

Creteau Technology Center

Spaulding High School

140 Wakefield Street

Rochester, New Hampshire 03867

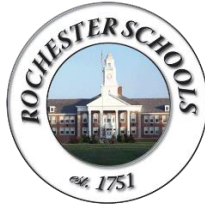
(603) 332-0757



Program Descriptions

2018-2019

Contact Information



Our mission . . . "To guide individuals in developing confidence, goals and marketable skills for life and career success."

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Nondiscrimination Policy

Spaulding High School, the Richard W. Creteau Regional Technology Center and the Rochester School Department do not discriminate in its education programs, activities or employment practices on the basis of **race, color, national origin, age, sex, disability, religion, marital status, or sexual orientation** under the provision of Title VI of the Civil Rights Act of 1964, the Age Discrimination Act of 1967, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the Education of all Handicapped Children Act of 1975, or State Ed. Laws 303.01 and RSA 354-A. Furthermore, lack of English language skills will not be a barrier to admission and participation in any of the educational programs and activities held at or by Spaulding High School and the Creteau Technology Center.

Any person having inquiries concerning this system's compliance with the regulations implementing these laws may contact the following:

Christiane Allison, Special Education Director
Superintendent's Office
150 Wakefield Street
Rochester, New Hampshire 03867
(603) 332-3678

Any person wishing to file a grievance in regards to one of the above laws may follow the district's grievance procedure through either the district's website www.rochesterschools.com (school board policy) the telephone hotline (603-335-7373), by completing a grievance form located in the school offices, or by verbally reporting to principal, counselor, school nurse, teacher, or the above listed coordinators. Any person may also contact the Assistant Secretary for Civil Rights, United States Department of Education or the Director, United States Department of Education, Office of Civil Rights, Region I, Boston Massachusetts.

SIGN UP NOW! Use the following instructions to sign up for a CTE Course and speak to your School Counselor.

<https://tricity.enrolltrack.com>

Steps:

1. Create an account
2. Enter Student Information
3. Enter Contact Information
4. Apply to Spaulding High School (R.W. Creteau)
5. Enter the Program you are interested in.

Program Offerings: R.W. Creteau Technology Center

The following table identifies which CTE programs are offered at each Career Technical Center:

Rochester CTE Programs	College Credit
Accounting	6
Architectural/Mechanical Engineering	3
Automotive Service Technology	3
Banking and Financial Services	3
Business Commerce	9
Computer Networking & Telecommunications	3
Criminal Justice & Homeland Security	6
Environmental Science & Sustainable Studies	-
Foundations of Education	6
Graphic Design	3
Health Science Technology	3
Heating, Ventilation, Air Conditioning, and Refrigeration HVACR	6
Precision Machining	7
Restaurant Management	9
Video & Photographic Arts	3

Accounting Program

Program Course Sequence

Year 1 – Accounting I and Accounting II (Two semester-long courses)

Program Description: Why Choose Accounting? You may already have an idea about what you want to do for a career. Then again, maybe you're not so sure. Either way, there's one degree that gives you the education to succeed at just about anything in the business world. It's an accounting degree. Accounting opens doors in every kind of business coast to coast. It can give you the foundation you need to go on and become a CPA. It can prepare you to become a partner in an accounting firm, to pursue a career in finance or corporate management, to work in government, or even to become an entrepreneur. In fact, no matter what you decide to do, having an accounting background can open doors wide. You can work as an accounting technician/bookkeeper while in college or after graduating from high school and according to the US Department of Labor you will earn an average of \$18.13/hour. The two courses offered in the CTE Accounting Program are both offered for Running Start credits and if you successfully complete the courses, they will directly transfer to the Peter T. Paul College at UNH as ADMN 502: Introduction to Financial Accounting.

