technologies (advanced real-time rendering, interactive design and virtual reality using Twinmotion, Blender, and Unreal). Options are offered in civil, architectural, and mechanical design and drafting.

Local Program

CAD Drafter, OCAS 9681/9682

Courses	Hours	OCAS
Fundamentals of Computer Aided Drafting and Design	120	8905
Engineering Computer Aided Drafting and Design	120	8904
Principles of CAD Design	145	
Manufacturing Computer Aided Drafting and Design	120	
3D Rendering and Design Visualization	90	
2D CAD Mech / Arc	120	
CAD Civil Introduction	60	
Portfolio Projects and Development	75	
Drawing & Document Management	45	
Material and Equipment Specifications	35	
Employee Readiness	30	
TOTAL HOURS	**960**	

Occupations
CAD Drafter Designer
2D Drafter Designer
3D Drafter Designer

Entry Level Salary Range
$15.00 - $26.00 per hour

Licensure/Certification
AutoDesk-AutoCAD
Autodesk Maya
Autodesk 3DS Max
AutoDesk-Revit
AutoDesk-Civil 3D
Solidworks

Resources
Solid Professor

Suggested Entry Level Skills
9th grade reading level; Basic Math

CV TECH

Program Information Sheet
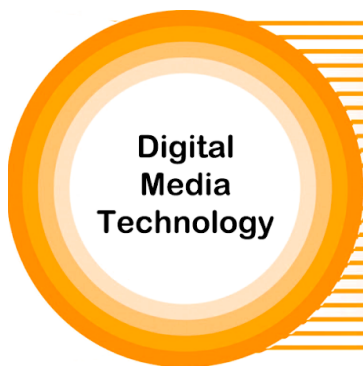
Computer Information Systems

This local program prepares students to repair, service and troubleshoot personal computers and computer-related equipment and to install and configure operating systems and application software. Students also learn to install, configure and support an organization's local area network (LAN). Students in this program gain the technical skills required for the CompTIA ITF+, CompTIA A+, and the CompTIA Network+, Cisco Networking and Cisco Cybersecurity (both CCST) industry certifications.

Local Program

Network PC Support Technician, OCAS 9542/9543

Courses	Hours	OCAS
Computer Repair and Troubleshooting I	240	8136
Computer Repair and Troubleshooting II	240	8137
Routing and Switching I	240	8125
Routing and Switching II	120	
Career Major Capstone	120	
TOTAL HOURS	**960**	

Occupations
Help Desk Support
Desktop Support Analyst

Entry Level Salary Range
$10.00 - $20.00 per hour

Licensure/Certification
TestOut PC Pro
CompTIA A+
CompTIA ITF+
CompTIA Network+
CCST Networking
CCST Cybersecurity

Resources
LabSIM TestOut PC Pro
Total Seminars CompTIA
 A+ Video Lectures
Total Seminars CompTIA
 Network+ Video Lectures
CBT Nuggets Cisco CCNA
 200-301 Video Lectures
uCertify Cisco 200-301
 Simulator
Cisco Packet Tracer

Suggested Entry Level Skills
9th grade reading level; Basic math skills

CVTECH

Program Information Sheet

Digital Media Technology

The Digital Media Technology program at CV Tech prepares students for video production and digital communication. Students will create various media pieces using the iMac computer lab and a variety of industry-level equipment. All Students will focus on mastering Adobe products – Premiere Pro, After Effects, Photoshop, InDesign, and Illustrator – as well as online digital marketing through social media. Upon completion of the program, all students will have an opportunity to be certified in up to two Adobe programs.

Local Program
Marketing Communications Associate, 9783/9784

Courses	Hours	OCAS
Fundamentals of Technology	120	8169
Advertising Strategies	120	
Business and Marketing Communications	60	
Customer Service	60	
Employment Essentials	60	
Marketing Fundamentals	120	
Adv. Desktop Publishing and Graphic Design	120	8901
Marketing Research	120	
Product and Service Sales	60	
Public Relations Marketing	60	
Capstone	60	
TOTAL HOURS	**960**	

Occupations
Production Assistant
Digital Media Specialist
Photographer
Videographer
Social Media Management
Marketing Assistant

Entry Level Salary Range
$12.00 - $16.00 per hour

Licensure/Certification
Adobe Certified Associate:
InDesign
Photoshop
Premiere Pro
Illustrator

FAA Certification:
Recreational Flyer
Commercial Unmanned Aerial Systems (UAS)

Students will create a professional portfolio or demo reel

Resources
Gmetrix
The Photographer's Toolkit
ICEV
Better Photo Basics

Suggested Entry Level Skills
8th grade reading and math levels

CVTECH

Program Information Sheet

Early Care and Education

The Early Care and Education program at CV Tech is designed to prepare students for employment in child care occupations. The National Accreditation Commission for Early Care and Education Programs (NAC) accredits the on-site Child Development Center, where students will experience rotations with children six weeks through four years of age. Students in this program will begin their portfolio to earn The Child Development Associate (CDA) Credential.

Local Program
Early Care Education, OCAS 9480/9489

Courses	Hours	OCAS
Planning a Safe, Healthy Learning Environment	120	
Advancing Children's Physical and Intellectual Development	120	
Supporting Children's Social and Emotional Development	120	
Building Productive Relationships with Families	120	
Managing an Effective Program	120	
Maintaining a Commitment to Professionalism	120	
Observing and Recording Children's Behavior	120	
Understanding Principles of Child Development and Learning	120	
TOTAL HOURS	**960**	

Occupations
Early Care & Education Master Teacher

Entry Level Salary Range
$8.00 - $18.00 per hour

Licensure/Certification
CECPD Certifications:
Entry Level Child Care Training
Sleep Safe
Early Learning Guidelines

American Heart Association CPR/First Aid

ODCTE Competency Tests:
Teacher Assistant
Master Teacher
Pathway to Your National Credential

CDA Child Development Association Credential

Resources
Working with Young Children
The Child Development Associate National Credentialing Program and CDA Competency Standards
Child Development
Early Care & Education: Pathway to Your National Credential

Suggested Entry Level Skills
9th grade reading level; Basic math skills

Clothing Requirement
Closed-toe shoes required in the Child Development Center kitchen. Clothing should be washable and fit to allow for movement, outdoor activities and sitting on the floor with children.

