

2025-26 COURSE DESCRIPTIONS

NWTECH.K12.WA.US



Northwest
Career & Technical
Academy

Learn. Do. Lead

**Take the next step
in your education and
career training while
still in high school!**

NCTA Programs

Aerospace Manufacturing
Animation & Graphic Design
Applied Medical Sciences
Automotive Services
Baking & Pastry
Construction
Criminal Justice
Culinary Arts
Cyber Security
Dental Assisting
Early Childhood Education
Fire Science & EMS
Health and Human Services
Maritime
Medical Assisting
Money & Business
Pharmacy Technician
Teaching Academy
Tourism & Hospitality
Transportation & Logistics
Pre Vet Tech (Veterinary Assisting)
Video Game Development
Welding

NCTA is part of the regional skills center network serving high school students from multiple school districts. We provide instruction in preparatory programs that are often too expensive or specialized for school districts to operate.



**Apply at
ncta.smapply.io**

Explore Your Future at The Northwest Career & Technical Academy! NCTA offers high school juniors and seniors the opportunity to gain hands-on, industry-relevant experience in a variety of career fields. Whether you're interested in aerospace manufacturing, medical sciences, video game development, construction, or dozens of other high-demand industries, NCTA provides specialized training that prepares students for college, apprenticeships, and the workforce. Our programs emphasize real-world learning, with expert instructors, state-of-the-art facilities, and industry partnerships that help students develop the technical skills and leadership qualities needed to succeed in their chosen career paths.

With four campuses and three flexible daily sessions (morning, midday, and afternoon), NCTA makes it easier than ever for students to integrate career training into their high school schedule. Our tuition-free programs give students a head start on earning industry certifications, college credits, and valuable workplace experience—all while still in high school. Some programs may have industry-related costs or lab fees, but financial assistance options are available. At NCTA, we believe in empowering students with the knowledge, skills, and confidence to take their next steps toward a successful future. Apply today and start building your career!

	Anacortes			Mount Vernon			Sedro-Woolley			Whatcom (Meridian)		
	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd	1st	2nd	3rd
Aerospace Manufacturing	X	X										
Animation & Graphic Design				X	X							
Applied Medical Sciences				X	X							
Automotive Services									X			
Baking & Pastry						X						
Construction	X	X										
Criminal Justice				X	X							
Culinary Arts				X	X							
Cyber Security						X						
Dental Assisting				X	X							
Early Childhood Education										X	X	
Fire Science & EMS				X	X					X	X	
Health and Human Services						X						
Maritime	X	X										
Medical Assisting						X				X	X	
Money & Business				X	X							
Pharmacy Technician						X						
Teaching Academy				X	X							
Tourism & Hospitality						X				X	X	
Transportation & Logistics						X						
Veterinary Assisting				X	X							
Video Game Development				X	X							
Welding									X	X		

CAMPUS LOCATIONS

Anacortes

1606 R Ave
Anacortes, WA 98221

Mount Vernon

(Main Campus)
2205 West Campus Place
Mount Vernon, WA 98273

Sedro-Woolley

@ SWHS C-Building
1235 3rd Street
Sedro-Woolley, WA 98284

Whatcom (Meridian)

adjacent to MHS
194 West Laurel Road
Bellingham, WA 98226

SESSION TIMES

1st - 8:00am to 10:30am

2nd - 11:30am to 2:00pm

3rd - 3:00pm to 5:30pm

Apply at
ncta.smapply.io





The Northwest Career & Technical Academy (NCTA) is an extension of your high school where innovative educational opportunities are available. The programs offered will provide you with the skills, knowledge, and professional leadership training necessary for the workplace or continuing education through an apprenticeship, community college, or university. NCTA is tuition-free for high school students; however, some programs may have industry-related costs or lab fees. Please see the NCTA website at nwtech.k12.wa.us for full course descriptions, course requirements, high school credit equivalencies, college credits, and industry certifications. Apply online at ncta.smapply.io (campus location noted in parentheses).



