

2020-2021 PROGRAMS OF STUDY



AOH.HAMPTON.K12.VA.US

Dear Students and Families:

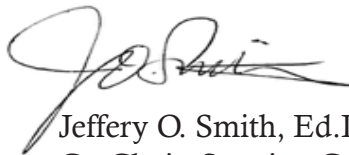
The excitement in our community continues to build around our efforts to significantly transform and improve our high schools through the *Academies of Hampton*. Ultimately, this effort supports our community's commitment to providing students with more of the advanced skills they need to be productive, engaged, and successful citizens in college, career, and life.

The *Academies* enable students to learn through the lens of a career or academic theme in a relevant, hands-on learning environment with real-world application and experiences. Each academy provides a highly personalized, small learning community, where students learn English, science, math, and social studies within the theme of their academy. Through their academy experiences, students are exposed to a multitude of careers and opportunities, industry skills, and potential employers by way of classroom speakers, site visits, job shadowing, and internships.

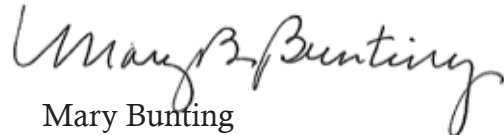
In September 2018, we implemented the second phase of the high school transformation by welcoming the Class of 2021 into one of the 16 college and career academies. In college and career academies students take a deeper dive into the industry and careers of interest. Collaborating with employers, students engage in work-based learning through simulated workspaces, real-world learning experiences, cross-curricular lesson plans, career expos, project- and challenged-based learning, and internships ensuring young people graduate with the skills and competencies necessary for a successful future.

The *Programs of Study* outline the outstanding educational opportunities for young people. We know you will find this information helpful as you consider and select a pathway steeped in preparing you to succeed in college, career, and life.

The world awaits your contributions!



Jeffery O. Smith, Ed.D.
Co-Chair, Steering Committee
Superintendent, Hampton City Schools



Mary Bunting
Co-Chair, Steering Committee
City Manager, City of Hampton



The Academies of Hampton will provide career-focused small learning communities in which every young person will be prepared for success in a career, lifelong learning, and life.

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— PORTRAIT OF A — HAMPTON GRADUATE

Prepared for success in careers, lifelong learning, and life



Diploma



Professional Portfolio



CONTENT KNOWLEDGE

Achieves and applies appropriate academic and career-focused knowledge

CAREER & LIFE SKILLS

Integrates and applies classroom knowledge to navigate the real world



College-Ready PSAT Scores



Career Certification



Virtual Class

COMMUNICATION, COLLABORATION, & LEADERSHIP

Builds connections and works with individuals and diverse communities

POSITIVE SENSE OF SELF & PURPOSE

Demonstrates mindfulness of self, others, and personal journey



College Credit



Internship

HAMPTON
City Schools
Every Child, Every Day,
Whatever it Takes!

www.hampton.k12.va.us

— PORTRAIT OF A — HAMPTON GRADUATE

Prepared for success in careers, lifelong learning, and life



ACCOMPLISHMENTS

- Academically prepared with a diploma that verifies postsecondary readiness
- College credit, a nationally-recognized professional certification, or both
- Ten-year academic and career plan
- College-ready PSAT score
- Internship, work-based, service learning experience, and/or capstone research project
- Completed at least one virtual course
- Professional portfolio aligned with the 21st Century Employability Skills



CONTENT KNOWLEDGE

Achieves and applies appropriate academic and career-focused knowledge

- Exhibits college and career readiness and an ability to connect education to meaningful employment and productive citizenship
- Demonstrates the ability, knowledge, confidence, creativity, and initiative to take ownership in problem solving and goal setting



CAREER AND LIFE SKILLS

Integrates and applies classroom knowledge to navigate the real world

- Thinks critically and has the ability to deconstruct global problems, create solutions, and effectively articulate processes and results
- Applies creative thought to individually and collectively impact our region and the world as global-minded, innovative citizens
- Commits to achieving their goals as life-long learners displaying resiliency, persistence, adaptability, and a strong work ethic



COMMUNICATION, COLLABORATION, AND LEADERSHIP

Builds connections and works with individuals and diverse communities

- Communicates and collaborates to effectively express ideas through speaking, writing, and multimedia
- Respects, values, and embraces the diversity of others, as an inclusive leader, with an openness to new and unique ideas



POSITIVE SENSE OF SELF AND PURPOSE

Demonstrates mindfulness of self, others, and personal journey

- Conveys a positive sense of self, self-worth, and purpose
- Maintains healthy interpersonal relationships and supportive personal, social, and professional networks
- Sets goals to achieve full potential as empowered and committed individuals within the context of their family, community, and the world
- Demonstrates the social, intellectual, and creative ability to act with integrity, empathy, and flexibility in making reasoned, ethical, and responsible decisions



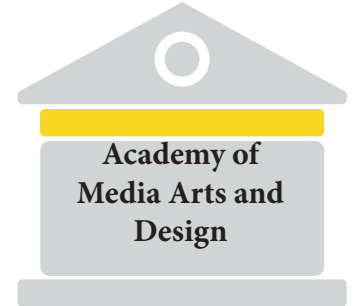
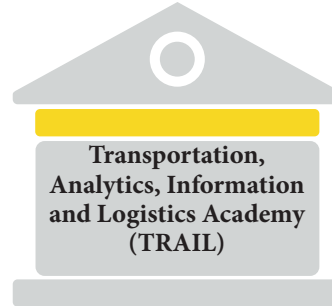
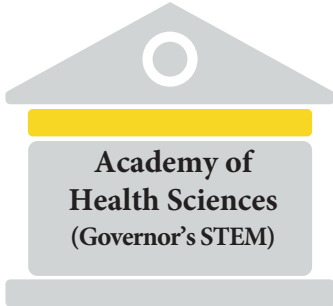
College, Career, and Life-Ready

HCS does not discriminate on the basis of race, color, national origin, sex, disability, age or other protected classes in its programs and activities and provides equal access to the Boy Scouts and other designated youth groups. The following person has been designated to handle inquiries regarding the non-discrimination policies: Robbin G. Ruth, Executive Director, Human Resources, One Franklin Street, Hampton, VA 23669 757-727-2000.

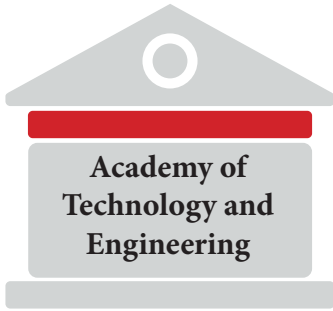
16 academies and **41** pathways,
which one is best for
YOU?



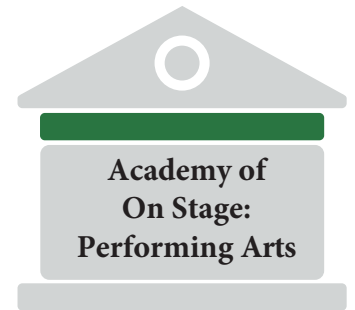
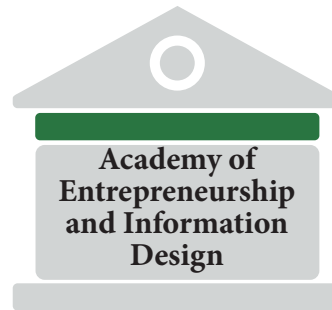
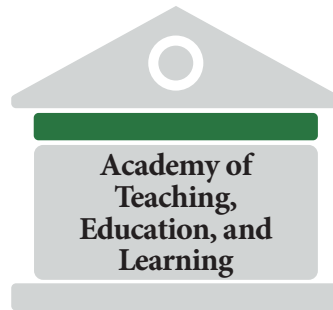
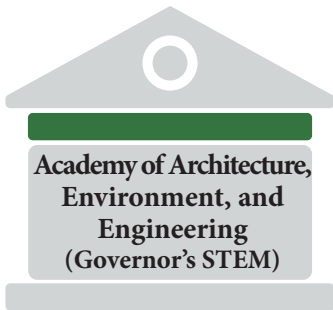
Bethel High School



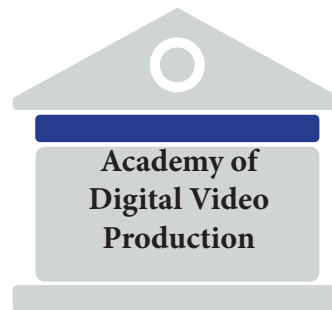
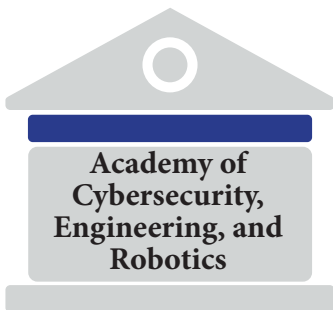
Hampton High School



Kecoughtan High School



Phoebus High School





BETHEL HIGH SCHOOL'S Academies and Pathways

ACADEMIES

Academy of Media Arts and Design	Academy of Transportation, Analytics, Information, and Logistics	Academy of Law and Public Safety	Academy of Health Sciences (Governor's STEM)
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PATHWAYS

1. Journalism 2. Digital Media	3. Geospatial Technology and Unmanned Systems 4. Business Management and Logistics 5. Networking 6. Programming and Data Analysis	7. Law and Legal Studies 8. Law Enforcement 9. Firefighter/EMT	10. Health Informatics and Support Services 11. Diagnostics Services 12. Therapeutic Services 13. Biotechnology Research and Development
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Connect the pathway number with the pathway course sequence below.

If you would like more details, don't forget to check the back of the book for course descriptions.