CVTECH

Program Information Sheet
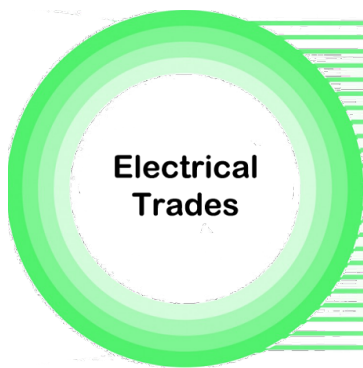
Electrical Trades

The Electrical Trades programs at CV Tech are a CareerTech State affiliated program. Students will learn about both residential and commercial electrical installations. This will include knowledge and skills in the use and understanding of the National Electrical Code, blueprint reading, NEC code calculations, safety, and wiring methods. The certificate of graduation in Electrical Trades is accepted by the Construction Industries Board as one year of experience toward the four years required for a Journeyman License.

Local Program
Electrician's Assistant, OCAS 9058/9086

Courses	Hours	OCAS
Construction Training	120	
Electrical Safety	30	
Parts and Pieces	30	
Tools and Meters	60	
Electrical Schematic and Blueprint Reading	30	
Electrical Distribution in Construction	30	
Basic Conduit Theory	40	
Residential Wiring: Electrical Box/Cable/Switches	160	
Residential Wiring Installation	115	
Environmental Electrical Practices	25	
Commercial Wiring Methods	250	
Motor Control	80	
Employment Readiness	30	
TOTAL HOURS	**1000**	

Occupations
Electrical Apprentice
Electric Maintenance
Motor Control Apprentice
Junior Electrical Estimator
Generator Installation and
  Maintenance Technician

Entry Level Salary Range
$16.00 - $24.00 per hour

Licensure/Certification
Electrical Construction
  Technology - NOCTI
Electrical Occupations -
  NOCTI

Preparation for assessment:
Residential Certification
Commercial Certification

Apprenticeship License

Resources
Construction Core
  Curriculum;
221 Trainee Guide
Modern Residential Wiring

Suggested Entry Level Skills
11th grade reading level; Basic math skills; Algebra; Geometry; Trigonometry

Clothing Requirement
Personal Protective Equipment (PPE) including safety glasses, closed-toe shoes and coveralls or overalls.
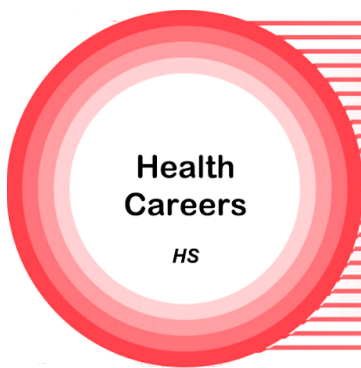
CVTECH

Program Information Sheet
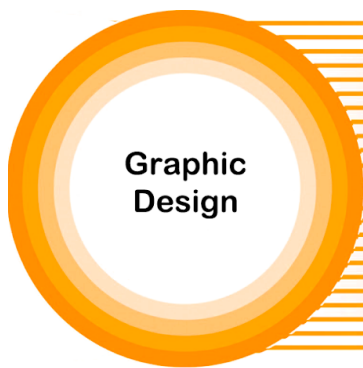
Graphic Design

The Graphic Design program prepares you to develop, design and produce a wide range of business marketing for customers. You will learn to create logos, advertisements, vinyl decals, promotional posters and product packaging as well as sublimation. Students will learn Adobe design software (InDesign, Illustrator, and Photoshop) and other support software. They will create and edit graphics and documents using design principles that include composition, color, layout, illustration, typography, and more. As the course progresses, you will produce a portfolio that exhibits your creativity, capabilities, and vision to prospective employers and colleges.

Local Program
Graphic Designer, OCAS 9133/9144

Courses	Hours	OCAS
Introduction to Graphic Design	60	
Desktop Publishing and Graphic Design	120	8149
Multimedia & Image Management Techniques	120	8150
Graphic Design Principles	90	
Graphic Design Production I	90	
Advanced Adobe Suite for Graphic Design	180	
Graphic Design Production II	120	
Employment Readiness	60	
Capstone	120	
TOTAL HOURS	**960**	

Occupations
Graphic Artist
Print Shop Associate
Production Assistant
Sublimation Technician

Entry Level Salary Range
$14.00 - $20.00 per hour

Licensure/Certification
Adobe Certified Associate:
InDesign
Illustrator
Photoshop

Students will create a professional portfolio

Resources
Advertising and Design
Creative Workshop
GO: A Kidd's Guide to Graphic Design
ACA Test Prep Online
The Print Handbook
Gmetrix

Suggested Entry Level Skills
10th grade reading level; Basic math skills (understanding the marks on a ruler for example)

CVTECH

Program Information Sheet

Health Careers
HS

The Health Careers program at CV Tech prepares students through training in core medical knowledge, anatomy, physiology, medical terminology, first aid/CPR, communication pertaining to the health sector, and nursing assistant skills. All first year students will complete Anatomy, Physiology, and MedTerm and begin certified nursing assistant (LTCA) training; second year students will complete LTCA training and AUA training and have the opportunity for EKG Technician and Phlebotomy training. Those who decide not to pursue patient care may transfer to the Accounting and Business Education program to learn Medical Office skills so they may pursue working on the administrative side of a hospital or doctor's office.

Local Program • (High School Only Program)
Health Careers - CNA/AUA, OCAS 9301/9331

Courses	Hours	OCAS
Anatomy	60	5333
Physiology	60	5220
Medical Terminology	60	
Healthcare Provider CPR and First Aid	9	
Long Term Care Aid *includes National Health Science Standards (Core) and a minimum of 16 clinical hours in a long term care facility or setting*	275	
Home Health Care Nursing Assistant	16	
AUA *includes a minimum of 40 clinical hours*	240	
Option 1		
EKG Technician	120	
Phlebotomy	120	
Option 2		
Fundamentals of Nursing I	75	
Fundamentals of Nursing II	165	
TOTAL HOURS	**960**	

Occupations
Certified Nursing Assistant
Advanced Unlicensed Assistant
Home Health Aide
Phlebotomist
EKG Tech
Monitor Tech

Entry Level Salary Range
$15.00 - $18.00 per hour

Licensure/Certification
AHA BLS Provider, CPR, First Aid
Certified Nursing Assistant (LTCA)
Home Health Aide
NCCT Phlebotomy Technician NCPT
NCCT EKG Technician NCET
Advanced Unlicensed Assistant

Resources
Dean Vaughn Medical Terminology
The Human Body in Health and Illness
Hartman's Nursing Assistant Care – Long Term Care and Home Care
Being a Homemaker Home Health Aide
Lippincott Acute Care Skills for Advanced Nursing Assistants

Suggested Entry Level Skills
10th grade reading level; Basic math skills; Algebra

Clothing Requirement
Students must wear scrubs every day (dark gray, blue, or black); you may wear a HOSA or CV Tech t-shirt instead of a scrub top. A jacket is allowed with a HOSA or CV Tech short sleeve t-shirt under. Students must wear healthcare appropriate shoes (athletic, closed toe shoes that are clean and professional, no Croc type shoes).