ACCOUNTING I – Running Start HNR (π) - 070013

GRADES 11 and 12

1 CREDIT (fall semester course, CTE Program)

This course is an introduction to accountings as the language of business and the purpose of accounting in business. Students will develop an understanding of the concepts and use of the classification of assets, liabilities, equity, revenue and expense accounts. The student will be introduced to accounting procedures necessary to prepare financial statements utilizing current concepts and accounting principles. This includes journalizing transactions, preparation of trial balance, accounting adjustments, closing journal entries, inventory, accounts receivable, accounts payable, special journals, payroll, cash receipts, disbursements, and banking procedures. **Note: Students taking this course will have the option of earning three college credits. There would be a fee associated with this option.**

PREREQUISITE: Acceptance into the Accounting program

ACCOUNTING II – Running Start HNR (π) - 070023

GRADES 11 and 12

1 CREDIT (spring semester course, CTE Program)

This course consists of a more in-depth study of accounting procedures and concepts. An emphasis is placed on accounts from the balance sheet such as accounts and notes receivable; plant, property and equipment; and current and long-term liabilities. This course will also involve comparing and contrasting sole proprietorships, partnerships and corporations, as well as capital stock and stock transactions. The student will learn to use financial ratios to measure financial strength, profitability and liquidity. **Note: Students taking this course will have the option of earning three college credits. There would be a fee associated with this option.** The successful completion Accounting 1, HNR AND Accounting 2, HNR will transfer to the Peter T. Paul College at UNH and replace ADMN 502: Introduction to Financial Accounting, a requirement of various business majors.

PREREQUISITE: Successful completion of Accounting I

Architectural/Mechanical Engineering

Program Course Sequence

Year 1 - Architectural/Mechanical Engineering I (Full year, one block course)

Year 2 - Architectural/Mechanical Engineering II (Full year, one block course)

ARCHITECTURAL/MECHANICAL ENGINEERING I ENR (AutoCAD Drafting) – 0800012 (π)

GRADE 11 (Grade 12 on space available basis)

2 CREDITS (Full-year course, CTE Program)

During the first year students learn basic drafting techniques as they apply to industry. Hands on approach to computer aided drafting (CAD) are emphasized. Students will be able to utilize technology such as the 3-D Printer, Laser engraver, and CNC machinery to take ideas into real life objects. Students will explore all aspects of engineering including Mechanical, Architectural, Environmental, and others to understand how engineers can solve real world problems and better our society. Topics include: Safety, computer programming, STEM, drafting, physics, manufacturing skills. **Note: This course will fulfill the fine arts requirement for graduation. Note: This program has articulation agreements with Southern Maine Community College**

PREREQUISITE: Acceptance into the Architectural/Mechanical Engineering program.

ARCHITECTURAL/MECHANICAL ENGINEERING II HNR (AutoCAD Drafting) – 0800023 (π)

GRADE 12

2 CREDITS (Full-year course, CTE Program)

During the second year students expand upon their experience in CAD and specialize in a field of engineering (Mechanical, Architectural, Environmental, Aerospace, etc.) This course is designed to be very individualized to meet the student's interests within engineering. Students will continue to utilize technology such as the 3-D Printer, Laser engraver, and CNC machinery to take ideas into real life objects. Students will develop a website portfolio to showcase all of their engineering success and market themselves to compete in today's exciting, rewarding engineering field. Topics include: Safety, computer programming, STEM, drafting, physics, manufacturing skills. **Note: This course will fulfill the fine arts requirement for graduation. Note: This program has articulation agreements with Southern Maine Community College**
PREREQUISITE: Successful completion of Architectural/Mechanical Engineering I

Automotive Service Technology

Program Course Sequence

Year 1 – Automotive Service Technology I (One full-year course)

Year 2 – Automotive Service Technology II (One full-year course)

AUTOMOTIVE SERVICE TECHNOLOGY I – ENR – 080132 (π)

GRADE 11(Grade 12 on space available basis)

2 CREDITS (Full-year course, CTE Program)

The purpose of this course is to train future technicians in the fundamentals of automotive theory, maintenance, diagnosis and repair. During this course students will learn about tools, fasteners, engine design and theory, steering and suspension, brakes, electrical/electronics and engine performance. Students will have the opportunity to reinforce theory with hands-on experiences and by participating in live repairs. Students are permitted to work on personal vehicles on a limited basis and are eligible to join SkillsUSA and compete in several competitions. **NOTE: Clothes that can get dirty, long pants, and boots are required to be worn when in the lab setting.**

PREREQUISITE: Acceptance into the Automotive Service Technology program

AUTOMOTIVE SERVICE TECHNOLOGY II – Running Start HNR – 080153 (π)