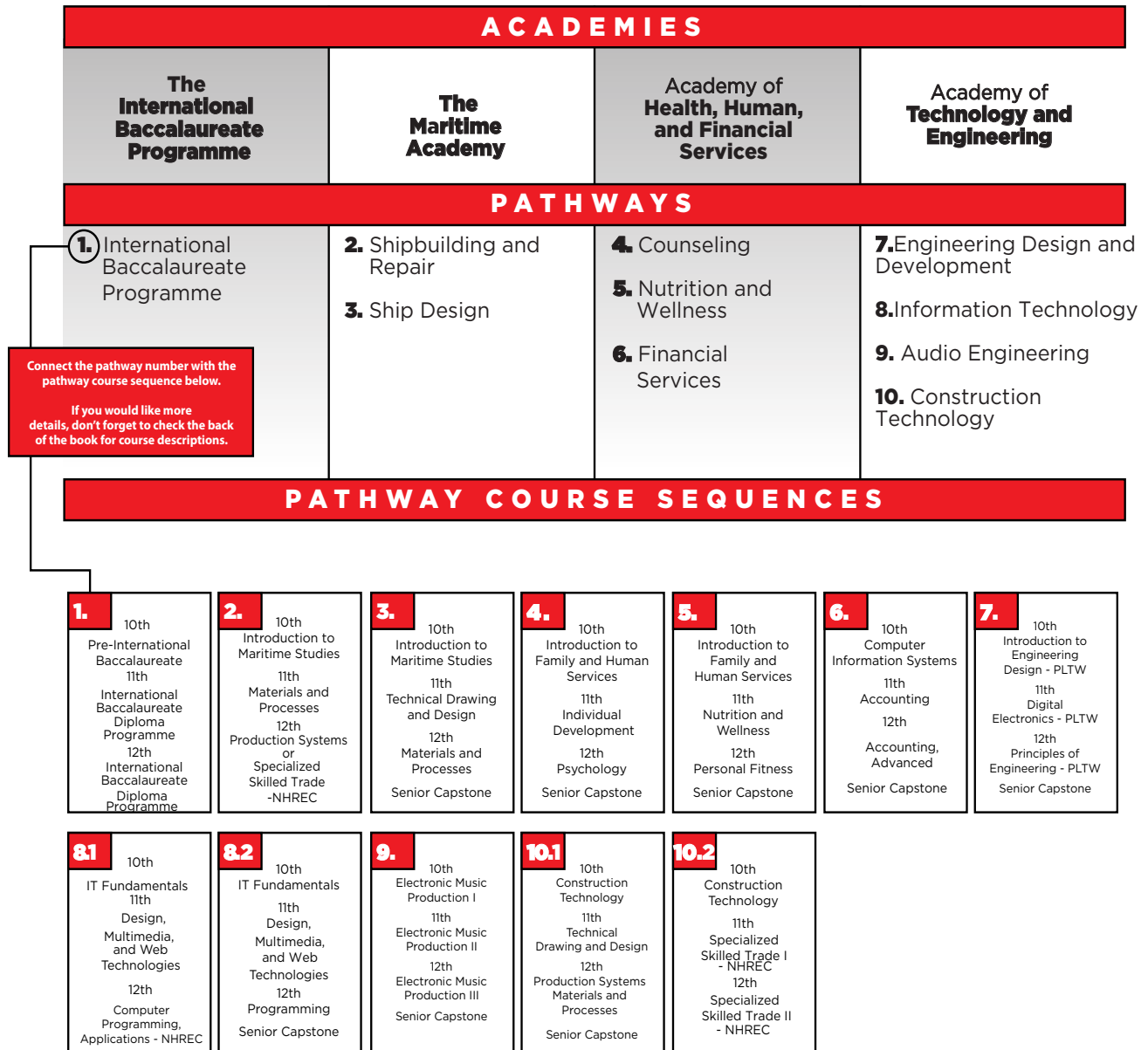
PATHWAY COURSE SEQUENCES

1. 10th Journalism I 11th Journalism II 12th Journalism III Senior Capstone	2. 10th Communication Systems 11th Digital Visualization 12th Video and Media Technology Senior Capstone	3. 10th Geospatial Technology I 11th Geospatial Technology II 12th Modeling and Simulation or Mechatronics -NHREC Senior Capstone	4. 10th Computer Information Systems 11th Global Logistics and Enterprise Systems I 12th Business Management Senior Capstone	5.1 10th IT Fundamentals 11th Programming 12th CISCO Networking Cybersecurity Security Academy -NHREC Senior Capstone	5.2 10th IT Fundamentals 11th Cybersecurity Systems Technology 12th CISCO Networking Cybersecurity Security Academy -NHREC Senior Capstone	6.1 10th Computer Science Principles, AP or IT Fundamentals 11th Programming 12th Programming, Advanced Senior Capstone
6.2 10th IT Fundamentals 11th Database Design and Management Oracle 12th Database Design and Management with Procedural Language Senior Capstone	7. 10th Introduction to Law 11th Ethics and Law Legal Oratory Debate 12th Legal Research and Writing Senior Capstone	8. 10th Public Safety I 11th Criminal Justice I 12th Criminal Justice II Senior Capstone	9. 10th Public Safety I 11th Fire Fighting I/II -NHREC 12th Medical Terminology or EMT - NHREC Senior Capstone	10. 10th Introduction to Health Medical Services 11th Health Informatics 12th Medical Coding and Billing Senior Capstone	11.1 10th Introduction to Health Medical Services 11th Medical Terminology 12th Principles of Biomedical Science Senior Capstone	11.2 10th Introduction to Health Medical Services 11th Medical Specialty I - NHREC 12th Medical Specialty II - NHREC Senior Capstone
12. 10th Introduction to Health and Medical Services 11th Sports Medicine I 12th Sports Medicine II Senior Capstone	13. 10th Principles of Biomedical Science 11th Human Body Systems 12th Medical Intervention Senior Capstone					





HAMPTON HIGH SCHOOL'S Academies and Pathways





KECOUGHTAN HIGH SCHOOL'S Academies and Pathways

ACADEMIES

Academy of
**On Stage:
Performing Arts**

Academy of
**Entrepreneurship
and Information
Design**

Academy of
**Teaching,
Education,
and Learning**

Academy of
**Architecture,
Environment, and
Engineering
(Governor's STEM)**

PATHWAYS

1. Theater Design and
Technology

2. Theater
Performance

3. Entrepreneurship
and Marketing

4. World Banking and
Finance

5. Information Design

6. Education and
Training

7. Child Development

8. Architectural
Engineering

9. Construction Design

10. Environmental
Studies

Connect the pathway number with the
pathway course sequence below.

If you would like more
details, don't forget to check the back
of the book for course descriptions.

PATHWAY COURSE SEQUENCES

1. 10th
3D Design /
Technical Theater
11th
Theater Technical
Drawing and Design
12th
Entertainment
Design and
Technology
Senior Capstone

2. 10th
Acting and
Dramatic Literature
/History
11th
Acting II /
Technical Theater
12th
Acting III /
Directing
Senior Capstone

3. 10th
Marketing I
11th
Entrepreneurship
12th
Accounting I
Senior Capstone

4. 10th
Computer
Information Systems
11th
Accounting
12th
Accounting,
Advanced
Senior Capstone

5. 10th
IT Fundamentals
or Cybersecurity
Fundamentals
11th
Design, Multimedia,
and Web
Technologies
12th
Advanced Design,
Multimedia, and
Web Technologies
Senior Capstone

6. 10th
Introduction to Early
Childhood,
Education, and
Services
11th
Virginia Teachers
for Tomorrow I
12th
Virginia Teachers
for Tomorrow II
Senior Capstone

7. 10th
Introduction to Early
Childhood, Education,
and Services
11th
Early Childhood,
Education, and Services I
12th
Early Childhood,
Education, and Services II
Senior Capstone

8. 10th
Technical Drawing and
Design
11th
Architectural Drawing and
Design
12th
Engineering Drawing and
Design
or 12th Architectural and
Drawing and Design,
Advanced
Senior Capstone

9. 10th
Construction
Technology
11th
Production Systems
12th
Materials Processes
Engineering Studies
Senior Capstone

10. 10th
Introduction to
Natural Resources
and
Ecology Systems
11th
Ecology and
Environmental
Management
12th
Fisheries and Wildlife
Senior Capstone





PHOEBUS HIGH SCHOOL'S Academies and Pathways

ACADEMIES			
Academy of Cybersecurity, Engineering, and Robotics	Academy of Hospitality and Tourism	Academy of Digital Video Production	Academy of Advanced College Experience
PATHWAYS			
1. Engineering and Robotics 2. Manufacturing 3. Cybersecurity Systems Technology 4. Cybersecurity Software Operations	5. Culinary Arts 6. Travel and Tourism	7. Television and Media Production 8. Video Media Production	9. Advanced College Experience
PATHWAY COURSE SEQUENCES			

Connect the pathway number with the pathway course sequence below.

If you would like more details, don't forget to check the back of the book for course descriptions.

1. 10th Introduction to Engineering Design - PLTW 11th Principles of Engineering - PLTW 12th Computer Integrated Manufacturing - PLTW or 12th Digital Electronics Senior Capstone	2.1 10th Manufacturing Systems I 11th Manufacturing Systems II Precision Machining - NHREC or 12th Mechatronics - NHREC	2.2 10th Manufacturing Systems I 11th Welding I -NHREC 12th Welding II -NHREC	3. 10th Cybersecurity Fundamentals 11th Programming 12th Cybersecurity Systems Technology -NHREC or Cybersecurity Systems Technology, Advanced - NHREC	4. 10th Cybersecurity Fundamentals 11th Cybersecurity Software Operations 12th Cybersecurity Software Operations, Advanced Senior Capstone	5. 10th Introduction to Culinary Arts 11th Culinary Arts I 12th Culinary Arts II Senior Capstone	6. 10th Introduction to Hospitality, Tourism, and Recreation 11th Hospitality, Tourism, and Recreation I 12th Hospitality, Tourism, and Recreation II Senior Capstone
7. 10th Television and Media Production I 11th Television and Media Production II Double Blocked 12th Television and Media Production III Double Blocked Senior Capstone	8. 10th Communication Systems 11th Imaging Technology 12th Video and Media Technology or Electronic Music Production	9. Advanced College Experience				

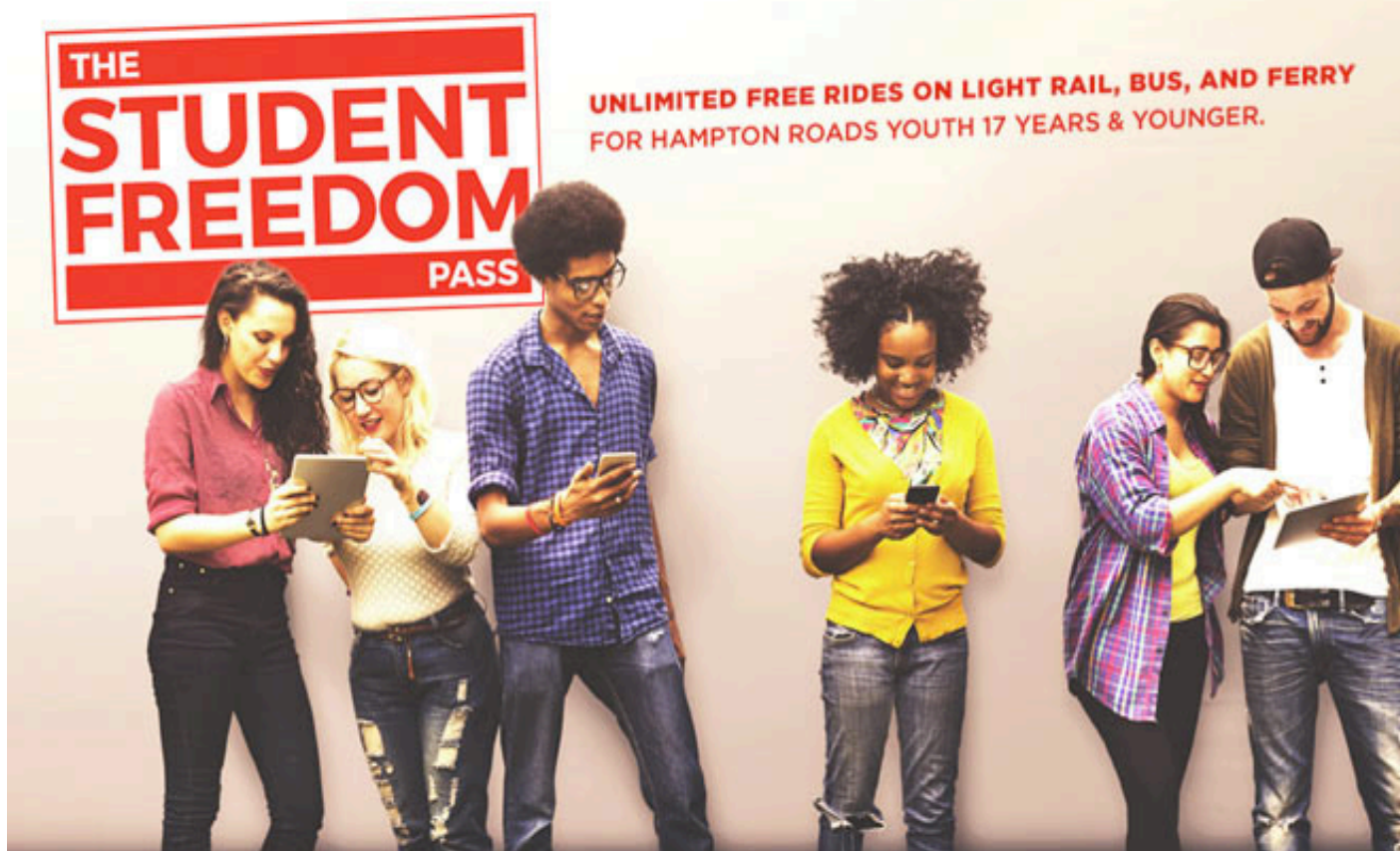
REMEMBER - You ARE NOT limited to the academy options in your current high school.

A. You can ride a Hampton Roads Transit (HRT) bus for free to and from your academy school with your Student Freedom Pass. Check your route by visiting GoHRT.com.

B. You can ride the HCS bus to your zoned school and then shuttle to your academy school. Please remember, young people who ride the shuttle are REQUIRED to take a blended learning or provided skinny block course the last period of the day.

Please keep in mind, your academy school will become your school.

YOU HAVE TRANSPORTATION OPTIONS



Gifted Enrichment Seminar

In addition to the college and career academies, Hampton City Schools offers a differentiated option of cluster grouping for gifted high school students in grades nine and ten in the young person's zoned high school. This model offers students access to in-depth learning of curriculum content with time for students to go into greater depth and/or breadth on a given topic. Teachers offer curriculum compacting and differentiated learning opportunities.

The smaller learning community consists of teachers in three core subject areas, English, science, and the social sciences. Gifted cluster courses require a minimum enrollment of 20 students. Students take a four-year sequence of courses that prepare them to be competitive at any college or university of their choice.