CVTECH

Program Information Sheet

Heating, Ventilation, Air Conditioning, & Refrigeration

The Heating, Ventilation, Air Conditioning, and Refrigeration program at CV Tech is an introduction into Residential and Light Commercial program. Students learn the fundamentals of safety, mechanics, refrigeration, electricity for HVACR, residential and light commercial air conditioning, domestic and commercial refrigeration, and sheet metal. Students will take the OSHA-10 Certification and the State competency exams.

Local Program
Residential HVAC Technician, OCAS 9059/9080

Courses	Hours
Air Conditioning Systems	100
Air Handling	45
Electricity for HVAC/R	60
Heat Pumps	30
Heating Systems	90
HVAC/R Codes, Regulations, & Standards	30
HVAC/R Controls	45
HVAC/R Preventive Maintenance	15
HVAC/R Solid State Electronics	30
HVAC/R System Servicing Installation & Start-Up	120
HVAC/R System Servicing & Troubleshooting - Residential	90
Indoor Air Quality	15
Introduction to HVACR: Safety, Tools, & Equipment	30
Load Calculations	15
Piping & Piping Practices	45
Principles of Thermodynamics & Heat Transfer	60
Professional Service	15
Refrigerant Recovery	15
Refrigerant Retrofits	15
Refrigerant System Components	90
Refrigerants & Lubricants	15
Workforce Staging	30
TOTAL HOURS	**1000**

Occupations
Apprentice HVAC Technician
Apprentice HVAC Installer
Sheet Metal Fabrication
  Apprenticeship

Entry Level Salary Range
$12.00 - $18.00 per hour
After obtaining a
  Journeyman's License,
  employees may earn
  $20.00/hour or more.

Licensure/Certification
EPA Certification
OSHA 10
FlashShield Certification
Two years of experience
  toward the 3-years required
  for a Journeyman License
Advanced placement with
  Sheet Metal Union

Resources
Modern Refrigeration and Air
  Conditioning 21st Ed.
International Mechanical Code
International Fuel Gas Code

Suggested Entry Level Skills
10th grade reading level; Basic math skills; Algebra; Geometry

Clothing Requirement
Closed-toe shoes and proper PPE are required and long pants are required in the shop.

CVTECH

Practical Nursing
Adult
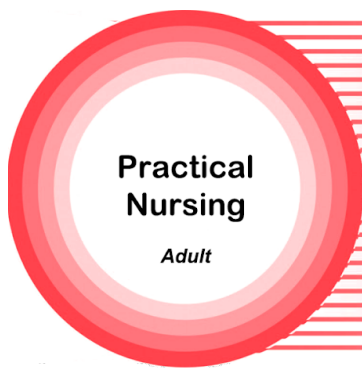
The Practical Nursing program at CV Tech prepares adult students to become a Licensed Practical Nurse. Graduates are eligible to take the NCLEX examination for Practical Nursing licensure after successful completion of the Practical Nursing program.

Local Program• (Adult Only Program)
  Practical Nursing, OCAS 9323

Courses	Hours
Medical Terminology	45
Anatomy	60
Physiology	60
Nursing Concepts	40
Fundamentals of Nursing I	165
Fundamentals of Nursing II	70
Pharmacology and Intravenous Therapy Skills	60
Clinical II - Medical Surgical Nursing	193
Medical Surgical Nursing I	85
Pediatric Nursing	65
Clinical III - Medical Surgical Nursing	276
Maternal/Newborn Nursing	65
Mental Health Nursing	40
Medical Surgical Nursing II	95
Clinical IV - Material/Newborn, Pediatric, and Mental Health	221
TOTAL HOURS	**1540**

Occupations
  Licensed Practical Nurse

Entry Level Salary Range
  $12.00 - $27.00 per hour

Licensure/Certification
  Students able to apply for NCLEX examination for Practical Nursing licensure

Resources
  Medical Terminology 350 (2nd edition)
  Human Body in Health & Illness (7th edition)
  Fundamentals of Nursing Care
  Nursing Leadership
  Calculate with Confidence
  All in One Care Planning
  Med-Surg Nursing Concepts and Practice
  CPR – BLS for Healthcare Provider
  CPR Training Mouthpiece
  Introduction to Maternity and Pediatrics
  Mental Health Nursing
  Understanding Pharmacology

Suggested Entry Level Skills
  Minimum scores of 250 in reading and 250 in arithmetic on the Accuplacer exam.

Clothing Requirement
  Students are required to wear scrubs of any color to class every day. Scrub tops, tshirts, or sweatshirts can be worn with scrub pants. School uniform scrubs (specific color with specific patches) are only required during clinicals and are purchased from the CV Tech bookstore.

CVTECH

Program Information Sheet

Precision Machining Technology
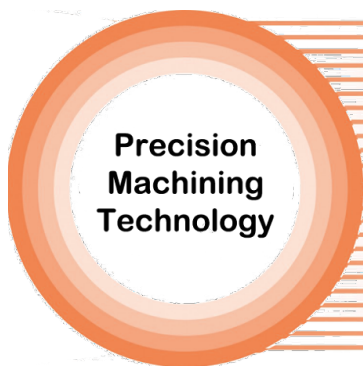
The Manufacturing and Machining program at CV Tech prepares students for a career in the machining field. Students learn blueprint reading, math, measuring tools, and setup and operation of manual machine tools such as lathes, grinding machines, mills during their first year and CNC machining in the second year where they will set up, operate, and write programs for CNC mills and lathes.