GRADES 12

2 CREDITS (Full-year course, CTE Program)

The purpose of this course is to train future technicians in the fundamentals of automotive theory, maintenance, diagnosis and repair. During this course students will learn more in-depth topics relating to the ASE areas of brakes, steering and suspension, electrical and electronics, and engine performance. Students will have the opportunity to reinforce theory with hands-on experiences and by participating in live repairs. Students are permitted to work on personal vehicles on a limited basis and are eligible to join SkillsUSA and compete in several competitions. **NOTE: Clothes that can get dirty, long pants, and boots are required to be worn when in the lab setting. Note: Students taking this course will have the option of earning three college credits. There would be a fee associated with this option.**

PREREQUISITE: Successful completion of Automotive Technology I, maintain a clean driving record

Banking and Financial Services Program

Program Course Sequence

Year 1 – Banking and Financial Services year-long

BANKING AND FINANCIAL SERVICES I – ENR – 070672 (π)

GRADE 11 OR 12

2 CREDITS (Full-year course, CTE program)

The HRCU branch is opened to the school as well as the public providing an excellent opportunity for "hands-on" learning and exposure to all aspects of banking. Students will be trained as professional HRCU tellers. As a teller they will learn how to handle different transaction types, maintain and balance cash drawers, be familiar with HRCU's products and services, negotiable instruments, and learn basic customer service skills as well as professionalism. They will also become knowledgeable in the many different departments and aspects of banking such as compliance, accounting, Federal Regulations, investments, insurances, lending, marketing, and the history and structure of credit unions. There will be job shadow days to the Brock Street Branch and other departments. Professional dress and appearance will be required. Opportunities for community service events and financial education outreach may also occur, along with the planning of CU 4 Reality event held at the high school. **NOTE: Students will be held to professional standards and adhere to HRCU's policies and procedures.**

PREREQUISITE: Acceptance into the Banking and Financial Services program. Students are required to submit with the application: two teacher recommendations and their resume. An interview with the instructor is also required. Students must have a minimum GPA of 2.25.

Business Commerce Program

Program Course Sequence

Year 1 – Business Management and Marketing (Two semester-long courses)

Year 2 – International Business and Entrepreneurship: Small Business Management (Two semester-long courses)

BUSINESS MANAGEMENT - Running Start HNR - 070623

GRADE 11 (Grade 12 on space available basis)

1 CREDIT (fall semester course, CTE Program)

Every business needs a manager. It doesn't matter if you are in an office or a construction site, someone is in charge. This course is designed to prepare students for the business world. In this course, students will develop and improve management techniques. They will also enhance their computer skills through practical business applications. They will work cooperatively on activities and team-building activities. Presentation and reviews will be a major part of the class. Students will complete simulations and learn how to succeed in a business environment. The course will provide the students with opportunities to experience real-world scenarios, including working in the Retail Learning Lab. Students will also have the opportunity to join the Future Business Leaders of America, to participate in community service and compete in business events. **Note: Students taking this course will have the option of earning three college credits. There would be a fee associated with this option.**

PREREQUISITE: Acceptance into the Business and Commerce program

MARKETING – Running Start HNR – 070653 (π)

GRADE 11 (Grade 12 on space available basis)

1 CREDIT (spring semester course, CTE Program)

Introduce yourself to the exciting world of marketing! This course includes fun activities such as: Buying/ordering merchandise, selling, promoting and displaying merchandise, and operating our school store, The Raider Shack. This course is valuable for anyone considering a business career and/or business major in college or technical school. Students will learn by doing in this course! The final product will be the development of a business plan for your own business venture. This satisfies the economics requirement for graduation. Students have the opportunity to become involved in the student organization, FBLA, which offers many experiences for community service, leadership, travel and conferences.

Note: Students taking this course will have the option of earning three college credits. There would be a fee associated with this option. Note: This class will fulfill the economics requirement for graduation.

PREREQUISITE: Successful completion of Business Management HNR

ENTREPRENEURSHIP: SMALL BUSINESS MANAGEMENT – Running Start HNR - 070643

GRADE 12

1 CREDIT (spring semester course, CTE Program)

Most of the jobs created in recent years have been in the small business sector. Forecasts indicate that this trend will continue. This course will offer a unique opportunity to develop and promote your own product or business in a Shark Tank-like format. Students will benefit from developing an appreciation for and understanding of small business development in our economy. Students have the opportunity to become involved in the student organization, FBLA, which offers many opportunities for community service, leadership, travel and conferences. **Note: Students taking this course will have the option of earning three college credits. There would be a fee associated with this option.**

PREREQUISITE: Business Management HNR.