Beyond the core subject areas, gifted students have wide and varied interests. They are then able to choose not only gifted seminar courses, but also any career pathway that is offered in the high school. The cluster grouping prepares them for the intellectual challenge in their futures; selecting a pathway in the high schools allows students to prepare for their careers. Therefore, students fulfill the core requirements of the gifted enrichment seminar and a career pathway.

Sample gifted course sequence:

	English	Science	Social Studies	Math	PE/Health/Economics	World Language	Pathway Course/Global Elective	Pathway Course/Global Elective
9	English 9 Honors (GC)	Honors Biology (GC)	AP Human Geography (GC)	Geometry; Algebra II/Trigonometry; Pre-Calculus	Health/PE I	World Language III	Success 101	Pathway Course/Global Elective
10	English 10 Honors (GC)	Honors Chemistry (GC)	AP World History	Algebra II/Trigonometry; Pre-Calculus/AB Calculus	Health/PE II	World Language IV/Global Elective	Pathway Course/Global Elective	Pathway Course/Global Elective
11	AP English Language	GSST/ AP Biology	AP US History	Pre-Calculus/ AB/BC Calculus/ GSST	Economics and Personal Finance	AP World Language/ Global Elective	Pathway Course/ Global Elective	Pathway Course/ Global Elective
12	AP English Literature	GSST/ AP Physics	AP Government	AP Statistics/ GSST	Capstone Course/ Global Elective	World Language/ Global Elective	Pathway Course/ Global Elective	Pathway Course/ Global Elective

Pathway leads to Virginia Early College Scholars Program - See high school counselor for additional information.

Academy of Media Arts and Design

Academy Pathways

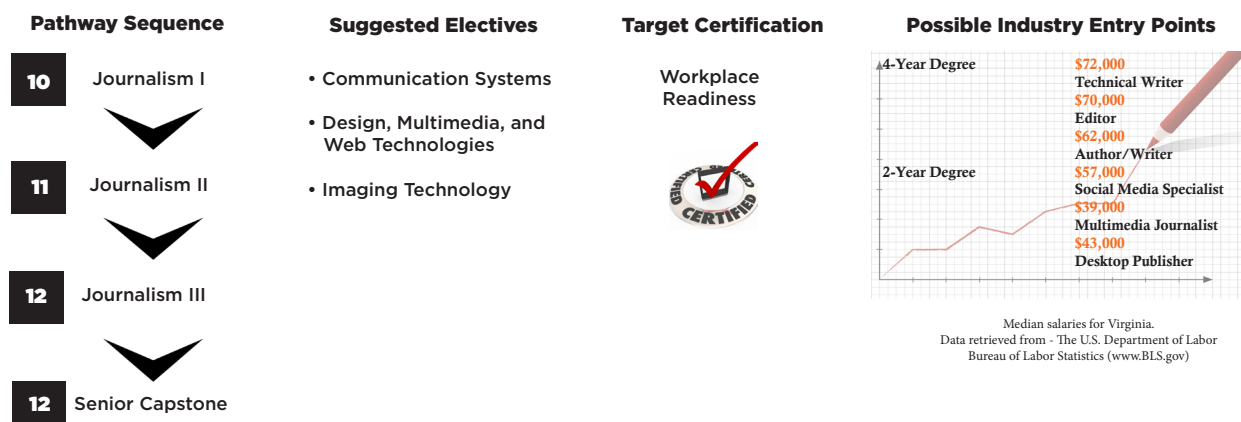
- Journalism
- Digital Media

Do you enjoy developing story content? Do you enjoy integrating video, audio, graphics, and text into unique media platforms? If so, then this may be the right academy for you. The Academy of Media Arts and Design is for students interested in the areas of journalism, digital imaging, graphic design, social media/web design, digital photography, video editing and video production. Students learn critical knowledge, skills, and credentials that will prepare them for high-demand careers in media arts.

Journalism

Do you enjoy writing and researching? Do you want to put a creative spin on news stories to catch the attention of your peer's and others? Then this might be the right pathway for you.

Journalism opens doors to a range of careers where creativity, writing, communication, and research skills are invaluable. Core journalistic skills include researching, investigating, interviewing, reporting and writing. With additional technical skills such as video, editing, shorthand, audio, content management and web design, a journalist can find employment in any field or industry.



Digital Media

Do you enjoy creating a video and audio content for the Internet, television, or other media outlets? Do you enjoy graphics, animation, or photography? If so, check out the Digital Media pathway.

Digital media artists design web pages, video games, use digital photography, video, pod-casts and animations for mass communications. Digital media artists use a variety of software to design, animate, and edit video and audio recordings. Learn lighting and sound techniques as well. Create informational and entertaining audiovisual content for television, movies, new media, education, government, businesses and advertising.



Academy of Transportation, Analytics, Information, and Logistics

Academy Pathways

- Geospatial Technology and Unmanned Systems
- Business Management and Logistics
- Networking
- Programming and Data Analysis

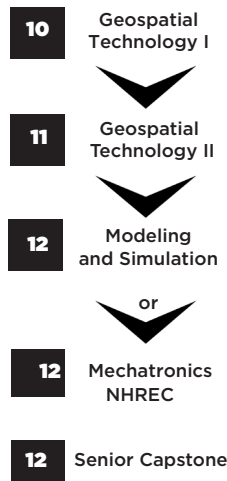
Do you enjoy the process of planning, implementing, and controlling procedures that deliver the products of tomorrow for the consumers of today? Do you enjoy flying drones, programming, and networking it all together as you enter the world of high tech and security through big data? The Transportation, Analytics, Information, and Logistics (TRAIL) Academy is for students interested in integrating operations management services with analytics and technology within the global supply chain. Students in this academy will learn critical knowledge, skills, and credentials that will prepare them for high-demand careers in transportation and logistics.

Geospatial Technology and Unmanned Systems

Do you enjoy flying drones, taking pictures, and creating 3D images? Do you enjoy measurements and surveying? Do you like to create drawings and images of your surroundings? Then this might be the right pathway for you.

Geographical Information Systems professionals use computer-aided mapping and surveying technology to collect, measure, and interpret geographic information in order to create and update maps and charts for regional planning, education, emergency response, and other purposes.

Pathway Sequence



Suggested Electives

- Engineering Drawing and Design
- Technical Drawing and Design
- Imaging Technology

Target Certification

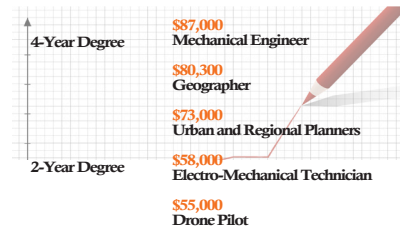
Spatial Technology and Remote Sensing (STARS) Certification

Remote Pilot Certificate- FAA

Siemens Level 1 Mechatronics Systems Certification



Possible Industry Entry Points

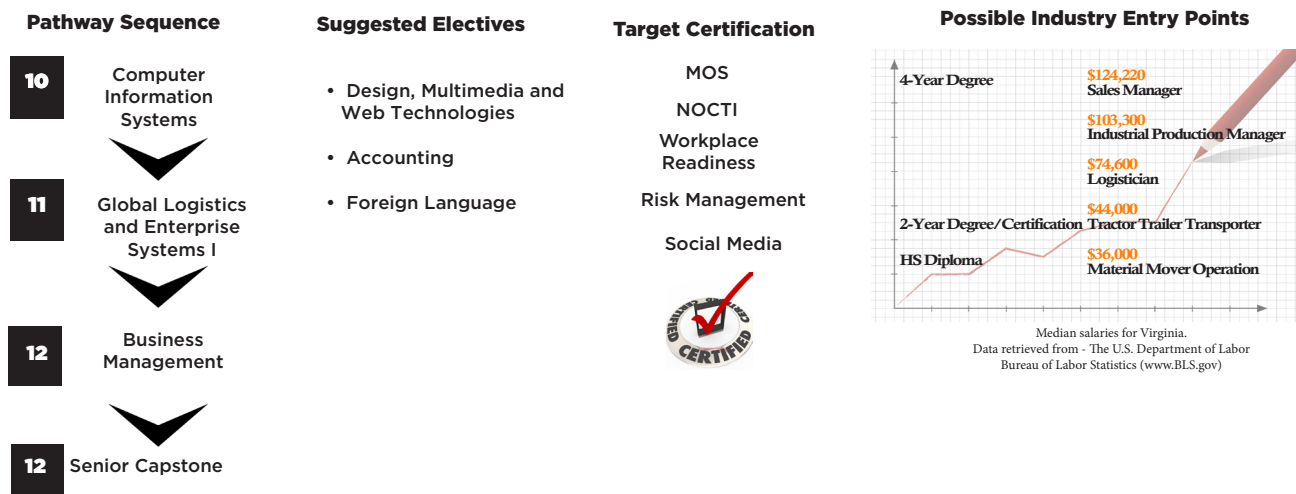


Median salaries for Virginia.
Data retrieved from - The U.S. Department of Labor
Bureau of Labor Statistics (www.BLS.gov)

Business Management and Logistics

Do you love fast cars, huge trucks and powerful trains? Or, perhaps you're detailed-oriented with a passion for planning, coordinating and directing? You may just have a penchant for management or customer service or analysis or international business or manufacturing or driving or... well, you get the drift.

In the Logistics and Business Management pathway, you will develop the critical thinking, problem solving, and communications skills necessary for business to move products from the manufacturer to the customer's doorstep. Managers are responsible for supporting the supply chain through coordinating the human, financial, and logistics within an organization. Management is a critical skill for launching your own successful business, supporting an organization, or joining a Fortune 500 firm.



Networking

Do you enjoy building networks and securing devices? Do you enjoy connecting separate items as one? Are you fascinated as to how the Internet works? Do you have a desire to be a highly sought after team member for your skills anywhere in the world? Then this might be the right pathway for you.







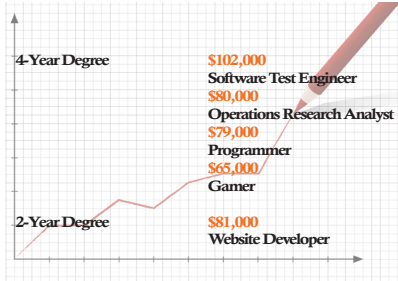
Imagine not having access to the Internet, the world's largest network. Computer networks, connecting two or more computers together to share resources, have become an integral component of today's corporate, government, personal, and international world. Networking professionals build networks, develop applications, secure devices, and analyze data.



Programming and Data Analysis

Do you enjoy using logic to solve technical problems or play video games like Fortnite to learn code and build something of your own? Then this might be the right pathway for you.

Whether they are solving technical problems or creating video games, computer programmers and software developers must use logic. Computer programmers write and test code that allows computer applications and software programs to work properly. They turn the program designs created by software developers and engineers into instructions that a computer can follow.

Pathway Sequence	Pathway Sequence	Suggested Electives	Target Certification	Possible Industry Entry Points
10 Computer Science Principles, AP or Information Technology Fundamentals  11 Programming  12 Programming, Advanced  12 Senior Capstone	10 Information Technology Fundamentals  11 Database Design and Management Oracle  12 Database Design and Management with Procedural Language	<ul style="list-style-type: none"> • Programming • Database Design and Management • Computer Information Systems • Design, Multimedia and Web Technology 	Big Data Oracle JAVA C+ Python NOCTI - NHREC JAVA 6 Fundamentals Brain Bench - NHREC 	 <p>Median salaries for Virginia. Data retrieved from - The U.S. Department of Labor Bureau of Labor Statistics (www.BLS.gov)</p>

*Option at NHREC - Computer Programming Applications and Gaming & Advanced Programming

Academy of Law and Public Safety

Academy Pathways

- Law and Legal Studies
- Law Enforcement
- Fire Fighter/EMT

Do you enjoy problem solving and building relationships? Are you a leader in your community and want to make a larger contribution to its wellbeing? Then the Academy of Law and Public Safety is for you. Academy programs provide academic and technical courses needed for successful transition to postsecondary education and careers in professions that ensure the safety, security, and wellness of the community and prepare you for high-demand careers in law and public safety.

Law and Legal Studies

Do you enjoy reading, writing, and researching? Do you enjoy helping others by protecting their lawfully bound rights? Are you motivated by a good income and not afraid to work long hours? Then this may be the right pathway for you.