Local Program
Precision Machinist, OCAS 9679/9680

Courses	Hours	OCAS
Orientation to Machining	30	
Print Reading for Machining	45	
Fundamentals of Manufacturing	45	
Machine Tool Theory	45	
Metal Preparation for Processing	45	
Precision Measurement	45	
Precision Grinding	30	
Engine Lathe Operations	135	
Drill Press Operations	75	
Milling Operations	135	
Computer Numerical Control Operations	60	
Basic CNC Mill Operations	60	
CNC Mill Programming	60	
Basic CNC Lathe Operations	60	
CNC Lathe Programming	60	
Workforce Staging	30	
TOTAL HOURS	**960**	

Occupations
Machinist
CNC Operator

Entry Level Salary Range
$13.00 - $25.00 per hour

Licensure/Certification
ODCTE Competency Tests:
Drill Press Operator
Lathe Operator
CNC Machining Center Operator

Resources
Immerse2Learn
Precision Machining Technology
Machining Center Programming and Operation
Turning Center Programming and Operation
Haas operator and training manual
Cam Instructor

Suggested Entry Level Skills
11th grade reading level; Basics of Algebra; Geometry; Trigonometry

Clothing Requirement
Long pants (jeans or work pants), short-sleeved shirts, closed-toe shoes with socks, and safety glasses are required.

CVTECH

Program Information Sheet

Pre-Engineering

HS
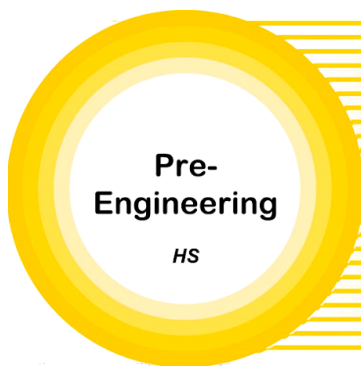
The Pre-Engineering program at CV Tech is a college preparatory program for sophomores, juniors, and seniors that combines advanced math and science with hands-on, real-world application of engineering principles. Design a city, program a robot, and do other projects while learning engineering concepts.

Students will be enrolled in the courses below based on courses completed at their high school prior to entering the Pre-Engineering program. This could cause this course outline to be different for some students.

Local Program• (High School Only Program)
Pre-Engineering Academy, OCAS 9862/9871

Courses	Hours	OCAS
Sophomore		
Algebra II	160	4412
PLTW Aerospace Engineering	160	8715
PLTW Principles of Engineering	160	8710
Junior		
PLTW Intro to Engineering and Design	120	8709
Accelerated Physics	120	5211
Algebra III (College Algebra)	120	4413
Trigonometry	80	4750
Senior		
Calculus I	120	4612
AP Physics C - Mechanics	120	5216
PLTW Digital Electronics	120	8711
PLTW Engineering Design and Development	120	8716
TOTAL HOURS	**1440**	

Retention Criteria
A student must make a B or higher each semester to progress to the next semester.

Credits
Many students earn college credit in the AP courses

Project Lead the Way college credit hours may be earned

Resources

Flamingo Math
College Physics
Mechanics and Electricity and Magnetism Physics for Scientists and Engineers
Algebra 2 Common Core
TI-Nspire CX calculator
TI-Nspire CX2 CAS calculator
A Molecular Approach
World of Chemistry

Suggested Entry Level Skills / Academic Criteria
A student who meets pre-ACT/SAT college readiness benchmarks in STEM or math and science and has a grade B or higher in high school math and science courses may be accepted.

Program Information Sheet

Service Careers

Building and Grounds

The Service Careers Building and Grounds Maintenance program at CV Tech provides students training in a wide range of skills necessary for entry into building and grounds maintenance occupations. These skill areas include but are not limited to: light construction, wood working, custodial services, landscaping design, construction, installation, and maintenance, and grounds equipment operation and maintenance. There is an emphasis in this program on the development of employability skills, positive attitudes, and work ethic.

Local Program
Building and Grounds Maintenance Technician, OCAS 9071/9076

Courses	Hours	OCAS
Construction Core	245	
Landscaping and Grounds Care	435	
Facilities Cleaning	75	
Introduction to Construction Industry Trades	145	
Employment Readiness	60	
TOTAL HOUR	**960**	

Occupations
Facilities Maintenance
Facilities Groundskeeper
Construction Assistant
Customer Service
  Representative

Entry Level Salary Range
$10.00 - $18.00 per hour

Licensure/Certification
Construction Trainee

Resources
N/A

Suggested Entry Level Skills
Basic reading and math skills but most important is a willingness to learn, work, and be employable upon completion of this program.

Clothing Requirement
Closed-toe shoes are required for all activities. Long pants are required for custodial and landscape labs. Students should wear old clothes or may keep a set of work clothes in their lockers.

CVTECH

Program Information Sheet

Service Careers Hospitality

The Service Careers Hospitality program at CV Tech develops skills in customer service, event setup, hotel housekeeping and laundry, office cleaning services, communication, teamwork, and organization. There is an emphasis in this program on the development of employability skills, positive attitudes, and work ethic.

Local Program

Service Careers Hospitality, OCAS 9434/9442

Courses	Hours	OCAS
Introduction to Hospitality & Tourism	30	
Sanitation and Cleaning	90	
Customer Service	120	
Lodging Services	240	
Food & Beverage Services	240	
Event Services	120	
Employment Readiness	120	
TOTAL HOURS	**960**	

Occupations
Housekeeper
Event Staff
Breakfast Attendant
Laundry Attendant
Room Service Server
Dining Room Attendant

Categories
- Accommodations
- Transportation
- Food and Beverage
- Attractions

Entry Level Salary Range
$8.00 - $18.00 per hour

Licensure/Certification
Hospitabilities

Resources
N/A

Suggested Entry Level Skills

Basic reading and math skills but most important is a willingness to learn, work, and be employable upon completion of this program.

Clothing Requirement

Students must wear closed-toe shoes for all activities (no sandals allowed). Students should wear shirts that cover their shoulders (no tank tops allowed). If a hat is worn, the brim must be facing their face.

CVTECH

Program Information Sheet

Surgical Technology
Adult
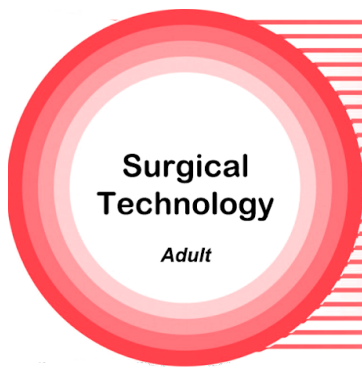
The Surgical Technology program at CV Tech prepares students to provide quality patient care before, during and after surgery as a critical part of the surgical team. Students learn to prepare operating rooms for surgery; sterilize and supply equipment; prepare patients for surgery; assist surgeons and nurses during surgery by passing instruments and other sterile supplies. Students will experience challenging coursework and instruction in a variety of surgical procedures and clinical settings.