INTERNATIONAL BUSINESS HNR - 070673

GRADE 12 (Grade 11 with space availability)

1 CREDIT

Have you ever wondered about International Business and the role that it plays in your life? No matter where you look, social media, television, print, or on the radio, it is there. International Business is everywhere! The increasing globalization of the market place affects all who are involved with business or who must make business decisions. Understanding the impact of the globalization that exists in today's ever-changing business landscape has become an essential part of doing business. Whether you work for a large company, or own your own small business, you will inevitably be impacted by global issues. This course provides an overview of the global environment, the national business environments, international trade and investment, the international financial system and international business management. **Note: Students taking this course MAY have the option of earning three college credits. There would be a fee associated with this option. (Pending approval)**

PREREQUISITE: Business Management HNR

Computer Networking & Telecommunications Program

Program Course Sequence

Year 1 - Computer Technology I (Full-year course)

Year 2 - Computer Technology II (Full-year course)

COMPUTER TECHNOLOGY I – ENR – 080252 (π)

GRADE 11(Grade 12 on space available basis)

2 CREDITS (Full-year course, CTE Program)

This course is focused on an in-depth exposure to PC operating systems, and hardware configuration and installation through hands-on activities and laboratory exercises as well as suggested best practices in maintenance and safety issues. The material covered in this course is intended to form a foundation of technical knowledge to assemble and configure a computer, install operating systems and software, and troubleshoot hardware and software problems as well as suggested best practices in maintenance and safety issues. In addition, an introduction to networking is included. This course helps prepare students for the industry recognized CompTIA's A+ certification. Cisco ITE certification and Running Start credits are available to advanced students.

PREREQUISITE: Acceptance into the Computer Networking & Telecommunications program

COMPUTER TECHNOLOGY II - Running Start HNR – 080272 (π)

GRADE 12

2 CREDITS (Full-year course, CTE Program)

The course focuses on network systems and network security as well as a review of the skills acquired in Computer Technologies 1. Students will acquire a solid foundation in networking and basic network design. Students will then design, install and maintain a peer-to-peer local area network within the lab. The LAN will provide students with experience in monitoring overall network operation, troubleshooting basic problems, and implementing administrative functions. Students will also design a server based network in a virtual environment. The desired outcome of this course is for the student to be prepared to take a network certification test. Cisco ITE certification and Running Start credits are available to all students. **Note: Students taking this course will have the option of earning three college credits. There would be a fee associated with this option.**

PREREQUISITE: Successful completion of Computer Technology I

Criminal Justice & Homeland Security Program

Program Course Sequence

Year 1 – Intro to Criminal Justice and Criminal Procedures (Two semester-long courses)

Year 2 – Criminal Law & Procedures and Juvenile Justice (Two semester-long courses)

INTRO TO CRIMINAL JUSTICE - Running Start HNR - 080104

GRADE 11 (juniors only unless not filled)

1 CREDIT (fall semester course, CTE Program)

This course covers the components of the justice system in American society. Although civil law will be discussed, the emphasis will be on the criminal justice system. The influence and pressures of changing social, political, technological, and economic factors on the agencies of justice will be studied. Much of the focus will compare ideals with realities of the system. Law enforcement, the courts, and correctional aspects will be examined. **Note: Students taking this course will have the option of earning three college credits. There would be a fee associated with this option.**

CRIMINOLOGY – Running Start HNR – 080114

GRADE 11 & 12

1 CREDIT (spring semester course, CTE Program)

This course explores the question of crime causation from a number of theoretical perspectives in the social sciences. The nature and extent of crime in American society, theories of factors and influences that are related to criminal behavior, and the impact of crime on society. **Note: Students taking this course will have the option of earning three college credits. There would be a fee associated with this option.**

PREREQUISITE: Intro to Criminal Justice

CRIMINAL LAW & PROCEDURE – Running Start HNR – 080124

GRADE 11 & 12

1 CREDIT (fall semester course, CTE Program)

This course provides an in-depth review of substantive criminal law in the federal and state systems including analysis of the essential elements of all major crimes, the concepts of constitutional review and judicial scrutiny and the principles governing legal challenges to the constitutionality of laws. This course will also analyze the constitutional issues in the United States which have direct bearing on the role and policies of criminal justice agencies. Application of these issues as they relate to investigation, arrest, pretrial and appeal will be emphasized. **Note: Students taking this course will have the option of earning three college credits. There would be a fee associated with this option.**