Legal professionals must understand the law from philosophical, political, historical, and sociological perspectives. This pathway teaches through the lens of the legal profession and introduces legal foundations, types of law, law processes, and careers related to law and legal studies.



Law Enforcement

Do you enjoy solving problems, collecting data, and working with people? Do you enjoy being physically active? Do you want to do something you can be proud of and positively impact others? Then this might be the right pathway for you.

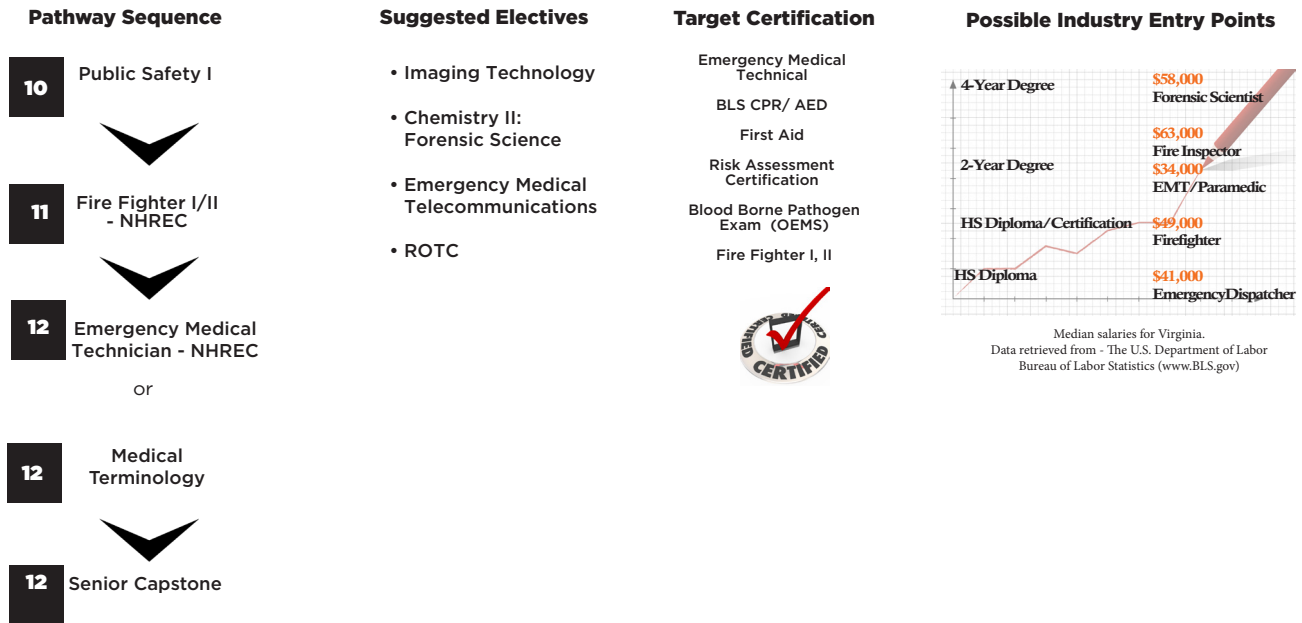
Careers in criminal justice are found at the federal, state, and local levels, as well as in the private sector. This pathway teaches through the lens of the criminal justice system and careers related to law enforcement.



Firefighter / Emergency Medical Technician

Do you enjoy living on the edge and needing physical challenges in your life as well as mental challenges? Do you enjoy helping others? If so, then this pathway might be right for you.

Firefighters control and put out fires, respond to emergency situations where life, property, or the environment is at risk, and prevent or reduce the risk of future fires. This pathway teaches through the lens of a firefighter and related emergency medical service providers.



Exclusive New Horizon Regional Education Track: Students must be able to meet prerequisites and apply for program with acceptance as noted below or Participate in a Hampton Volunteer Fire Summer Program and work evenings and weekends during Junior year. Must be 16 years old by July Rising Junior year.

Academy of Health Sciences Academy (Governor's STEM)

Academy Pathways

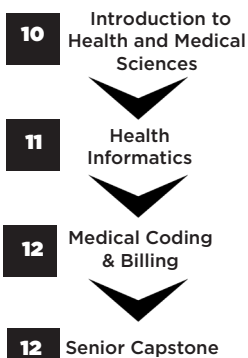
- Health Informatics and Support Services
- Diagnostic Services
- Therapeutic Services
- Biotechnology Research and Development

Health Informatics and Support Services

Do you enjoy finding solutions to questions and working with numbers and figures? Then this might be the right pathway for you.

This pathway teaches through the lens of health professionals to manage healthcare agencies by overseeing patient data, financial information, and technological applications to healthcare processes and procedures.

Pathway Sequence



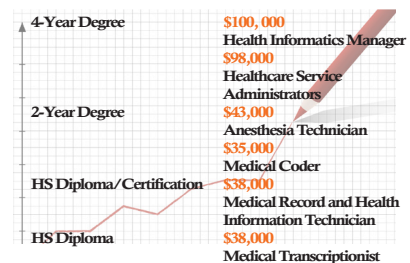
- Medical Terminology
- Computer Information Systems
- Accounting
- ROTC

Target Certification

- Health Informatics - NOCTI
- CPR/AED
- First Aid
- Electronic Health Records Specialist



Possible Industry Entry Points



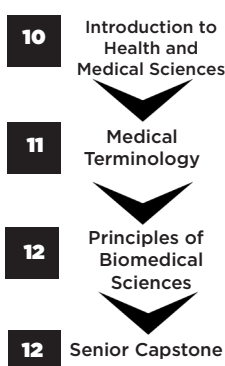
Median salaries for Virginia.
Data retrieved from - The U.S. Department of Labor
Bureau of Labor Statistics (www.BLS.gov)

Diagnostic Services

Do you enjoy solving mysteries? Did you ever wonder why certain people get sick and others do not? Are you passionate about helping others and strong enough to realize when you cannot? Then this may be the right pathway for you.

Diagnostic healthcare services help physicians diagnose and treat a wide range of healthcare problems. Health professionals use diagnostic tests to aid in the detection, diagnosis, and treatment of diseases, injuries, or other physical conditions. Diagnostic services include laboratory tests, radiology, genetic testing, diagnostic imaging, and more.

Pathway Sequence



Pathway Sequence



Suggested Electives

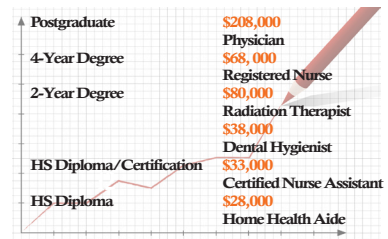
- Medical Specialty*
- *Options at NHREC
Pharmacy
Nursing Assistant
Veterinary Science
Dental Careers I & II
Occupational and Physical Therapy
Medical Assistant

Target Certification

- CPR/AED
- First Aid
- Blood Pathogens
- Biotechnology NOCTI
- National Clinical Medical Assistant
- CAN
- Small Animal Science and Technology NOCTI



Possible Industry Entry Points

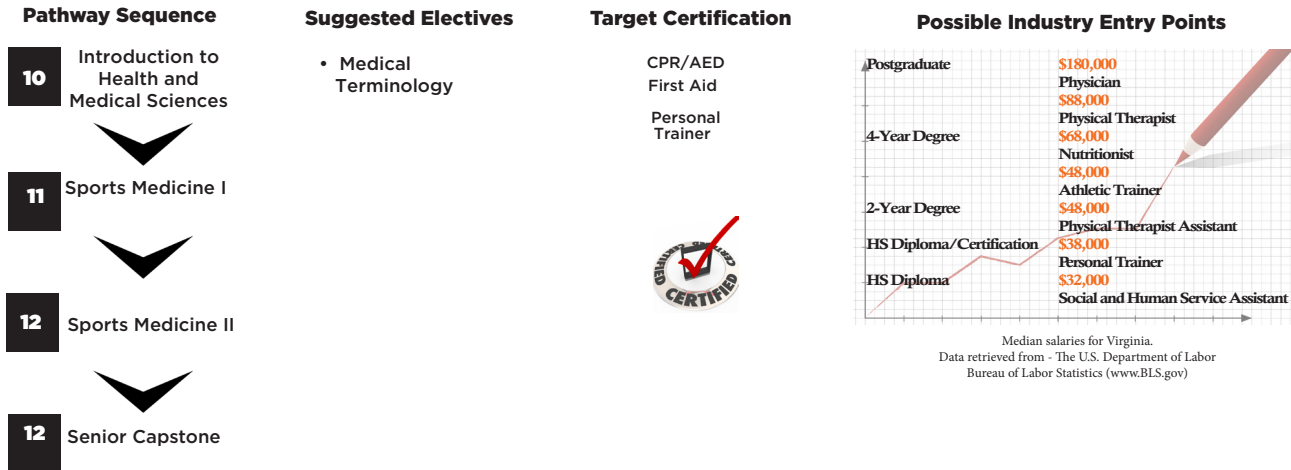


Median salaries for Virginia.
Data retrieved from - The U.S. Department of Labor
Bureau of Labor Statistics (www.BLS.gov)

Therapeutic Services

Do you enjoy helping others and want to learn the basics about how to help pediatric patients to older adults, healthy patients to health-compromised patients? Then this may be the pathway for you.

Healthcare professionals provide a variety of therapeutic services once a diagnosis has been made. The goal of these services is to provide patients with the tools needed to live a healthier and problem-free lifestyle. Therapeutic services include occupations focused primarily on changing the health status of patients over time through direct care, treatment, counseling, or health education information.



Biotechnology Research and Development

Do you enjoy finding out what really is going on behind the scenes? How are treatments found for minor ailments versus deadly diseases? Then this may be the pathway for you and you might find the next cure or medical device that can change the world.

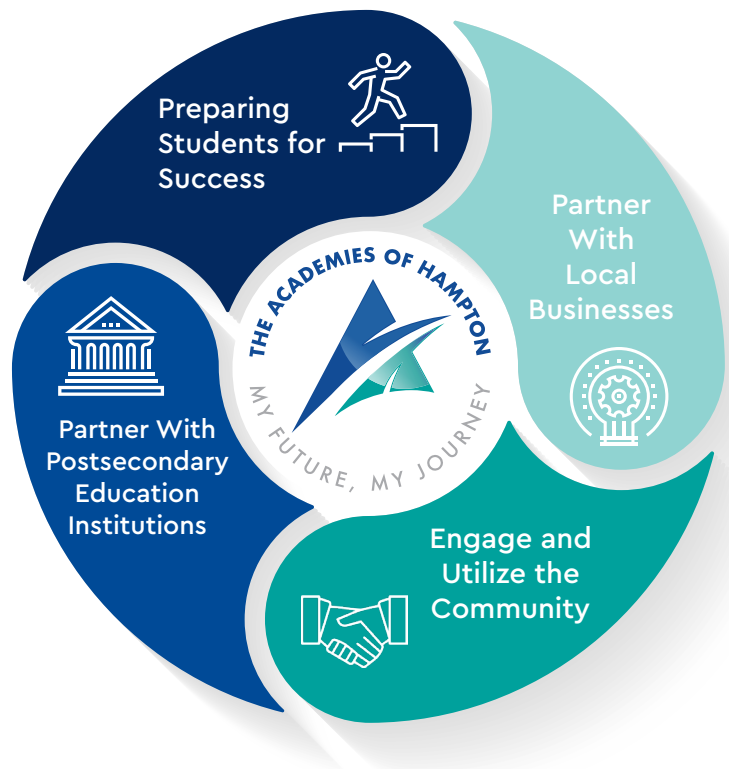
If you want to play a role in developing the latest advancements in healthcare, whether it is through science, research and development, biotechnology discoveries, or both, there is a career in this pathway waiting for you. Health professionals in biotechnology research and development focus on developing new treatments and medical technologies to improve human health and advance the overall health science field.



Community Partner Engagement Preparing the Workforce of the Future

The Academies of Hampton's foundation is built on a strong partnership among schools, families, local business leaders, postsecondary education institutions, and the community. These 'learning partners' are forging connections and making learning relevant. While our community partners support the academies in many different ways, collectively they engage students; transform teaching and learning; create authentic, exciting, and relevant learning environments that allow students to apply their learning to solve community challenges; and inspire young people to achieve greatness. Sharing their knowledge, skills, expertise, and passion with our students, our learning partners are inspiring the next generation of workers and leaders.