Local Program • (Adult Only Program)
Surgical Technologist (Accredited Program), OCAS 9343

Courses	Hours	OCAS
Surgical Technology Orientation	26	
Core Medical Terminology	45	
Anatomy	80	
Physiology	80	
Introduction to Surgical Technology	60	
Microbiology and Wound Healing	55	
Essentials of Surgical Asepsis	100	
Surgical Pharmacology	60	
Disaster and Emergency Preparedness	15	
Surgical Patient Care	60	
Surgical Case Management	120	
Surgical Procedures I	90	
Surgical Procedures II	73	
Surgical Tech Practicum I	76	
Surgical Tech Practicum II	208	
Surgical Tech Practicum III	208	
TOTAL HOURS	**1356**	

Occupations
Surgical Technologist

Entry Level Salary Range
$18.00 - $25.00 per hour

Licensure/Certification
CST Nationally Certified Surgical Technologist

Resources
Medical Terminology: A Short Course
Understanding Anatomy & Physiology Text & Workbook
The Human Body in Health and Illness 7th Ed.
Surgical Technology Principles & Practice 8th Ed.
Microbiology for the Surgical Technologist 2nd Ed.
Pharmacology for the Surgical Technologist 5th Ed.

Suggested Entry Level Skills
9th grade reading level; Must score 250 in reading and 238 in arithmetic on Accuplacer to apply.

Clothing Requirement
Students must wear scrub bottoms every day (dark gray or black); you may wear a HOSA or CV Tech t-shirt instead of a scrub top. A jacket is allowed with a HOSA or CV Tech short sleeve t-shirt under. Students must wear healthcare appropriate shoes (athletic, closed toe shoes that are clean and professional, no Croc type shoes).

CVTECH

Program Information Sheet
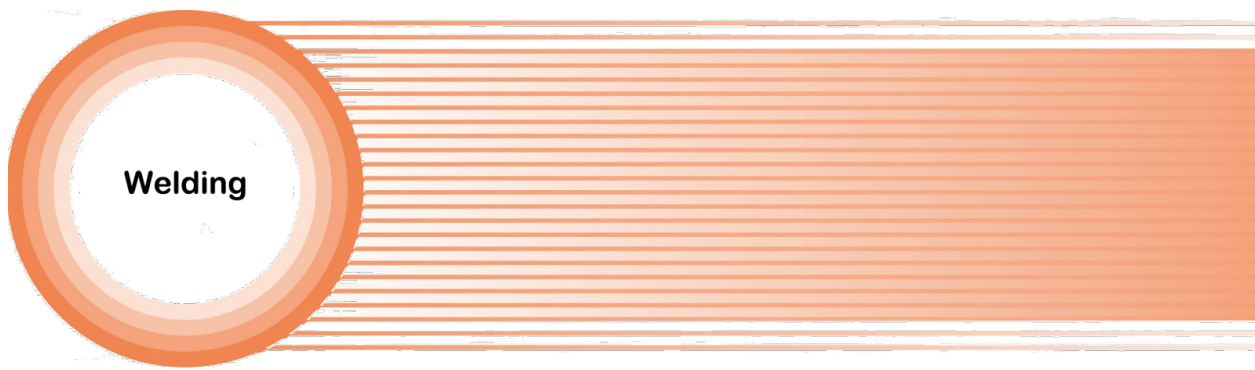
Welding

The Welding program at CV Tech prepares students for a career in the welding field. Students will learn about Shielded Metal Arc Welding (Stick), Gas Metal Arc Welding (MIG), Flux Cored Arc Welding (FCAW), and Gas Tungsten Arc Welding (TIG). Students will also learn about oxy-fuel cutting and weld shop blueprint reading.

Local Program
Pipe/Structural Welder/Fitter, OCAS 9707/9708

Courses	Hours	OCAS
Fundamentals of Welding	30	
Cutting Processes	85	
SMAW Beads and Fillet Welds	155	
Welding Joint Fit Up and Adjustments	15	
SMAW V Groove and Pipe Welds	180	
SMAW Stainless Steel Grove and Pipe Welds	75	
SMAW Groove Welds with Backing	30	
GMAW/FCAW Processes	105	
GTAW Plate and Pipe	120	
Weld Quality	15	
Welding Blueprints	30	
Metal Prep and Characteristics	60	
Employee Readiness	15	
GTAW Aluminum Plate	45	
TOTAL HOURS	**960**	

Occupations
Welder
Fabricator
Fitter
Inspector
Retail Sales

Entry Level Salary Range
$15.00 - $30.00 per hour

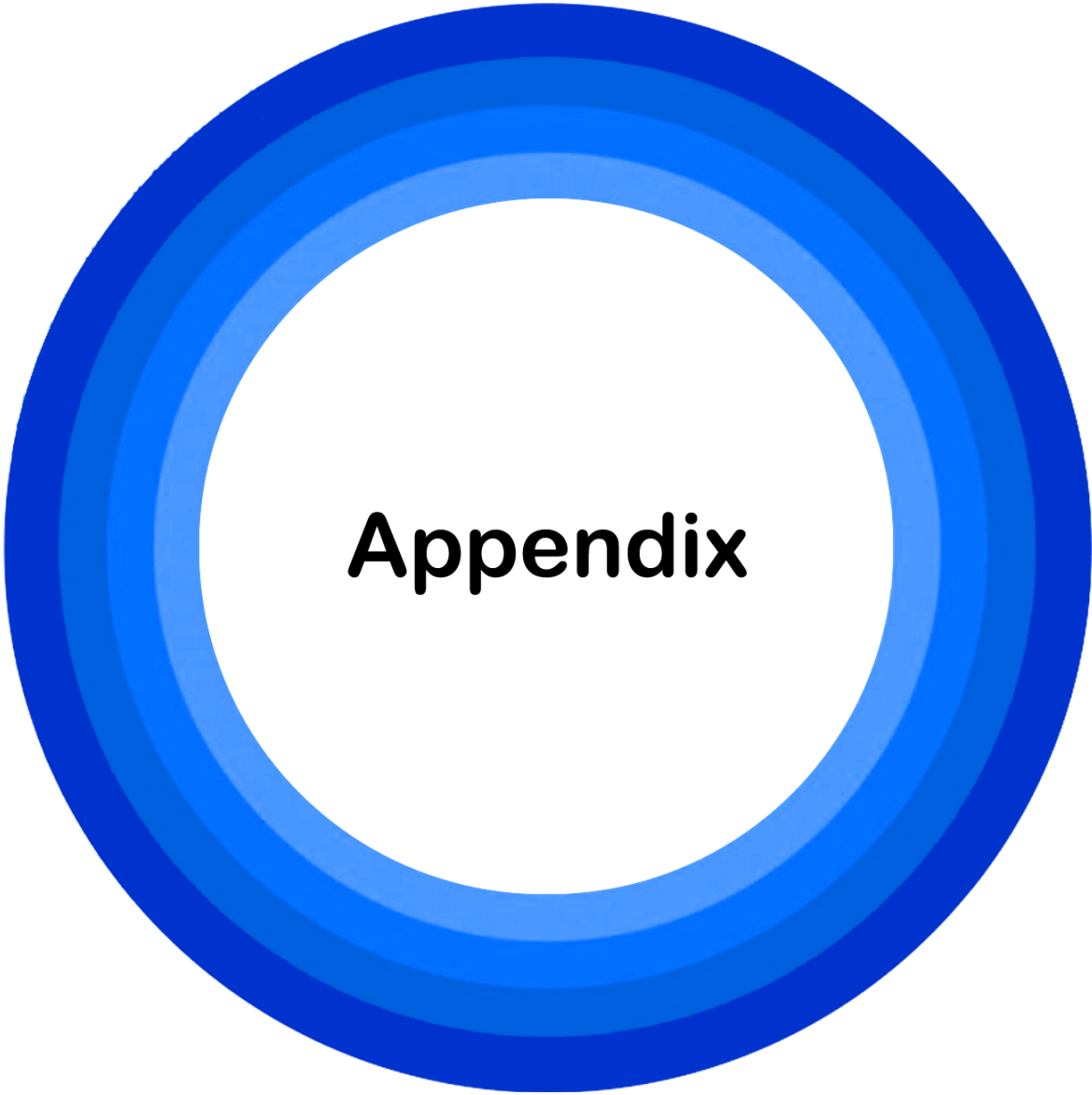**Licensure/Certification**
Certified Welder