PREREQUISITE: Intro to Criminal Justice

JUVENILE JUSTICE – Running Start HNR - 080134

GRADE 11 & 12

1 CREDIT (spring semester course, CTE Program)

An examination of causative factors in the development of youthful offenders and the development and philosophy behind treatment and rehabilitative practices are covered. The course also covers legal, procedural, and substantive issues pertaining to the juvenile justice system. **Note: Students taking this course will have the option of earning three college credits. There would be a fee associated with this option.**

PREREQUISITE: Intro to Criminal Justice

Environmental Science & Sustainable Studies Program

Program Course Sequence

Year 1 – Environmental Science I and Environmental Science II (Two semester-long courses)

Program Description: Environmental Science is the study of nature and how it is influenced by humans.

This program is designed for students interested in environmental issues, ecology and sustainability. You will develop your creative problem-solving skills needed to design and bring about solutions to environmental problems at local, regional, and global scales. Through community-based projects you will gain practical experience and make a positive impact while you are still in school. The topics will combine hands on science with current environmental issues and prepare you for a variety of career paths. You will develop and apply your skills for experimental design, data analysis, and scientific writing.

A significant amount of time will be spent outside (during all seasons) both on and off of school grounds setting up study sites, collecting data and samples and learning about the natural systems of the community. Students will go on several local and regional field trips to visit relevant ecosystems and research facilities, as well as hearing from several guest speakers who will share their work and research experience with you. The Environmental Science CTE program is year-long, which requires you to register for Environmental Science 1 and 2 in consecutive semesters.

ENVIRONMENTAL SCIENCE I – ENR 030072 / HNR 030073 (π)

GRADES 11, 12

1 CREDIT (fall semester course)

This course will focus on the biogeochemical cycles, climate change, environmental health and pollution, sustainability and food production (hydroponics and aquaculture), as well as stream and watershed ecology. Class projects involving a study of the local forest, water quality of the Cocheco River watershed, as well as hydroponics and aquaculture will be conducted. Long term projects will also be researched, proposed and started at this time.

PREREQUISITE: Must pass Biology and be accepted into the Environmental Science and Sustainability program.

ENVIRONMENTAL SCIENCE II – ENR 030412 / HNR 030413 (π)

GRADES 11, 12

1 CREDIT (spring semester course)

This semester will focus on winter ecology, air quality, human population, marine ecosystems, natural resources and alternative energy sources. Spatial data will be collected, mapped and analyzed using ArcGIS software. Aquaculture and hydroponic systems will continue to be studied and the year-long projects will be completed and presented.

PREREQUISITE: Must successfully complete Environmental Science and Sustainability 1

Foundations of Education Program

Program Course Sequence

Year 1 – Foundations of Education I (One full-year course)

Year 2 – Foundations of Education II (One full-year course)

Foundations of Education I – Running Start HNR - 080463

GRADE 11(Grade 12 on space available basis)

2 CREDITS (Full-year course, CTE Program)

This course is designed for students interested in pursuing a career in education or other field associated with working with children. Foundation of Education 1 introduces students to basic teaching skills, such as classroom management, lesson planning, guidance and discipline techniques. Students divide their time between classroom instruction and student-teaching in the laboratory school, Small Wonders Preschool or other Field site placement. Classroom instruction includes lectures, notes, handouts, projects, hands-on activities, and unit tests. Foundation of Education units include: Differentiated Instruction, Instructional Practices, Curriculum Planning, Classroom Management, Educational Psychology, and Growth and Development. As part of Foundations of Education you will be part of a leadership organization, Educators Rising, which offers many opportunities for community service, leadership, trips and conferences. There is a \$30 course fee to take this program; this fee covers membership dues and course shirt (scholarship available upon request). Students will be required to undergo a criminal background check at the N.H. Department of Safety in order to participate in the internship component of the program. For those furthering their education,

articulation credits are available with some of the two-year colleges in NH. **Note: Students taking this course will have the option of earning three college credits. There would be a fee associated with this option.**