The **Aerospace Manufacturing** Program prepares students to work with cutting-edge materials and build components for the industry/ In this hands-on course, you'll learn how to fabricate, assemble, and repair components using industry-standard techniques and materials—just like the professionals at top companies. Students will gain in-demand skills like blueprint reading, precision measurement, material science, and aluminum riveting, all while working in a state-of-the-art lab with professional tools. Plus, you'll earn the prestigious Core Plus certification, a direct ticket to high-paying jobs in aerospace and advanced manufacturing. (Anacortes 1st and 2nd Session)



Animation & Graphic Design takes students from concept & design through to creation of animations in 2D, 3D, and stop-motion environments. Using a combination of traditional art, photography, digital 2D paint programs and 3D animation software, students will have an opportunity to work in different mediums to storyboard, stage and implement their creative ideas! This course prepares students with the teamwork skills necessary to create animation and visual effects for television, movies, video games, and other media. A strong background in art and drawing is not required. (Mount Vernon, 1st and 2nd Session) *(Advanced 2nd year available to qualified students)*



Applied Medical Sciences prepares students to the pre-nursing pathway in addition to the medical field, with an emphasis on knowledge and skills applicable to many medical occupations. Students explore medical careers in areas of interest as well as in targeted, high demand fields for future jobs. Students who complete all course work with excellent attendance and participate in a 50-hour clinical internship may qualify to become a WA State Nursing Assistant Certified (NAC). Additionally, students can test for the HIPAA certification. (Mount Vernon, 1st and 2nd Session)



Automotive Services provides skills and knowledge required for jobs in the automotive trade at the apprenticeship level, with the opportunity for student automotive certifications or additional training in a career-technical institute. The course consists of shop safety, shop organization and operation, theory and repair of engines, electrical systems, brakes, fuel systems, cooling systems, power trains, suspension and steering alignment. Students will make repairs on the automobile in these areas at the trade accepted standard. (Sedro-Woolley, 3rd Session) *(Advanced 2nd year available to qualified students)*





Baking and Pastry introduces students to the essentials of the pastry arts. The course is intended to give the student a detailed understanding of the components of various bread, cookie and pastry preparation techniques including quick breads, yeast breads, enriched and laminated doughs, cookie mixing methods, pies, tarts, syrups, icings, sauces, custards, creams, and cakes. It emphasizes professionalism, ingredient and equipment use, basic baking science, and includes practical lab work with fruit desserts, cookies, meringues, pâte à choux, and custards. This course includes the ServSafe examination. (Mount Vernon, 3rd Session)



Construction develops the entry-level skills needed in residential electrical wiring, plumbing, and carpentry. Students will learn about work-site safety, construction-based applied math and terminology, safe use of hand and power tools, blueprint reading, communication skills, employability skills, material handling, framing skills, and the basics of residential electrical and plumbing. The program assists students in exploring a variety of construction-related careers, developing appropriate work readiness skills, and preparing them to enter construction-related apprenticeships, post-secondary education programs, or entry-level jobs. (Anacortes, 1st and 2nd Session) (Advanced 2nd year available to qualified students)

Criminal Justice provides a comprehensive and hands-on curriculum that challenges and prepares those students who are interested in pursuing possible careers within the Criminal Justice field. This year-long course prepares students through community partnerships, academic study, hands on experiences, and the development of 21st Century Skills. CPR training, hazardous materials awareness, and the National Incident Management System are also included. The program has an emphasis on law enforcement, corrections, and the judicial system. Students will participate in and lead activities both inside and outside the classroom throughout the school year. Students should be prepared to be involved in physical activity. (Mount Vernon, 1st and 2nd Session) (Advanced 2nd year available to qualified students)



Culinary Arts combines current hospitality industry curriculum with on the job training in a commercial setting open to the public. Students provide customer service, deal with production deadlines, and serve in actual jobs, including cook, baker, server, maintenance, and barista. Content includes food and workplace safety, kitchen and dining room procedures, customer service, food production and baking techniques, event planning and service, technical report writing, applied mathematics, nutrition, marketing, and introduction to management and leadership. (Mount Vernon, 1st and 2nd Session) (Advanced 2nd year available to qualified students)



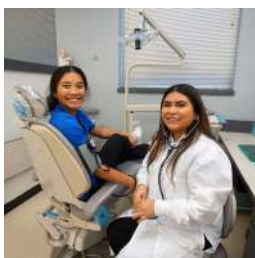
Cyber Security prepares students to defend against criminal and terrorist threats in the digital world. Designed for those interested in the Cyber Security/Information Assurance industry, this program provides the foundational skills needed to launch a career in IT security. Students will learn hardware, networking, and software, including Linux and CISCO, through a web-based curriculum that allows for self-paced learning, supplemented by classroom instruction and hands-on labs. The program also prepares students for industry-recognized certifications, giving them a competitive edge in the workforce. (Mount Vernon, 3rd Session)