Resources
Welding Technology Fundamentals
Hobart Institute of Welding Technology Step-by-Step Books

Suggested Entry Level Skills
9th grade reading level; Basic math skills

Clothing Requirement
Steel-toe high-top boots, welding shirt or jacket, safety glasses, welding cap and welding gloves.

CVTECH

Appendix

Computer Technology Competencies

Secondary students who complete a CareerTech program at CV Tech will have gained the set of competencies in computer technology listed below. All CV Tech programs are using *Canvas* as their Learning Management System.

Programs	Programming / Hardware / Diagnostic Tools / Software / Database	OK Promise Computer Technology Credit *OCAS Code
Account and Business Management	Microsoft Office QuickBooks Online Canva Gmetrix Knowledge Matters TestOut	Fundamentals of Administrative Technologies *8103 Office Administration and Management *8105 Computerized Accounting *8109
Auto Collision Technology	iCar PPG OneTouch Paint Mixing Software CCC1 Estimating Software Velocity Frame Analysis System AllData	
Auto Service Technology	CDX Auto Diagnostic Technology Scan tools to pull diagnostic trouble codes Alignment Diagnostic Machine Oscilloscope for Wave Forms AllData ProDemand	
Computer Aided Drafting and Design	AutoCAD Revit Civil 3D AutoDesk Vault Maya Stingray 3DS MAX Solid Work Professor	Fundamentals of Computer Aided Drafting and Design *8905 Engineering Computer Aided Drafting and Design *8904
Computer Information Systems	Google Apps for Education LabSim Test Out Packet Tracer Hardware Labs Complex Cisco	Computer Repair and Troubleshooting I *8136 Computer Repair and Troubleshooting II *8137 Routing and Switching I *8125
Digital Media Technology	Photoshop Indesign Illustrator iCEV Gmetrix	Fundamentals of Technology *8169 Advanced Desktop Publishing and Graphic Design *8901

Programs	Programming / Hardware / Diagnostic Tools / Software / Database	OK Promise Computer Technology Credit *OCAS Code
Early Care Education	Word Processing Spreadsheets Presentation Safe Sleep Center for Early Childhood PD	
Electrical Trades	Programmable Logic Controller Alarm System Fire Alarm System NCCER Testing Center	
Graphic Design	Photoshop Indesign Illustrator Gmetrix ACA Test Prep Online	Desktop Publishing and Graphic Design *8149 Multimedia & Image Management Techniques *8150
Health Careers	EKG Machine Sonogram Machine Pass Assured system Patient Care Database	Anatomy *5333 Physiology *5220
Heating, Ventilation, and Air Conditioning	ECM Tester Digital Thermostats Control Boards on furnaces and AC Load Calculation System NCCER Testing Center	
Practical Nursing	EDGT (Educational Global Technologies, Inc.) ATI (Assessment Technologies Institute) YouTube	
Pre-Engineering	Robot C Programming Lab Pro 3D Printer TI-Nspire AutoDesk Inventor / CAD Logger Pro Multi SIM Virtual Circuitry EBSCO Google Patent	Introduction to Engineering Design *8709 Principles of Engineering *8710 Computer Integrated Manufacturing *8712 See Syllabus for complete list
Precision Machine Technology	CNC Programming Ink Scape Bob CAD Immerse2Learn	

Programs	Programming / Hardware / Diagnostic Tools / Software / Database	OK Promise Computer Technology Credit *OCAS Code
Service Careers	Google Apps for Education	
Surgical Technology	Google Apps for Education YouTube AORN Association of Surgical Techs JOMI	
Welding	Plasma Cutter Programming Auto CAD Mach 3 Sheet Cam	

Suggested Reading and Math Levels for Enrollment

Program	Reading Level	Math Level
Automotive Collision Technology	9	Algebra, Geometry
Automotive Service Technology	10	Algebra, Geometry
Business and Medical Administration	10	Basic Math
Computer Aided Drafting & Design	9	Basic Math
Computer Information Systems	9	Basic Math
Digital Media Technology	10	Algebra, Geometry
Early Care and Education	9	Basic Math
Electrical Trades	11	Algebra, Geometry
Graphic Design	10	Basic Math
Health Careers	10	Algebra
Heating, Ventilation, Air Conditioning & Refrigeration	10	Algebra, Geometry
Practical Nursing	10	Algebra
Pre-Engineering	11	Algebra, Geometry
Precision Machining Technology	11	Algebra, Geometry
Service Careers	3	Basic Math
Surgical Technology	10	Algebra
Welding	9	Basic Math

# *Career Tech Academic Credits/Transcripting*

Math and Science Courses

On March 26, 2015, the Oklahoma State Board of Education approved certain math and science courses taught at technology centers and select high schools to count for academic credit on high school transcripts. On June 8, 2015, the Oklahoma State Regents for Higher Education approved the PLTW Pre-Engineering and PLTW Biomedical courses to count for academic credit on the College Prep/Work Ready curriculum and to count for OKPromise. CTE Biotechnology courses will count as a science course on the CORE curriculum and will count as electives on the CollegePrep/WorkReady curriculum. Additional courses were approved in December 2016.