PREREQUISITE: Acceptance into the Foundations of Education program

Foundations of Education II – Running Start HNR - 0800053

GRADE 12

2 CREDITS (Full-year course, CTE Program)

Students entering Foundation of Education 2 are expected to have mastered or be proficient in the basic teaching skills learned in Foundation of Education 1. Students divide their time between classroom instructions, student teaching in the laboratory preschool, Small Wonders Preschool and participation in internships. Classroom instruction includes lectures, notes, handouts, projects, hands-on activities, and unit tests. Foundation of Education 2 units include: Curriculum Planning using Understanding by Design, Special Education, Advanced Instructional Practices, and Observation Skills. At the conclusion of Foundation of Education 2, students will create a professional portfolio to demonstrate the competencies they have achieved. As part of Foundations of Education 2 you will be part of a leadership organization, Educators Rising, which offers many opportunities for community service, leadership, trips and conferences. There is a \$30 course fee to take this program; this fee covers membership dues and course shirt (scholarship available upon request). Students will be required to undergo a criminal background check at the N.H. Department of Safety in order to participate in the internship component of the program. For those furthering their education, articulation credits are available with some of the two-year colleges in NH. **Note: Students taking this course will have the option of earning three college credits. There would be a fee associated with this option.**

PREREQUISITE: Successful completion of Foundations of Education I and recommendation from program instructor.

Graphic Design Program

Program Course Sequence

Year 1 – Graphic Design/Printing Technology I (One full-year course)

Year 2 – Graphic Design/Printing Technology II (One full-year course)

GRAPHIC DESIGN/PRINTING TECHNOLOGY I – ENR – 080512 (π)

GRADE 11(Grade 12 on space available basis)

2 CREDITS (Full-year course, CTE Program)

If you like to draw, design on computers, be creative, scan images, use digital cameras and produce your creations through print technology, then this course is for you. You will use the latest software (Adobe Photoshop and InDesign) to layout and design your projects. The Graphic Arts industry offers a wide range of career opportunities that employs both men and women. Job titles include graphic designers, page-layout artist, camera operators, pre-press technicians, computer operators, plate makers, press operators, bindery workers, computer programmers, chemists and estimator. This hands-on course acquaints students with the latest cutting edge technology, digital color imaging and conventional offset technology. Students will design and print business cards, tickets, letterhead, CD covers, posters and various other items. **Note: This course will fulfill the fine arts requirement for graduation.**

PREREQUISITE: Acceptance into the Graphic Design program.

GRAPHIC DESIGN/PRINTING TECHNOLOGY II - Running Start HNR – 080532 (π)

GRADE 12

2 CREDITS (Full-year course, CTE Program)

Never has the demand been greater for graphic designers and print technicians. This advanced hands-on course acquaints students with the latest computer technology, digital color imaging (Adobe Photoshop, Illustrator, and InDesign), digital and conventional print technology and introduction to animation software. Students in this advanced program will learn to think like a designer and technician for their own personal expression as well as gain real-world experience by working with actual customers and learn to develop their skills in more detail. The students in this course will use research, critical thinking, creativity, and a range of problem-solving principles to complete their assignments. Projects include photo-composites, posters, publications, invitations, and various other items. **Note: Students taking this course will have the option of earning three college credits. There would be a fee associated with this option.**

PREREQUISITE: Successful completion of Graphic Design/Printing Technology I

Health Science Technology Program

Program Course Sequence

Year 1 - Health Science Technology I (Full year course)

Year 2 - Health Science Technology II (Full year course)

HEALTH SCIENCE TECHNOLOGY I – ENR –080551 (π)

GRADE 11(Grade 12 on space available basis)

2 CREDITS (Full year course, CTE Program)

During the first year of this course, students are introduced to the field of health care. Students will have the opportunity to earn their CPR & AED certification. Students develop a basic understanding of health care concepts focusing on the patient centered model and specific career paths within the industry. Students study the history of health care, medical terminology, ethical and legal aspects, microorganisms, and safety issues such as fire, body mechanics and infection control. After completing the anatomy and physiology, nutrition, CPR and first aid units, the students may travel to various community health care agencies for observation. Students will learn hands-on skills in our simulated hospital environment. Upon successful completion of HST I, students will have the opportunity to take the HSTII program to continue with their studies and gain college credit for medical terminology and participate in clinical setting.

PREREQUISITE: Acceptance into the Health Science Technology Program, Recommendation: in Anatomy and Physiology course or equivalent.