More importantly, our learning partners are knocking down school walls – literally and figuratively – and opening our classrooms to the community. With the community as our classroom, everyone has something to offer, and every organization can play a role in ensuring that all of our young people graduate college, career, and life ready.



Business Integration: Employers Transforming Education

Career Exploration Fairs – industry exhibitors give learners their first personal encounter with a professional in their field of interest.

Power Hour Speakers – career professionals and industry experts visit students in their school classroom or meet with small groups outside of class to talk about their careers and describe what they do, how they do it, and their need for colleagues with critical thinking and interpersonal skills.

Business and College Site Visits – organizations host groups of learners, providing opportunities for students to visit a workplace or learning environment.

Industry Tours – career professionals provide a deeper dive into the business or host a site visit, during which the students develop an enduring understanding of the industry.

Job Shadowing – a career exploration activity that allows a student to spend time observing a professional on the job, provides a fresh perspective on the professional's work, and promotes mutual reflection on why people do what they do.

Pathway/Career Mentors – business professionals meet regularly with high school students to help them successfully transition into postsecondary education, training programs, and careers.

Experts in the Classroom – real-world, subject matter experts deepen learning in the classroom and build the connection between academics and careers. Employers and industry experts actively engage with teachers to develop and write curriculum and offer classroom and extended learning instruction and enrichments.

Internships – high school juniors and seniors work at business sites to explore their interests, learn more about the industry, and decide on options they may want to pursue.

Youth Apprenticeships – high school juniors and seniors, who have decided on a career path and are looking to gain in-depth experience, participate in a comprehensive training program that combines hands-on experience with classroom education.

Teacher Externships – teachers spend time in an industry to learn about business and industry trends, to understand the skills and competencies required for successful employment, and integrate classroom learning with real-world challenges in the workplace.

Community Leadership – business and industry partners play an integral role in creating learning experiences for all academy students. They bridge the classroom experience with the real world of colleges and careers.

The International Baccalaureate (IB) Programme

Program Goals and Objectives

The International Baccalaureate (IB) Programme was founded in 1968 in Geneva, Switzerland. It is a non-profit educational programme that offers an international education that develops the intellectual, personal, emotional, and social skills needed to live, learn, and work in a rapidly globally competitive society. The program is recognized internationally for providing a rigorous academic environment that prepares students for entrance into college/university. Schools must be authorized by the IB organization to offer the program. The International Baccalaureate Programme is currently offered in 146 countries around the globe.

Hampton High School is authorized to offer the IB Diploma Program during the 11th and 12th grade year. Hampton High School also has been given the approval of the International Baccalaureate Organization to offer a Pre-IB Program to assist students in the 9th and 10th grade for successful transition to the IB Diploma Program.

The goal of the IB Diploma Program is to help schools develop students who have excellent breadth and depth of knowledge. International research has shown that there are many benefits to choosing the IB Diploma Program. Studies have shown that IB Diploma Program students are better able than their peers to cope with demanding workloads, manage their time, and meet the expectations placed on them. IB Diploma Program graduates from Hampton High School have consistently been accepted to competitive colleges and universities. During this decade, IB Diploma program graduates have attended schools such as Harvard, Princeton, Columbia, the University of Chicago, Northwestern University, New York University, Georgetown, the US Air Force Academy, the US Coast Guard Academy, the University of Virginia, the College of William and Mary, and many other respected institutions or higher learning.

Application Process

Rising 9th grade students will apply to the International Baccalaureate Programme in accordance with the guidelines outlined by HCS. All applicants that apply will be interviewed by the IB Program Coordinator. Admissions guidelines are as follows:

- I. Completion of at least Algebra I in middle school with a minimum final grade of B
- II. Preferred that students complete other high school credit courses during their middle school career, but those courses are not required for admission
- III. Minimum cumulative GPA of a 3.0
- IV. Passing scores on SOL assessments
- V. Essay submission
- VI. Teacher recommendations

All IB Diploma Program students will be expected to complete the requirements for the Advanced Studies Diploma in addition to their IB Diploma Program coursework. In addition, all IB Diploma Program students must complete an Extended Essay, participate in CAS (Creativity, Activity, and Service) hours, and complete the IB Theory of Knowledge requirements.

Degrees and Credits Awarded

Students who successfully complete all International Baccalaureate Program requirements will be eligible for the International Baccalaureate Program Diploma in addition to the HCS Advanced Studies Diploma. Students who successfully complete course requirements in IB Diploma Program courses have the potential to earn college credit in addition to their high school credits.

The Maritime Academy

Academy Pathways

- Shipbuilding and Ship Repair
- Ship Design

Do you like designing ships and working with tools and machines? Then the Maritime Academy might be the academy for you. Academy programs provide the academic and technical courses needed for successful transition to postsecondary education, careers, and registered apprenticeship opportunities in ship design and shipbuilding/repair.

Shipbuilding and Ship Repair

Do you enjoy installing, maintaining, and equipment, machinery, and electronics? Then this might be the right pathway for you.

Students will learn about the various careers and opportunities in the industry such as welding, pipefitting, coatings, rigging and machining.

Pathway Sequence



Suggested Electives

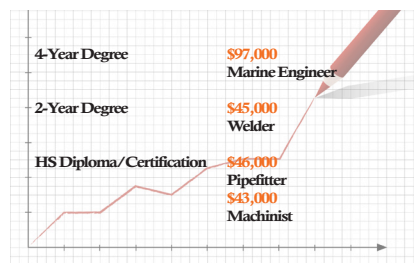
- Technical Drawing and Design
- Information Technology Fundamentals
- Production Systems

Target Certification

OSHA 10



Possible Industry Entry Points



Median salaries for Virginia.
Data retrieved from - The U.S. Department of Labor
Bureau of Labor Statistics (www.BLS.gov)

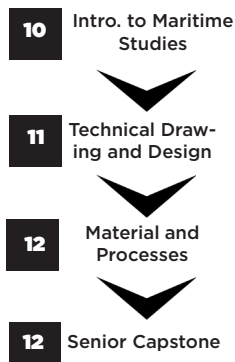
* Options at NHREC
NHREC- 8601/8602 (12th, 1yr)- Construction
NHREC- 8533/8534 (12th, 1yr)- Electrical
NHREC- 8503/8504 (12th, 1yr)- HVAC
NHREC- 8672/8673 (11th & 12th, 2yr)- Welding I & II

Ship Design

Do you enjoy building things, solving puzzles, working with tools, or designing ships and machines? Then this may be the right pathway for you.

Students will use engineering principles and problem-solving techniques along with organizational, communication, and leadership skills to design ships and their systems.

Pathway Sequence



Suggested Electives

- Information Technology Fundamentals
- Production Systems
- Introduction to Engineering Design

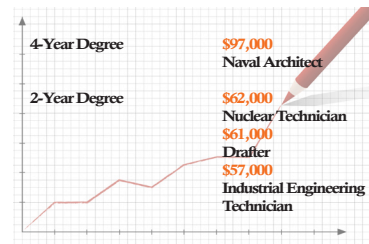
Target Certification

AutoCAD

OSHA 10



Possible Industry Entry Points



Median salaries for Virginia.
Data retrieved from - The U.S. Department of Labor
Bureau of Labor Statistics (www.BLS.gov)

Academy of Health, Human and Financial Services

Academy Pathways

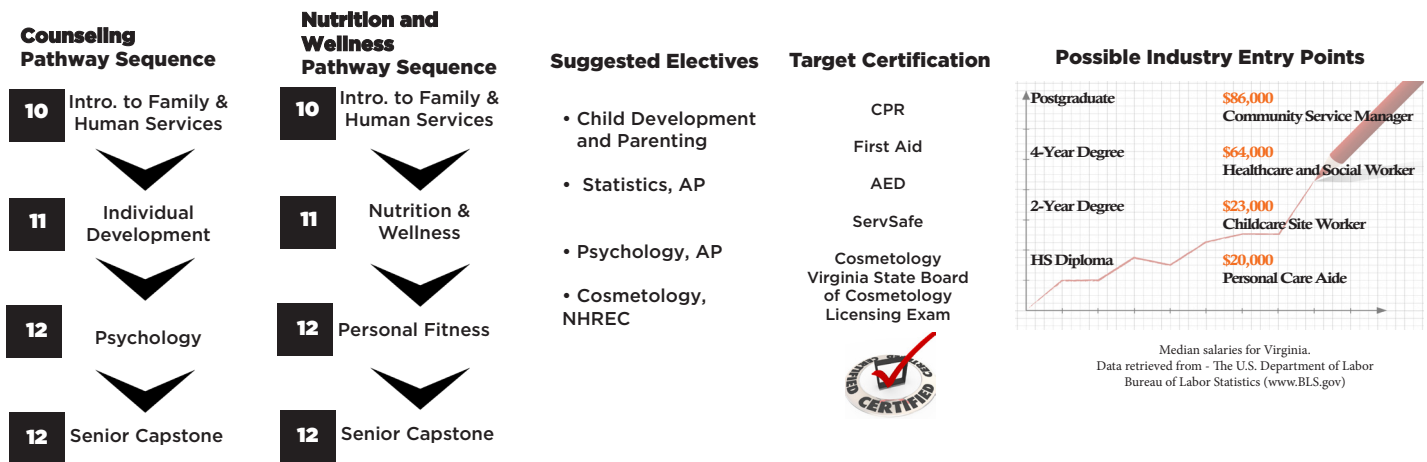
- Counseling
- Nutrition and Wellness
- Financial Services

Counseling and Nutrition and Wellness

Do you enjoy listening and helping others improve their lives? Then this might be the right pathway for you.

Do you enjoy helping others within your community achieve a higher quality of life? Then the Academy of Health, Human and Financial Services might be the right academy for you. Academy programs provide the academic and technical courses needed for successful transition to postsecondary education and careers focused on improving their community through counseling, wellness and financial education services.

Everywhere you go you hear about the demand for healthcare careers. As an advocate of healthy living, workers in the health and wellness field focus on improving the lives of others and their community through preventive care. They focus on behavioral and physical health, public policy, exercise and wellness education, medicine, or social science.



Financial Services

Do you enjoy making and learning about money? Then this might be the right pathway for you.

The financial industry offers a wide range of career opportunities that are compatible with different skills and interests. Whether you are working in commercial and investment banking, insurance, pension plans, risk management, mutual funds, e-commerce, or personal and business planning, a career in finance is essentially all about money.



Academy of Technology and Engineering

Academy Pathways

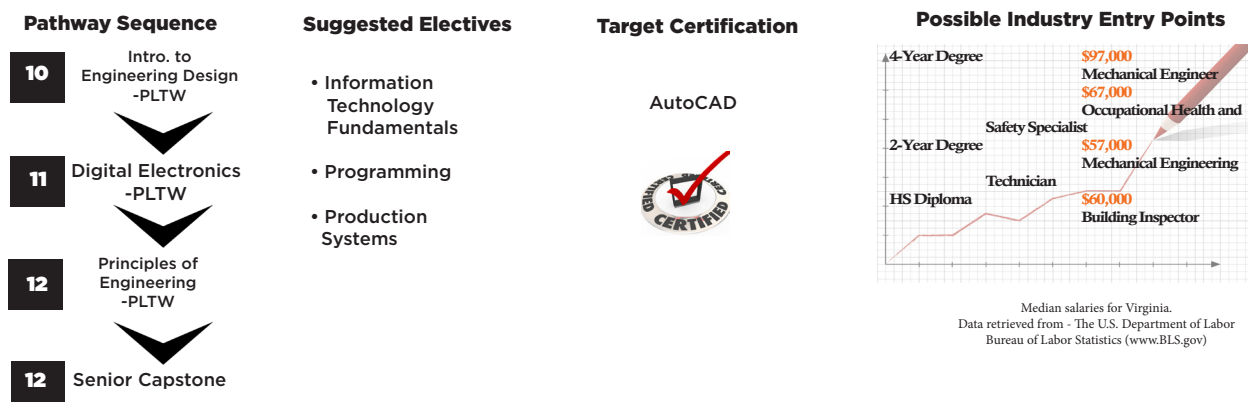
- Engineering Design and Development
- Information Technology
- Audio Engineering
- * Construction Technology

Do you enjoy building things, solving puzzles, working with tools, or designing machines? The Academy of Technology and Engineering provides the academic and technical courses needed for successful transition to postsecondary education and 21st century careers in construction technology, engineering design and development, information technology, and audio engineering.