In order for students to receive credit for these courses, it is imperative that schools follow these guidelines:

1) Technology Centers must submit these courses to their partner schools' boards of education for approval to count these courses as academic credit for graduation purposes.

2) NCAA – High schools will need to submit to NCAA course syllabi's for the courses approved by the local BOEs that meet the requirements for math or science credit. Technology Centers will need to work with their partner schools to supply the information needed by NCAA.

3) It is **very important** that the technology centers send their partner schools the correct OCAS code when listing courses receiving academic credit. (Just as technology centers have been doing for Human Anatomy/Physiology in Health and for courses already on the OKPromise list of approved courses.) It is also **very important** that high schools use these same codes when adding the courses to the students' transcripts. The correct OCAS codes for the science and math courses are listed in the chart below.

4) Additional computer education courses approved for OKPromise and the CollegePrep/ WorkReady curriculum are listed under **CTE Academics and Transcripting.** Here is the link to the list of courses on the SDE's website:
https://oklahoma.gov/careertech/educators/ocas-codes.html

World-of-Work Map and
U.S. Department of Education
Career Clusters

U.S. Department of Education 16 Career Clusters

CV Tech Local Programs
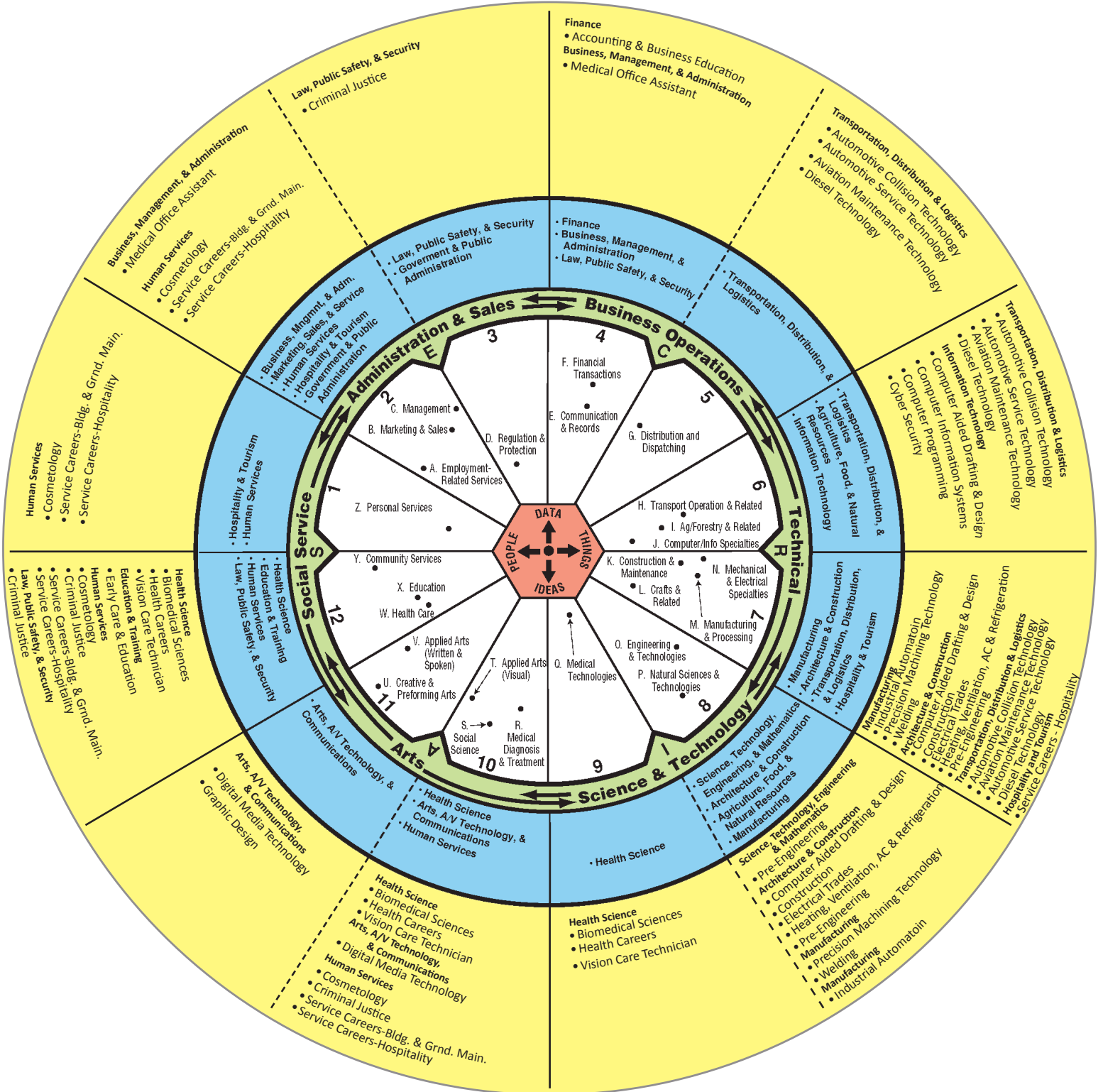
Oklahoma based the above model on the ACT World-of-Work Map in order to crosswalk the 6 ACT Career Clusters to the 16 U.S. Department of Education Clusters. This version does not imply endorsement by ACT or the U.S. Department of Education.