HEALTH SCIENCE TECHNOLOGY II – Running Start HNR – 080573 (π)

GRADE 12

2 CREDITS (Full year course, CTE Program)

The second year is for students who have a definite career interest. Students will have the opportunity to earn college credit for medical terminology and maybe eligible for Licensed Nurse Assistant (LNA) licensure in the state of New Hampshire. Students will investigate current trends and issues affecting the healthcare industry. There is more in-depth study of body systems as it pertains to disease and nursing processes. Students will learn nursing assistant skills and procedures with hands on training in our simulated hospital environment as well as clinical experience at healthcare agencies in our community. **Students will incur costs taking HST 2. Students interested in other HC careers can do an internship instead of LNA section. There are extra fees for the LNA Exam and Clinicals. Note: Students taking this course will have the option of earning three college credits. There would be a fee associated with this option.**

PREREQUISITE: Successful completion of Health Science Technology I, Anatomy & Physiology, and recommendation from program instructor.

Heating, Ventilation, Air Conditioning, and Refrigeration HVACR

Program Course Sequence

Year 1 – HVACR Technology I (One full-year course)

Year 2 – HVACR Technology II (One full-year course)

Program Description: HVAC program is designed to provide students with an understanding of theoretical information covering the sciences of matter, heat, fluids and pressure. Theory information also includes the components of a basic refrigeration system and how they operate to move heat from where it is not wanted to where it is desirable. Students successfully completing this program will be able to pursue a two year or a four year degree at a college or university. Students can obtain immediate employment in the heating, ventilation and air conditioning field, which include: residential and commercial heating, ventilation, and air conditioning apprenticeship in installation and service; refrigeration technician; sheet metal apprentice; sheet metal design; gas system technician; oil burner technician; heating, ventilation and air conditioning sales representative; wholesale supply representative; and, appliance repair technician.

HVACR TECHNOLOGY I – ENR – 0800062 (π)

GRADE 11 (Grade 12 on space available basis)

2 CREDITS (Full-year course, CTE Program)

The students will receive instruction in safety requirements and demonstrate sound safety practices. Students will demonstrate electrical fundamentals including electrical circuits, Ohm's law and meter use. Students will identify heating fuels (natural gas, propane and heating oil), and explain how they burn and how to safely control the burn. Laboratory skills practiced include servicing and testing heating equipment and basic electrical circuits including identifying electrical motors and system schematics. Students will demonstrate their ability to use code books and apply code requirements at apprentice entry level. Technology related reading, writing, vocabulary, mathematics, blueprint reading, and science are integrated throughout the curriculum.

PREREQUISITE: Acceptance into the HVACR Technology program.

HVACR TECHNOLOGY II – ENR – 0800002 (π)

GRADE 12

2 CREDITS (Full-year course, CTE Program)

Students continue to receive instruction in safety requirements and demonstrate sound safety practices. Students will demonstrate theoretical competency in HVAC/R electrical controls, refrigeration systems, such as air conditioning, and refrigeration, both domestic and commercial. The students will have an understanding of Environmental Protection Agency (EPA) certification requirements with refrigeration systems and the proper handling of refrigerants, including recovery, recycling and reclaiming are studied and practiced. Students will be able to calculate building heating and cooling loads. Laboratory skills practiced include servicing and testing refrigeration equipment and basic electrical circuits including reading and writing electrical schematics. Students will demonstrate the skills needed for installation of HVAC systems. Students will demonstrate the ability to complete a job application, resume, interview, and to perform entry level job readiness and trade skills. Technology related reading, writing, vocabulary, mathematics, blueprint reading and science are integrated throughout the curriculum.

PREREQUISITE: Successful completion of HVACR Technology I

Precision Machining Program

Program Course Sequence

Year 1 – Precision Machining I (One full-year course)

Year 2 – Precision Machining II (One full-year course)

PRECISION MACHINING I – ENR – 080672 (π)

GRADE 11(Grade 12 on space available basis)

2 CREDITS (Full-year course, CTE program)

Students enrolled in the first year of this two-year program will demonstrate technical ability on machine tool equipment and hand tools related to the machine tool. Attention to detail, precise measurement and focus are highly recommended skills that will be developed and expanded through this course. Students will gain a complete understanding of the CNC machine tool's operation, metal working industry and requirements expected from a production machinist. Students will develop knowledge and understand of CNC machine tool operation and G-Code and M-Code terminology. Students will learn advanced machining competencies requiring lab hands on participation to meet and complete lab assigned projects. Student safety is held at the highest level of priority.

