

2021-2022 Course Offerings

The Northwest Career & Technical Academy is an extension of your high school where innovative educational opportunities are available. 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. The NCTA is tuition free for high school students; however some programs may have industry related costs/lab fees. Please see the NCTA Catalog for full course descriptions, course requirements, high school credit equivalencies, college credits and industry certifications. Apply online at ncta.smaply.io! (Campus location noted in parentheses.)



Aerospace Manufacturing prepares students for immediate employment in the aerospace and manufacturing industries by focusing on job ready skills based on industry standards. Students will fabricate, assemble, and repair structures using basic and advanced composite techniques and materials. Students will earn the prestigious Core Plus certification which includes skills in blueprint reading, material science, precision measurement, and aluminum riveting in our lab centric facility using various hand and stationary power tools. As with all NCTA programs, soft skill training is a major focal point in developing highly employable individuals. (Anacortes)

Applied Medical Sciences introduces students 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 completing all course work and participating in a 50-hour clinical internship, may be eligible to become WA State Nursing Assistant Certified (NAC). Additionally, students may be able to test for the HIPAA certification. (Mount Vernon)

NEW! Animation and Graphic Design takes students from concept, design through the creation of animations for both web-based programs and application in video games. Through a combination of traditional art, digital 2D computer programs, and 3D animation software, students will have an opportunity to work in different mediums and explore endless possibilities! This course prepares students for skills necessary to create animation and visual effects for television, movies, video games, and other media. A strong background in

art and drawing are not required. (Mount Vernon)

Automotive Services provides the skills and knowledge required for job entry 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 will consist of shop safety, shop organization and operation, theory and repair of engines, electrical systems, brakes, fuel systems, cooling systems, power trains, and suspension steering alignment. The students will make repairs on the automobile in these areas at the trade accepted standard. The students can supply their own projects or will be furnished a project to work on. (Sedro-Woolley)

Aviation Technology offers pathways into the aviation industry with a broad foundation in aviation science with hours of hands-on flight simulation and with practical experience electronics, and aerospace design and construction processes. It is intended to be an entry into a multitude of careers in the aviation and aerospace industries, including Airline Pilot, Aerospace Engineer, Unmanned Aerial Vehicle Operator, Air Traffic Controller, Aviation Maintenance Technician, and Aircraft Assembler. Students will have the opportunity to earn certifications in a private pilot ground school certificate, FAA knowledge test endorsement and Electronics I and II certification. (Meridian)

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, 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 helps students explore a variety of construction-related career opportunities, develops appropriate work readiness skills and prepares them to enter construction-related apprenticeships, post-secondary education programs or entry-level jobs. (Anacortes)

The **Criminal Justice** course 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 development of 21st Century Skills. CPR training, hazardous materials awareness, and the National Incident Management System are also included within this program. The program has an emphasis on law enforcement, corrections, and the judicial system. (Mount Vernon)

The **Culinary Arts** and Restaurant Management program 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 job functions. Students receive instruction in professional expectations, 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)

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 chair-side assisting, equipment and instrument identification and maintenance, sterilization and OSHA Practices. Students will be prepared to take the National Entry Level Dental Assisting exam. (Mount Vernon)

NEW! Drone & ROV Automation provides students with the application of mathematical and scientific principles, development, deployment, operation and maintenance of autonomous vehicles - air, land and water. Students will explore the ethics, safety and regulations of autonomous vehicles, the unique navigation strategies, assembly, design and structure and how to plan, prepare and execute a mission. Students will engage in authentic problem-solving including data collection, documentation, analysis and presentation to a real-world audience. (Anacortes)

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. Training to become a firefighter is exciting and meaningful. 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 & Meridian)

Marine Services is a hands-on curriculum focused on the skills necessary for employment in the Marine industry and is located right near the water! Students will learn safe boat handling & navigation skills, maintenance & preservation of vessels, manufacturing materials, Gelcoat & fiberglass repair; basic marine electrical & electronics, Introduction to marine propulsion & engines; boat trailer usage & repair; marina operations; customer service skills. While in the program, students are able to earn the Washington State Safe Boating Program Certification; First Aid/CPR/AED certification. This course uses strong, industry-based curriculum from American Boat & Yacht Council (ABYC) Marine Services Technology and the Washington State CorePlus Maritime program. (Anacortes)

Money & Business provides students with the opportunity to learn about entrepreneurship, sales, marketing and money management, in an interactive real-world environment. Students will learn how to start a business by creating a business plan and focusing on the elements that go into a successful business, such as, sales & marketing, product development, pricing strategies, personal & business accounting, business communication, and leadership. Guest speakers from different industries join our class multiple times per month to give real-world insight into how business plays an integral role in every industry and job. Students will have the opportunity to compete in a CTE club as well as a hands-on-experience during an internship at a local business. (Mount Vernon)

Veterinary Assisting is designed for students interested in professions working with and caring for animals. 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)

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 & 3D graphics, explore game design as part of a project team and combine these elements to create games using a professional game engine. With crossover 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)

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 a job-ready 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. Additionally, this program trains students in blueprint reading, math, layout and fit-up, and fabrication of a wide variety of projects. (Meridian Campus & Sedro-Woolley)

Apply Online at ncta.smapply.io

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