Engineering Design and Development

Do you enjoy learning about the design production and maintenance of mechanical, telecommunications, electrical, electronics, and electromechanical products and systems? Then this might be the right pathway for you.

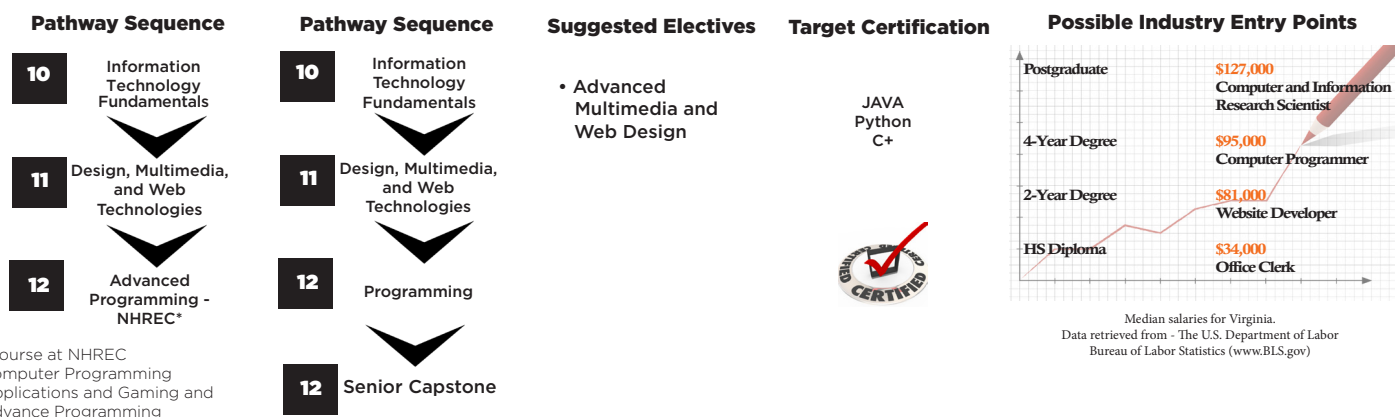
Design and development engineers create solutions to problems through research, design, and construction. Their area of expertise includes design, production, and maintenance of mechanical, telecommunication, electrical, electronic, and electromechanical products and systems.



Information Technology

Do you enjoy designing, developing, applying, implementing, supporting or managing computer-based information systems? Then this might be the right pathway for you.

Information technology specialists bring office workers the information and the applications, such as word-processing, spreadsheet, and presentation software, they rely on to do their jobs. Their roles include designing, developing, applying, implementing, supporting or managing computer-based information systems.



*Course at NHREC
Computer Programming
Applications and Gaming and
Advance Programming

Audio Engineering

Do you enjoy operating and setting up recording equipment used to capture and shape the sound of an album? Then this might be the right pathway for you.

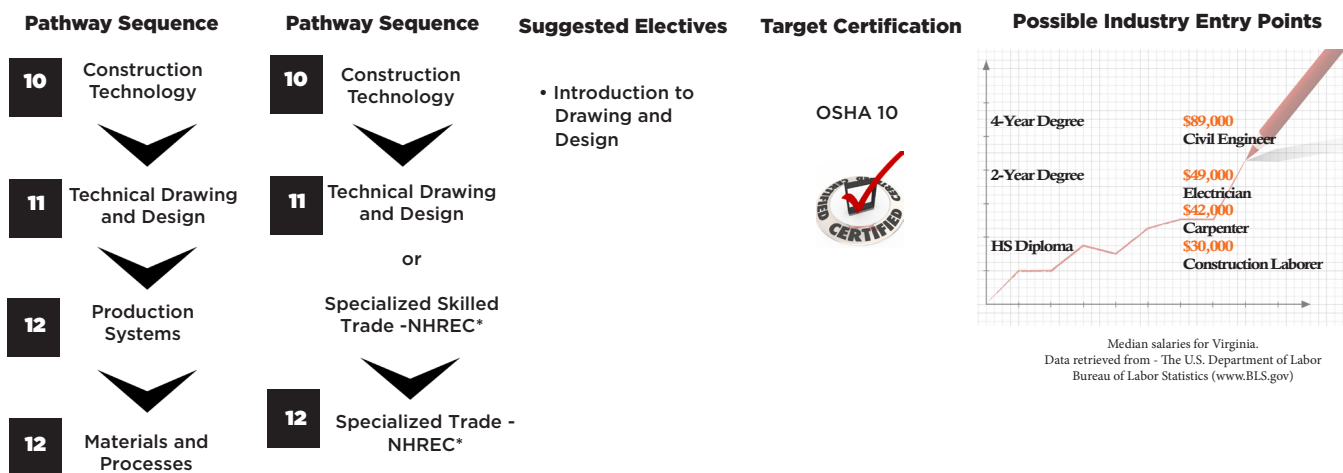
An audio engineer operates and sets up recording equipment used to capture the technical aspects of sound during the process of recording, mixing, and reproduction. Using a variety of computer software and cloud based music technology programs, they work with singers, arrangers, musicians, record producers, and artists' management to achieve the best sound possible.



Construction Technology

Do you enjoy working with tools, applying math skills, and learning basic carpentry, electrical, masonry, or plumbing skills? Then this might be the right pathway for you.

Workers in construction technology have multiple professional paths, each offering job security and excellent earning potential. Construction workers do a variety of construction-related activities during all phases of construction. Although most are generalists, many specialize in carpentry, electrical, masonry, or plumbing.



*Courses at NHREC
 NHREC- 8601/8602 (12th, 1yr)- Construction
 NHREC- 8533/8534 (12th, 1yr)- Electrical
 NHREC- 8503/8504 (12th, 1yr)- HVAC
 NHREC- 8672/8673 (11th & 12th, 2yr)- Welding I & II

Academy of On Stage: Performing Arts

Academy Pathways

- Theater Design and Technology
- Theater Performance

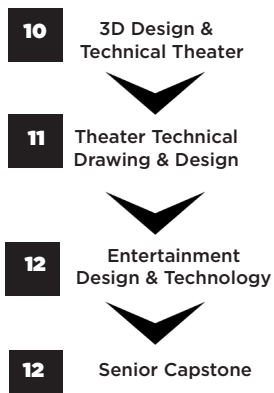
Do you enjoy being in front of an audience? Do you enjoy using your body to tell a story? Do you fantasize about an alternative persona and reality? Do you enjoy watching television and movies? Then this academy may be right for you! The On Stage: Performing Arts Academy is for students interested in being actors and actresses in a theater or set environment and for students interested in theater, set design and construction.

Theater Design and Technology

Do you enjoy bringing a space to life? Do you like to create large pieces of art? Do you enjoy using multimedia to create and tell a story? Then this pathway may be right for you!

The Theater Design & Technology pathway allows for students to receive knowledge of and responsibility for the safe and ethical use of facilities, materials, methods, and technologies.

Pathway Sequence



Suggested Electives

- Construction Technology
- Computer Graphic Design
- Drawing and Painting Fundamentals

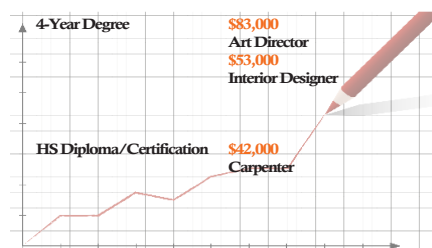
Target Certification

Technical Theater Assessment

OSHA 10



Possible Industry Entry Points



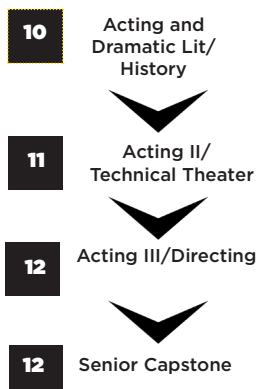
Median salaries for Virginia.
Data retrieved from - The U.S. Department of Labor
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Theater Performance

Do you enjoy being in front of people and making them laugh? Do you like imitating others? Do you enjoy telling stories with your expressions and body? Then this pathway may be right for you.

The Theater Performance pathway allows for students to acquire the technical and artistic knowledge and skills necessary for expressive dramatic performance.

Pathway Sequence



Suggested Electives

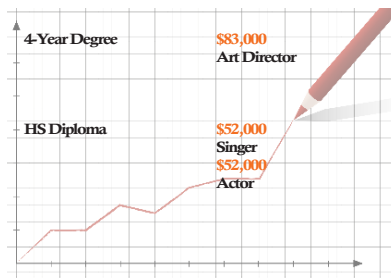
- Mixed Choir
- Acapella Choir
- Small Vocal Ensemble
- World Dance

Target Certification

Technical Theater Assessment



Possible Industry Entry Points



Median salaries for Virginia.
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Bureau of Labor Statistics (www.BLS.gov)

COMMUNITY-CONNECTED LEARNING

Career Immersion

Internship - Cooperative Work Experience - Youth
Apprenticeship - Dual Credit - Industry Certifications
Capstone Project

GRADE

12th

Career Exploration and Immersion

Summer Internship - Youth Apprenticeship
Job Shadow - Dual Credit - Industry Certifications
Challenged-based Learning Experiences

GRADE

11th

Industry and Career Exploration

Site Visits - Guest Speakers - Summer Extended
Learning Workplace Experience
Youth Pre-Apprenticeship
Project-based Learning Experiences

GRADE

10th

Self, Career, and Industry Exploration

Summer Bridge - Success 101 - Site Visits
(Business and College) - Guest Speakers
Career Exploratory Event
Project-based Learning Experiences

GRADE

9th



Academy of Teaching, Education, and Learning

Academy Pathways

- Child Development
- Education and Training

Do you enjoy teaching and tutoring your peers? Does learning new things excite you? Do you believe knowledge is power? Then this academy may be right for you. The Academy of Teaching, Education, and Learning is for students interested in developing the academic, social, emotional, and physical development of young people.

Child Development

Do you enjoy interacting with your younger family members? Do you enjoy taking care of young children? Then this pathway may be right for you.

A career in childhood development ranges from working as a teacher for children under the age of five, a teacher's assistant, to a school counselor. People working in child development typically work to promote language, social and learning skills in children, analyze safe environments for children, create healthy places that support well child development, and promote physical, cognitive, language, social, and emotional development in children from birth to adulthood.

Pathway Sequence



Suggested Electives

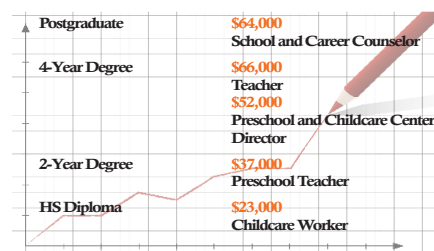
- Lifespan Development
- Early Childhood Development
- Psychology

Target Certification

Early Childhood Development & Services Assessment
Early Childhood Education & Care—Advanced Assessment



Possible Industry Entry Points



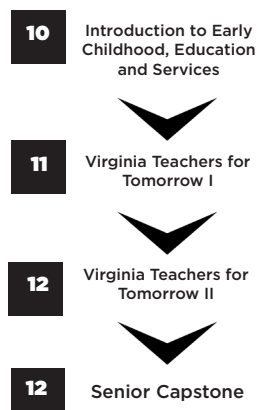
Median salaries for Virginia.
Data retrieved from - The U.S. Department of Labor
Bureau of Labor Statistics (www.BLS.gov)

Education and Training

Do you enjoy teaching and tutoring your classmates? Do you like being in school? Do you like to solve problems and work in teams? Then this pathway may be right for you!

Careers that involve teaching and education include work in childcare centers, youth service organizations, preschools, K-12 schools, and adult education. This pathway lays the foundation for those interested in teaching; the course content covers the components of instruction, teaching strategies, types of assessments, student learning, and more.