Dental Assisting prepares students to become Registered Dental Assistants through the state of Washington. Each student will experience hands-on learning, offering valuable preparation for entry-level chairside skills. The program will give students an understanding of different careers that are available in the expanding field of the dental profession. Students will develop skills in chairside assisting, equipment and instrument identification and maintenance, sterilization, pouring laboratory models, taking dental x-rays, and OSHA practices. Students will be prepared to take the National Entry Level Dental Assisting exam. (Mount Vernon, 1st and 2nd Session)



Core Plus provides students across Washington State hands-on learning and transferable skills that lead to various career pathways in aerospace, construction, manufacturing and maritime



Early Childhood Education explores the foundations of early learning with a focus on the youngest of learners starting in preschool. Students will examine theories defining the field, issues, trends, best practices, and program models. Classroom learning will focus on understanding the learner, child development, planning instruction, best practices in teaching and assessment strategies along with how to personalize learning, play to learn, social and emotional development, and behavior support. Students will understand how culture, equity, and opportunity are key to building a healthy learning community. (Meridian, 1st and 2nd Session)

Fire Science & EMS instills the proud tradition of serving communities with selfless dedication. The honor of becoming a firefighter is one sought after by many but bestowed upon only a few. The NCTA Fire Science and EMS program offers professional instruction, amazing facilities, and endless opportunities to not only learn the skills necessary to become a firefighter/EMT, but also the skills to be an integral part of a community emergency response team in your own neighborhood. Students earn their ICS 100 and 200 certificates from FEMA. Additionally, this course lays the groundwork so students can pursue their Firefighter I, Firefighter II, HazMat Operations, and EMT certificates upon turning 18 years of age. (Mount Vernon, 1st and 2nd Session & Meridian, 1st and 2nd Session) *(Advanced 2nd year available to qualified students)*



Health and Human Services prepares students for impactful careers in healthcare, mental health, and social services. This course combines foundational knowledge of human services with specialized training in peer support, including trauma-informed practices, ethics, goal-setting, and self-advocacy. Students will learn how to form meaningful partnerships, promote resilience, and make a positive difference in their communities. Whether you're passionate about helping others or exploring career pathways, this course provides the skills to lead with compassion and confidence. (Mount Vernon, 3rd Session)



Maritime is an immersive curriculum designed to equip students with the practical skills required for success in the marine industry. Nestled in close proximity to the water, our program offers hands-on training in a variety of essential areas. Participants will understand safe boat handling techniques, navigation principles, vessel maintenance and preservation, as well as manufacturing materials. Additionally, they will gain proficiency in Gelcoat and fiberglass repair, basic marine electrical and electronics, and the fundamentals of marine propulsion and engines. The curriculum also covers boat trailer usage and repair, marina operations, and customer service skills. (Anacortes, 1st and 2nd Session) *(Advanced 2nd year available to qualified students)*





The **Medical Assisting** program serves as an introductory pathway to launching a career in the non-therapeutic realm of healthcare. Through this program, students acquire fluency in the terminology used by doctors, nurses, and other healthcare professionals. The curriculum encompasses medical terminology, administrative tasks and fundamental clinical skills. Throughout the program, students develop proficiency in a range of practical skills, including taking vital signs such as blood pressure, temperature, pulse, and respiration, as well as conducting height and weight measurements. Additionally, they learn to perform vision screenings, surgical scrubs, CPR, First-Aid, and utilize various medical instruments. Office skills relevant to medical settings are also emphasized. (Meridian, 1st and 2nd Session & Mount Vernon, 3rd Session)



Money & Business offers driven students the chance to embrace the Entrepreneurial Mindset. Through hands-on activities, projects, and competitions, students gain real-world experiences, fostering networking, leadership, and vision. Embracing the evolving business landscape, students tackle challenges with innovative solutions, honing 21st-century skills. Internships and class-led enterprises guide students in business management and crafting career-launching business plans. Additionally, students learn essential personal finance strategies like "paying yourself first" for financial empowerment. (Mount Vernon, 1st and 2nd Session) *(Advanced 2nd year available to qualified students)*

The **Pharmacy Technician** program equips students with skills and employment training to work in the industry using application-based learning and field practicums. Students will learn basic principles of pharmacology, how medication affects the human body and how our bodies process medication. The course is organized by body systems, pathologies and the associated medications. A strength in math and reading skills will be needed to complete daily pharmacy calculations and read materials, including medically technical texts. (Mount Vernon, 3rd Session)



The **Teaching Academy** program covers both theoretical foundations and practical skills necessary for teaching effectively in a K-8 school setting. Students will learn key areas such as pedagogy, classroom management, curriculum design, and educational psychology with hands-on experience through classroom observation, teaching simulations, and mentorship from seasoned educators. This program prepares students with skills and knowledge to become Washington State Certified Paraeducator. (Mount Vernon, 1st and 2nd Session)