PREREQUISITE: Acceptance into the Precision Machining Program

PRECISION MACHINING II – Running Start HNR – 080693 (π)

GRADE 12

2 CREDIT (Full-year course, CTE Program)

Students continuing their enrollment in this two year program will gain understanding of industry standard CNC machine tool's operation, and a full understanding of G-Code and M-Code terminology and application. Students will understand the metal working industry and requirements expected from a production machinist. Students will meet advanced machining competencies requiring 97% shop hands on participation consisting of real time machining on a production level for both manual and CNC machining. Following all safety procedures will be continually enforced. Students will demonstrate personal growth / student professionalism through applied knowledge and skills in resume writing, job application writing, and job interviewing. **Note: Students taking this course will have the option of earning college credits. There would be a fee associated with this option.**

PREREQUISITE: Successful completion of Precision Machining I.

Restaurant Management Program

Program Course Sequence

Year 1 – Restaurant Management I (One full-year course)

Year 2 – Restaurant Management II (One full-year course)

RESTAURANT MANAGEMENT I – Running Start HNR –080793 (π)

GRADE 11(Grade 12 on space available basis)

2 CREDITS (Full year course, CTE Program)

This course offers students the chance to work in a restaurant atmosphere while learning the different tasks of various professionals in the food and restaurant industry. Students will learn about safety and sanitation, professional cooking, the duties and responsibilities of the chef, prep cook, baker, host, server, and manager, as well as industry job seeking and keeping skills. Students will be responsible for the successful management of the Raider House Restaurant. Careers related to food service will be presented from a management perspective. This program has articulation agreements with Lakes Region Community College, CIA and New Hampshire Culinary Institute. **Note: Students taking this course will have the option of earning three college credits. There would be a fee associated with this option.**

PREREQUISITE: Acceptance into the Restaurant Management program.

RESTAURANT MANAGEMENT II HNR – 080813 (π)

GRADE 12

2 CREDIT (Full year course, CTE Program)

This course continues students' experience to work in a restaurant atmosphere while learning the different tasks of various professionals in the food and restaurant industry. Students will learn about safety and sanitation, professional cooking, the duties and responsibilities of the chef, prep cook, baker, host, server, and manager, as well as industry job seeking and keeping skills. Students will be responsible for the successful management of the Raider House Restaurant. Careers related to food service will be presented from a management perspective. This program has articulation agreements with Lakes Region Community College, CIA and New Hampshire Culinary Institute.

PREREQUISITE: Successful completion of Restaurant Management I

Video & Photographic Arts

Program Course Sequence

Year 1 – Digital Photography & Video Production Technology I (One full-year course)

Year 2 – Digital Photography & Video Production Technology II (One full-year course)

DIGITAL PHOTOGRAPHY & VIDEO PRODUCTION TECHNOLOGY I – ENR – 080912 (π)

GRADE 10 -11

2 CREDITS (Full-year course, CTE Program)

During the first year students will be introduced to the Photography and Video field. It is a hands on/project based class. Students will complete a series of activities, utilizing the basic techniques necessary for the production of photographs and videos. Topics to be covered are treatment development, storyboarding, scripting, proper camera technique, composition, lighting and editing. Class time will focus on working with a variety of photographic and video equipment. Classes will run very independently and the goal is to provide each student with the opportunity to learn at his/her own pace and in his/her own style. Students, who choose this course, will be responsible for creating digital print artwork, slide presentations and motion graphics. Students will develop their own style in photography and video while building a portfolio of images and short videos demonstrating what they are learning and how their style is evolving.

PREREQUISITE: Acceptance into the Video & Photographic Arts program. . **Note:** *This is a Running Start course and students are eligible to receive college credit. There is a fee associated with this option.*

DIGITAL PHOTOGRAPHY & VIDEO PRODUCTION TECHNOLOGY II - ENR – 080922 (π)

GRADE 11 -12

2 CREDITS (Full-year course, CTE Program)

Students in the second year will be immersing themselves into various fields of photography and video. Students will be involved in more complex projects using advanced lighting, editing technique, macro, time lapse, multi camera shoots are just some of the areas to explore. Focus on visual workflow, exploring what they see and how best to record it. Emphasis will be on composition and telling a story with their images. Students will be working on individual self-designed projects and building a complete portfolio of their work.

PREREQUISITE: Successful completion of Digital Photography & Video Production I **Note:** *This is a Running Start course and students are eligible to receive college credit. There is a fee associated with this option.*