Pathway Sequence



Suggested Electives

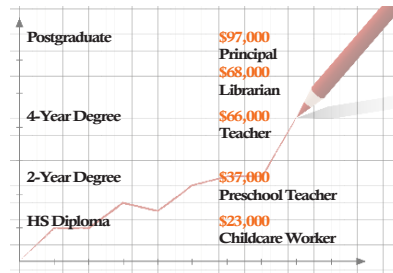
- Lifespan Development
- Early Childhood Development
- Psychology

Target Certification

Praxis I



Possible Industry Entry Points



Median salaries for Virginia.
Data retrieved from - The U.S. Department of Labor
Bureau of Labor Statistics (www.BLS.gov)

Academy of Architecture, Environment, and Engineering - Governor's STEM

Academy Pathways

- Architectural Engineering
- Construction Design
- Environmental Studies

Do you enjoy creating structures out of LEGOs®? Are you constantly analyzing how structures are made, or, do you enjoy going to the zoo or park? Then this may be the right academy for you! The Academy of Architecture, Environment, and Engineering - Governor's STEM is for students interested in the designing and developing of structures within a space. In addition, this academy gives experiences to students that are passionate about the Earth's resources and how to analyze, manage, and protect them.

Architectural Engineering

Do you enjoy drawing buildings, or building with LEGOs® and K'NEX®? Then this might be the right pathway for you.

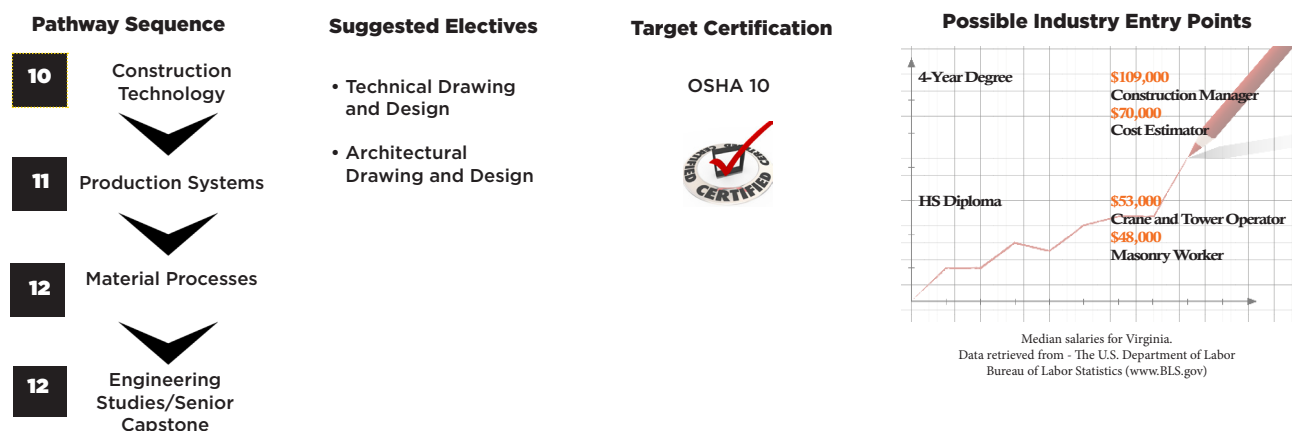
An architectural engineer helps create efficient structures and building systems. Engineering and design professionals apply design principles appropriate to the task at hand. They may specialize in structural, mechanical, electrical, plumbing, and heating, ventilating, and air conditioning. Their skill set allows them to draw, render, and model their design.



Construction Design

Do you enjoy building with LEGOs® and K'NEX®? Then this might be the right pathway for you.

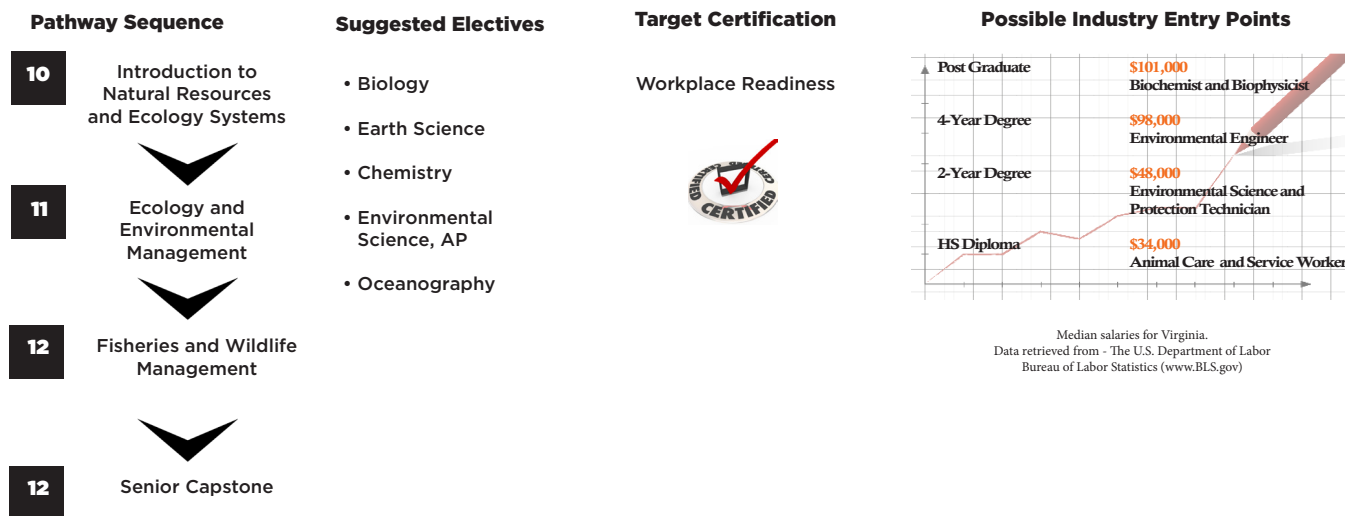
In the Construction Design pathway students are prepared to create various types of infrastructures and understand materials and their processes, in addition to illustrating the many specialized areas within construction.



Environmental Studies

Do you want to play a role in protecting the Earth, the air we breath, and the water we drink? Are you interested in the issue of climate and global warming? Do you appreciate and want to preserve the natural wonders of the world? Then this pathway may be right for you.

Environmental scientists and others working in the field explore the relationships between people and their environment. Whether they are cleaning up contaminated areas, making policy recommendations, working with industry to reduce pollution and waste, creating policy and strategies to combat environmental issues, investigating environmental or health problems, they use their knowledge to protect the environment and human health. They may focus their attention on ecosystem awareness; water and air quality issues; managing hazardous materials; or managing forests, wetlands, fisheries, and wildlife.



The Academies of Hampton Brand Promise

In my academy we are passionate about learning. Each academy is a family that helps all students own their education. This journey builds a tradition of trust and accountability. Fun, engaging, real-world experiences in and out of the classroom build our confidence and prepare us for the future.



Academy of Entrepreneurship and Information Design

Academy Pathways

- Entrepreneurship and Marketing
- World Banking and Finance
- Information Design

The Academy of Entrepreneurship and Information Design is for students interested in creating their own business and managing its finances and marketing. In addition, this academy gives experiences for students that are interested in website development, which includes coding and website visuals.

Entrepreneurship and Marketing

Do you have “big ideas”? Are you a creative thinker who wants to improve life? Then this pathway may be right for you.

Entrepreneurial and marketing careers are available in all business and industries. Making socioeconomic decisions and producing goods and services for consumption are key factors in successful entrepreneurship and marketing. Career opportunities include marketing communications, marketing management, marketing research, merchandising, and professional sales. From product marketing to starting a new business, these careers appeal to self-starters who can manage multiple tasks.

Pathway Sequence	Suggested Electives	Target Certification
10 Marketing I	• Design, Multimedia and Web Technologies	Accounting, Basic Assessment
11 Entrepreneurship	• Computer Information Systems	Customer Service and Sales
12 Accounting	• Business Law	Fundamental Marketing Concepts
12 Senior Capstone	• Business Management	Concepts of Entrepreneurship and Management



Possible Industry Entry Points



Median salaries for Virginia.
Data retrieved from - The U.S. Department of Labor
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World Banking and Finance

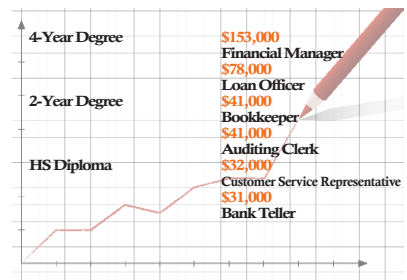
Do you enjoy handling money? Are you always thinking of ways to make your money grow and last longer? Then this may be the right pathway for you.

Sound financial systems are the foundation for economic growth and development in neighborhoods, communities, and countries. Workers in this industry understand banking and financial industries, transfer and growth of money in the financial services system, and the shared prosperity of financial stability. Career opportunities include corporate finance, commercial banking, investment banking, hedge funds, private equity, venture capital, financial planning, insurance, and public accounting.

Pathway Sequence	Suggested Electives	Target Certification
10 Computer Information Systems	• Business Management	Accounting, Basic Assessment
11 Accounting	• Advanced Computer Information Systems	Accounting, Advanced Assessment
12 Accounting, Advanced		Business Financial Management Assessment
12 Engineering Studies/Senior Capstone		



Possible Industry Entry Points

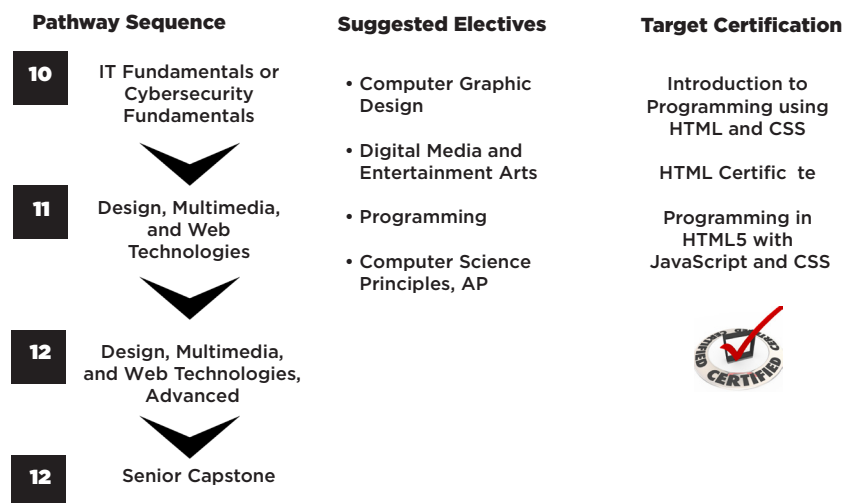


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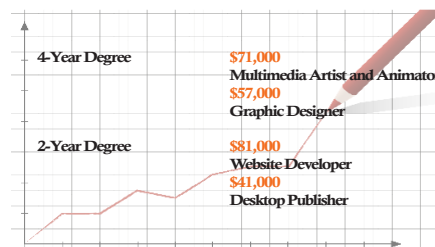
Information Design

Do you enjoy creating interactive media? Then this may be the right pathway for you.

Job opportunities continue to grow for web-developers, graphic designers, communications professionals and other specialists in fields that rely on visual data. Information design specialists use their creative skills and technical abilities to design and build user-friendly, visually pleasing graphics, communication tools, social media, and websites. Designing and creating these tools requires a blend of artistic talent, technical knowledge, business savvy and people skills.



Possible Industry Entry Points



Median salaries for Virginia.
Data retrieved from - The U.S. Department of Labor
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Bethel High School



Hampton High School



Kecoughtan High School



Phoebus High School

Academy of Cybersecurity, Engineering, and Robotics

Academy Pathways

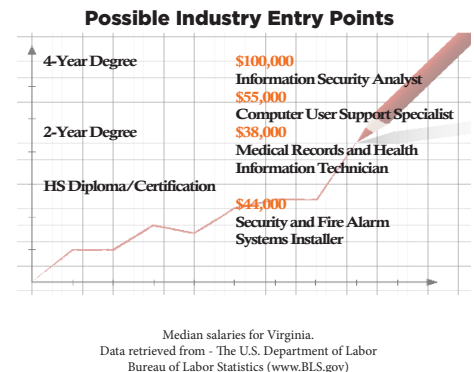
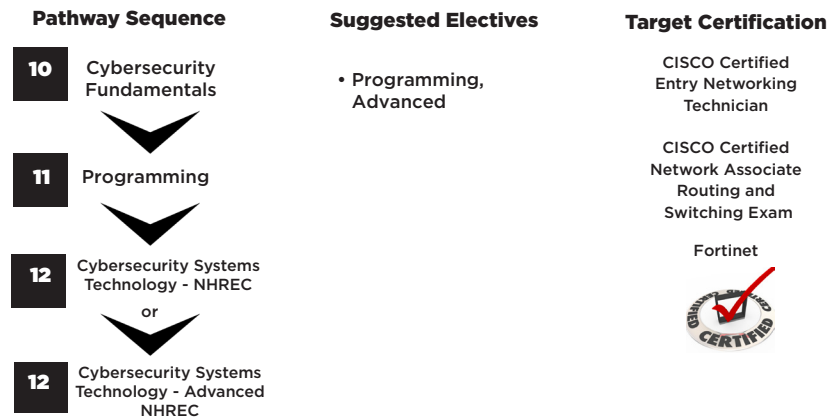
- Cybersecurity Systems Technology
- Cybersecurity Software Operations
- Engineering and Robotics
- Manufacturing

The Academy of Cybersecurity, Engineering, and Robotics is a small learning community for students interested in everything from cars, smartphones, thermostats and gaming consoles, and cybersecurity.