Tourism & Hospitality is a program that prepares students for exciting careers in the dynamic travel and hospitality industry. Students will develop essential skills in marketing, customer relations, and event planning, while gaining a strong foundation in travel geography. Through a combination of classroom learning and real-world experience, students will apply their knowledge in industry internships at hotels, travel agencies, event planning businesses, and other hospitality venues. Hands-on training in hotel front desks, guest services, reservations, banquets, and management provides students with the expertise needed to succeed in this fast-paced industry. (Mount Vernon, 3rd Session)





Transportation and Logistics explores the critical systems that keep goods and people moving across land and water. Students will dive into the strategies and technologies used in shipping, freight, and passenger transportation, learning how logistics impact industries and daily life. Hands-on activities and real-world problem-solving will help students develop skills for careers in one of the world's most vital sectors. There is an optional summer component after the course for students to complete their Commercial Drivers License (CDL). (Mount Vernon, 3rd Session)

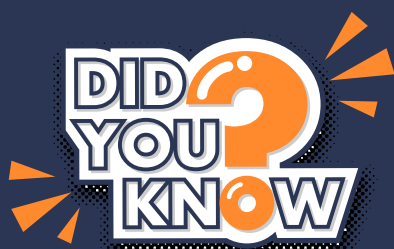


Pre-Vet Tech/ Veterinary Assisting is designed for students interested in professions caring for animals through this medically-based program. Through hands-on learning and challenging academic coursework, students will develop the skills and knowledge necessary to obtain entry-level positions in a variety of animal care facilities, including veterinary hospitals, grooming shops, animal shelters, and boarding facilities. (Mount Vernon, 1st and 2nd Session)

Video Game Development explores the many facets of the video game development life-cycle, from asset creation to game design to coding. Students will learn to code in an industry-standard programming language, create their own 2D and 3D graphics, explore game design as part of a project team, and combine these elements to create games using a professional game engine. With dual-credit options available, this could be the first step on the path to a career in computer science. Innovative students can return for a second year of self-driven studies, earning more credits by applying their skills in advanced software development areas. Students must have successfully completed the first year of study and shown evidence of being an independent worker. (Mount Vernon, 1st and 2nd Session) *(Advanced 2nd year available to qualified students)*



Welding is an industry-based shop environment designed for the student who would like to develop a deeper understanding of metalworking as a foundation for continuing education or joining the job market. Students are trained in the basic skills of welding, cutting, shielded metal arc welding, gas metal and flux-cored arc welding, gas tungsten arc welding, and many other areas. Furthermore, this training includes blueprint reading, math, layout and fit-up, and fabrication through a wide variety of projects. (Meridian, 1st Session & Sedro-Woolley, 3rd Session) *(Advanced 2nd year available to qualified students)*

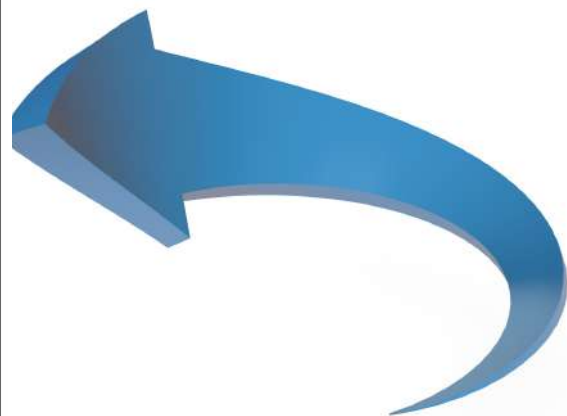


Eight years after their expected graduation date, students who focused on career and technical education (CTE) courses while in high school had higher median annual earnings than students who did not focus on CTE.