Law	Year	Description of Qualifiers	How Counted	Process
HB 3218	2016 (Original SB 497 in 2006)	Business and industry recognized endorsements **attained** by students: 1) Business and industry recognized endorsements are listed on the approved list here*. 2) Approved business and industry recognized endorsements follow A-F guidelines. Use the ones that appear in the A-F column with "Yes."	Business and industry recognized endorsements **attained** by students shall be **transcripted** on the student's high school transcript.	Technology centers send the name of the business and industry recognized endorsement and the name of students **earning** that endorsement to the high school counselor/registrar. At the high school, CTE teachers inform counselor/registrar the name of the business and industry recognized endorsement and the name of students **earning** that endorsement. Counselor/registrar adds name of endorsement to students' transcript in "notes" or "testing" section.
HB 3218	2016	**Postsecondary Opportunities:** *Students enrolling and successfully completing technology center industry certification programs* earn points that count towards the A-F report card of the local high school. 1) Industry certification programs must lead to specific certifications on the approved list here*. 2) Use certifications that appear in the A-F column with "YES."	Students may earn any number of points addressed in "Postsecondary Opportunities." Only 1 point per student can count on the A-F report card of the high school, however. Schools should submit all students qualifying for points. SDE will determine duplicative points.	**Technology centers** will report enrollment, participation and grades to ODCTE for all students in qualifying industry certification programs. ODCTE compiles this data and reports it to SDE. **High schools** will use approved CTE OCAS subject codes for reporting in the WAVE to ensure credit in the report. SDE guidelines can be found at http://sde.ok.gov/sde/accountability-assessments (includes approved CTE courses). Select **"Postsecondary Opportunities Guide."**

*career*tech

Law	Year	Description of Qualifiers	How Counted	Process
SB 1370	2018	**CORE students only:** Successful completion of 1 year of a full time, 3-hour CareerTech program leading to an industry-valued credential/certificate *(industry-endorsed or industry-aligned)* or college credit. 1) Industry certification programs must lead to specific certifications on the approved list here*. 2) Use certifications that appear in the Endorsed or Aligned column with "Yes."	Can fulfill high school graduation requirements **for CORE students only** by counting as 1 of the 2 math credits that are at or above the level of Algebra I.	Technology center sends student grades to the high school. It is a local decision as to how the high school records it on the transcript. Following local board of education approval, counselor/registrar adds to students' transcripts. Technology Centers should use current CTE Subject Codes for reporting program completion to the high schools. The OSDE will provide guidance to school districts for transcripting, including suggestions for tracking the completion of math requirements. A statewide "Core Curriculum Enrollment" form for the core curriculum will be available on the OSDE Accreditation Division's website.

*Approved Assessment List – Updated: https://www.okcareertech.org/educators/assessments-and-testing/testing/testing.

Other academic resources including **Oklahoma CTE Guidelines for Academics** at
https://oklahoma.gov/careertech/educators/counseling-and-career-development.html.

If you have questions or need more information, please contact Shawna Nord, Counseling and Career Development manager, 405.743.5524, shawna.nord@careertech.ok.gov, or Julie Childers, Academic Coordinator, 405.743.5110, julie.childers@careertech.ok.gov.

*career*tech
OKLAHOMA DEPARTMENT OF CAREER AND TECHNOLOGY EDUCATION

17913

Career Tech Program Meeting Math Requirement

SB 1370 (Regarding Math)

For students under the age of 18, school districts **must** require a parent or legal guardian of the student to **meet with a designee of the school prior to enrollment** in the **CORE** curriculum. All parties must sign off.

Allows for the acceptance and completion of one (1) year of a full-time, three-hour career and technology program *leading* to an industry credential / certificate (endorsed or aligned) to ***satisfy*** a **third math to meet graduation requirements for students on the CORE curriculum.**

Career Tech programs cannot satisfy both CORE Math and a computer credit in the same year.

The CORE curriculum counts for high school graduation only. It does not meet college entrance requirements or OK Promise requirements.

Using Career TEch to satisfy a 3rd math credit in high school **should be the exception rather than the rule.** Students should not be discouraged from taking Algebra II. (We do not want to make it more difficult for our students should they choose to continue to higher education, as 52% of our students do).

How to show on transcript, from SDE:

(Found in SDE Graduation Requirements for Math PDF on page 4)

Q: A student on the Core Diploma Pathway has opted to take one year of a full-time, three-hour career and technology program in place of a third mathematics credit. What subject code belongs on this student's transcript?

A: If a student is on the Core Diploma pathway and is taking a three-hour career and technology course in place of a third math credit, the subject code for the course they are taking is recorded on the transcript. Then, a comment may be added to the transcript stating that the third math requirement for graduation has been *satisfied* by [course or program name/code].

Example: mark the CT course with an * , then denote what the * means on the transcript;

9707 Welding MN *

*Student satisfied 3rd math credit with an approved 3 hour CareerTech program.

- **S.B. 1370 is NOT the same as a student taking a pull-out math course at Career Tech.**
- Student's taking a math course at a Career Tech need to be transcripted the exact same way as they would be if the student was taking it at their local High School.

From Julie Childers, Academic Coordinator, ODCTE
https://oklahoma.gov/careertech/educators/counseling-and-career-development/resources/academics.html

Adult Enrollment Steps

(updated May 2023)

The LPN and Surg Tech program has different admission and testing requirements. There are no testing waivers for these programs. Ask a counselor about the application process, see the Practical Nursing and Surgical Technology page on our website www.cvtech.edu, or call 405-222-7553 with questions.

Do you qualify for a testing Waiver(s)? Test scores are valid for **5 years** from the test date.

- ACT: Composite of 19 or higher
- SAT: Composite of 980 new SAT / 1330 old SAT or higher
- Prior Assessment
  - Accuplacer Next Gen scores: 235 in Reading; 238 in Arithmetic
  - Accuplacer Classic: 53 in Reading; 41 in Arithmetic
  - WorkKeys: 3 in all areas
- Pass at least 12 hours of level 1 college courses or Associate Degree (within the last 5 years). Students must be in good standing with the previous school(s).
- Bachelor/Master's Degree (can be older than 5 years, no time restriction)

If qualifying for the waiver, all qualifying documents must be submitted to the appropriate program counselor.

- You will be enrolled or placed on a waitlist.

If you do not meet any of the criteria above, schedule the Accuplacer Assessment

- Call (405) 222-7521 to schedule assessment
  - 1st test is free; retest or no show will cost a small fee.
  - Cut scores: Reading 235 (250 LPN; 250 Surg Tech)
    Arithmetic 238 (250 LPN; 238 Surg Tech)

If taking Accuplacer: Upon completion of the assessment, you'll meet with the appropriate program counselor.

- You will be offered remediation, enrolled, or placed on a waitlist.

If accommodations are needed: Prior to scheduling your assessment: Call (405) 222-7557

Complete FAFSA application online, if applicable: https://studentaid.gov

School Code: 009965

Determine if you qualify for the Next Step Scholarship

- Are you 23 years of age or younger?
- Do you have a high school diploma or GED?
- Do you live in one of our partner school districts?