-U.S. Department of Education



		UNEMPLOYABLE	EMPLOYABLE	HIGHLY SOUGHT OUT CANDIDATE
COMMUNICATIVE	BE PROACTIVE Keep in touch Ask for help Watch your words	☐ Does not communicate about absenteeism, even after reminders ☐ Avoids problem-solving; stays stuck ☐ Uses unprofessional language, despite reminders	☐ Communicates about absenteeism, as directed or responsive ☐ Focuses on problem-solving with occasional guidance on methods ☐ Uses professional language, as directed	☐ Always communicates absenteeism in advance ☐ Clarifies problems and finds solutions, seeking assistance when required ☐ Uses professional language at all times
MOTIVATED	BE VALUED Do your best Volunteer Meet deadlines	☐ Rarely puts forth best effort for assignments and tasks ☐ Does not attend extra-curricular events, despite availability ☐ Does not manage time well, frequently missing deadlines	☐ Puts forth good effort for almost every assignment and task ☐ Attends some extra-curricular events as part of leadership in learning ☐ Generally, manages time well, but sometimes requires additional time	☐ Puts forth best effort, above and beyond, for assignments and tasks ☐ Attends all extra-curricular events as part of leadership in learning ☐ Manages time consistently well, so tasks get done on time
RELIABLE	BE PRESENT Always attend Be punctual Be consistent	☐ Exceeds professional leave ☐ Tardy repeatedly or to a great degree ☐ Does not engage in all classwork, despite reminders	☐ Does not exceed professional leave ☐ Tardy once or twice or to a small degree ☐ Engages with all classwork, with occasional prompting	☐ Present daily ☐ On time daily without ☐ Engages in all activities, assignments and labs as a self-starter ☐ Initiates and engages with industry-related professionals
RESPONSIBLE	BE CARING Keep it tidy Stay focused Dress to impress	☐ Repeatedly prompted to keep classroom and lab neat, clean and orderly ☐ Repeatedly reminded to stay on task ☐ Not dressed professionally, despite reminders	☐ Keeps classroom and lab neat, clean and orderly, as per instructions ☐ Stays on task with occasional reminders ☐ Dresses professionally with occasional reminders, including hygiene	☐ Keeps classroom and lab neat, clean and orderly, as per policy ☐ Stays on task without prompting ☐ Dresses professionally, according to the class and PPE standards, including hygiene
TEAM MEMBER	BE INCLUSIVE Work with all members Be friendly Know when to lead Know when to follow	☐ Requires persuasion to contribute to team work exercises ☐ Often presents a negative attitude with classmates, instructors and/or visitors ☐ Non-compliance of procedures and protocols, even after reminders	☐ Contributes in a positive way during team work exercises ☐ Usually displays a positive attitude with classmates, instructors and visitors ☐ Follows procedures and protocols, as directed	☐ Takes a leadership role during team work exercises, acknowledging limits and takes actions appropriate to gain knowledge or skill ☐ Always displays a positive attitude with classmates, instructors and visitors ☐ Follows procedures and protocols as per class or NCTA policy
TRUSTWORTHY	BE ETHICAL Take care Be intentional Strive for honesty Demonstrate integrity	☐ Disrespects supplies, equipment and property, despite reminders ☐ Redirected multiple times for misuse of technology ☐ Lacks integrity, through purposeful plagiarism or lack of best practice	☐ Properly uses supplies, equipment and property, as directed ☐ Uses technology in an appropriate manner, as directed ☐ Has integrity with occasional guidance on best practice	☐ Cares for equipment and property, according to the class standards ☐ Uses technology in an appropriate manner, as per policy ☐ Embraces integrity always



In addition to the academic content and industry-based skills, we emphasize the importance of professional expectations that prepare students for success in the workplace. At NCTA, we guide students in developing key employability traits, including proactive communication, motivation, reliability, responsibility, teamwork, and integrity. These expectations help students transition from being simply employable to becoming highly sought-after candidates in their chosen fields. Developed with industry input, the Professional Expectations Rubric reflects the standards and qualities employers seek in their workforce. Through frequent monitoring and feedback, we use this rubric as a tool to assess and support students in meeting these expectations. By fostering professionalism in attendance, communication, work ethic, and ethical behavior, we aim to equip students with the skills and mindset necessary to thrive in both their careers and their communities.

Apply Online at
ncta.smapply.io

Email: info@nwtech.k12.wa.us

Website: nwtech.k12.wa.us

Tel: 360-848-0706

facebook.com/nwcta

Instagram ncta.skill.center



NONDISCRIMINATION

The Mount Vernon School District does not discriminate in employment, programs, or activities on the basis of age, race, color, national origin, creed, religion, sex, sexual orientation, gender expression, gender identity, honorably discharged veteran or military status, or the presence of any sensory, mental or physical disability or use of a trained guide dog or service animal by a person with a disability and provides equal access to the Boy Scouts and other designated youth groups. Inquiries regarding compliance and/or grievance procedures may be directed to the District's Title IX/Civil Rights Compliance Coordinator/HIB Coordinator, Jon Ronngren, Director, 124 E. Lawrence Street, Mount Vernon, WA 98273 (360)428-6110; Section 504/ADA Coordinator, Clint Carlton, Executive Director/Student Support Services, 920 S. Second Street, Mount Vernon, WA 98273, (360)428-6141.