Cybersecurity Systems Technology

Do you dream of becoming a hardware designer at Apple, an aerospace technician at NASA, or a cybersecurity sleuth? Then this may be the right pathway for you.

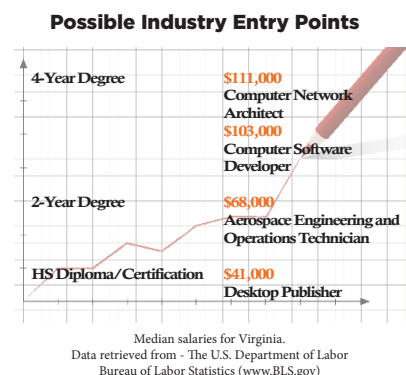
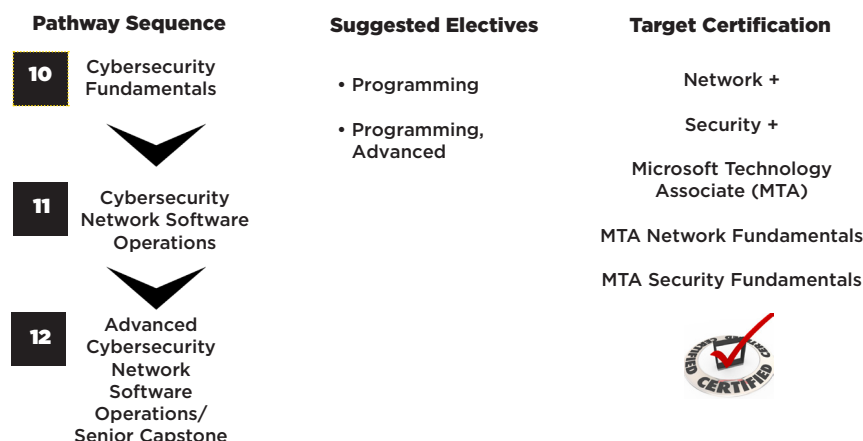
Once a specialty only associated with government agencies and defense contractors, cybersecurity now plays an integral role in most industries. Cybersecurity professionals protect valuable information from cyber breaches in industries such as health care, finance, manufacturing, hospitality, and retail. Work in this field includes programming and protecting computer hardware, software, and operating systems, assessing cybersecurity-related threats, and developing mitigation techniques.



Cybersecurity Software Operations

Do you enjoy learning about mitigating the risk from malware, hackers, trackers, cyber criminals and all online threats? Then this might be the right pathway for you.

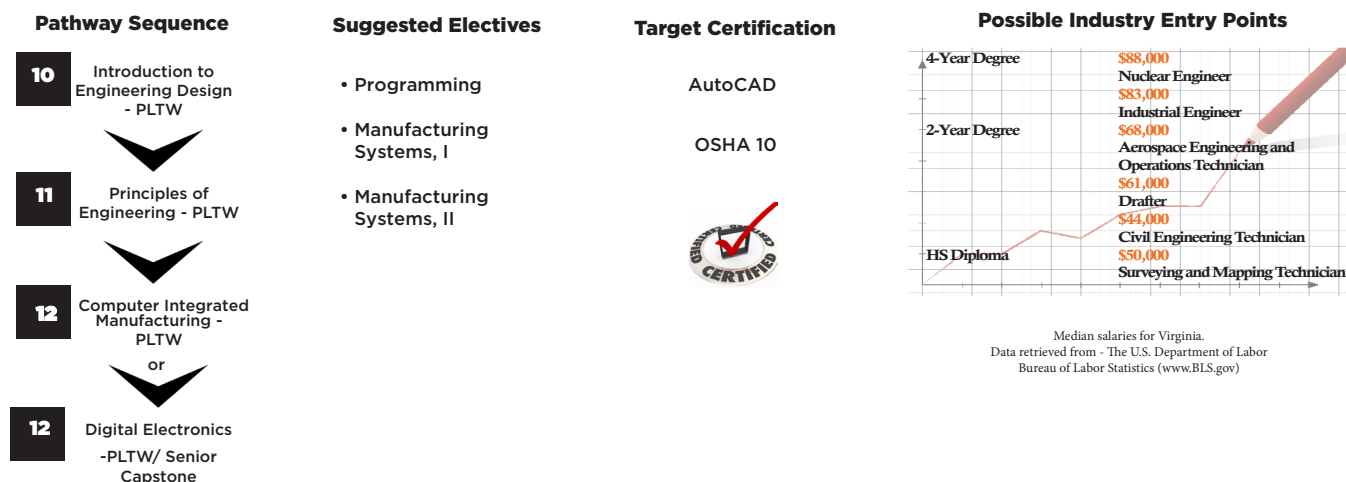
Specialists in cybersecurity operations monitor, analyze, and detect cyber events and incidents within information systems and network technologies. Cybersecurity operational service providers focus on mitigating the risk from malware, hackers, trackers, cyber criminals and all online threats.



Engineering and Robotics

Would you enjoy building robots with motors and sensors, then programming these robots to perform tasks and respond to their environment? Do you enjoy learning about the design, production, and maintenance of mechanical and electrical products and systems? Then this might be the right pathway for you.

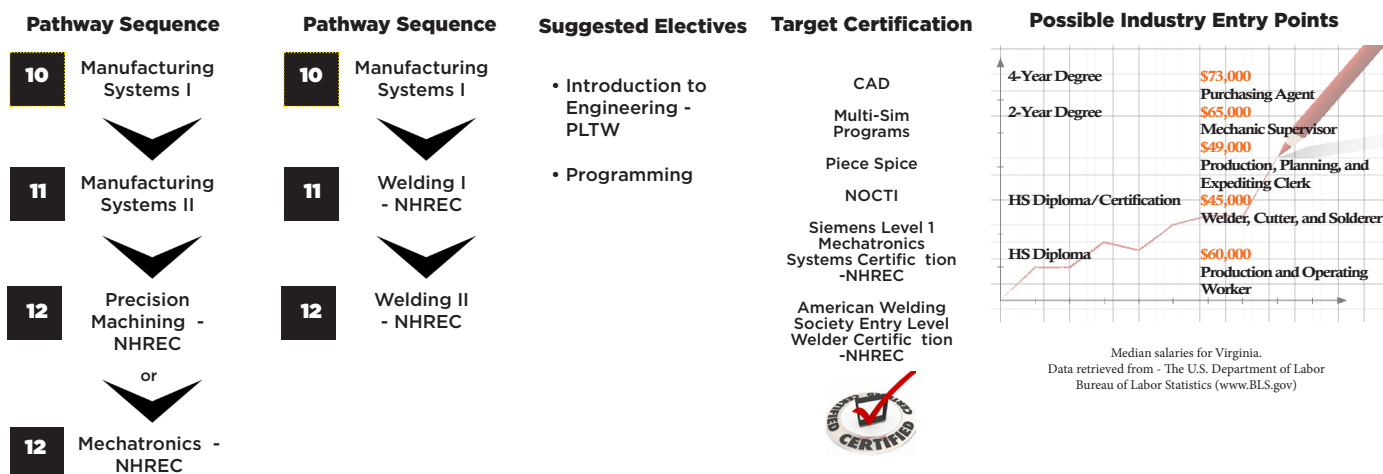
Robotics engineers may work in the agricultural, military, medical, and manufacturing industries, developing new uses for robots, designing improved robots for existing systems, or repairing and maintaining industrial robots.



Manufacturing

Do you enjoy learning hands-on mastery of virtually every aspect of modern-day production and manufacturing? Do you want to learn about basic programming, problem solving, processes and systems related to robotics? Then this might be the right pathway for you.

Without manufacturing and production, there would be no products to market or sell. Manufacturing and production is the process of making and producing the food we eat, the books we read, the clothes we wear, the components for the computers we use, and the technologies that make our cars, appliances, and cellphones work.



Academy of Hospitality and Tourism

Academy Pathways

- Travel and Tourism
- Culinary Arts

Do you like hosting parties and events? Do you like helping people enjoy themselves when they're out and about? Then this may be the right academy for you. The Academy of Hospitality and Tourism is for students interested in hotel administration, restaurant management, culinary arts, event planning, and travel and tourism.

Travel and Tourism

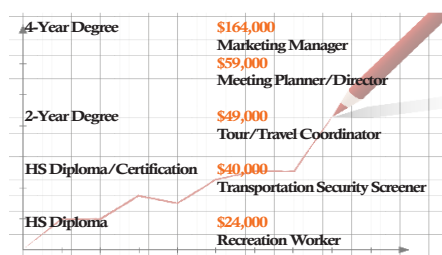
Do you enjoy learning about worldwide travel destinations, cruise operations, business travel, planning an event, tour operations, marketing and sustainable tourism? Then this might be the right pathway for you.

Hospitality and tourism is all about the food, accommodations, and experiences. It is all about tourists, traveling, attractions, and customer service. Travel and tourism careers include creating personalized experiences to worldwide travel destinations, coordinating cruise operations, managing business travel, planning an event, organizing tour operations, and marketing and sustaining tourism.

Pathway Sequence	Suggested Electives	Target Certification
10 Introduction to Hospitality, Tourism, and Recreation	• Introduction to Marketing	Customer Service and Sales Certification Assessment
11 Hospitality, Tourism, and Recreation I	• Marketing	Travel and Tourism Assessment
	• Marketing, Advanced	Certified Hospitality and Tourism Management Professional Examination
12 Hospitality, Tourism, and Recreation II	• Travel and Tourism Marketing and Sales	The Virginia Destination Professional certification



Possible Industry Entry Points



Median salaries for Virginia.
Data retrieved from - The U.S. Department of Labor
Bureau of Labor Statistics (www.BLS.gov)

Culinary Arts

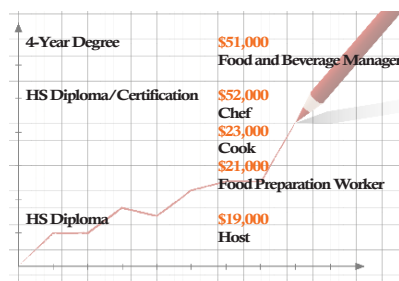
Do you enjoy nutrition, culinary arts, food science, and business management? Then this might be the right pathway for you.

Food is the universal language. Throughout history, every society and all cultures have embraced the ability to uniquely contribute to the variety of culinary processes, creation and preparation of expressive recipes, and the presentation of edible works of art.

Pathway Sequence	Suggested Electives	Target Certification
10 Intro. Culinary Arts	• Introduction to Marketing	Food Service Management Professional Certification
	• Marketing	ServSafe
11 Culinary Arts I (Double Block)	• Marketing, Advanced	ProStart
		ACF Culinary Arts CPR/First Aid
12 Culinary Arts II/ Senior Capstone (Double Block)		NRF - Customer Service and Sales



Possible Industry Entry Points



Median salaries for Virginia.
Data retrieved from - The U.S. Department of Labor
Bureau of Labor Statistics (www.BLS.gov)

Academy of Digital Video Production

Academy Pathways

- Television and Media Production
- Video Media Production

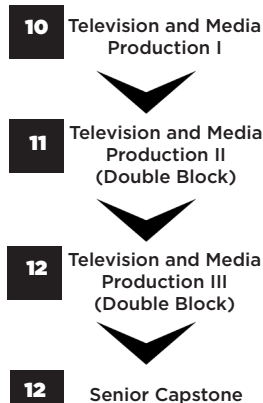
Do you enjoy designing projects such as video slideshows, animated videos, video commercials with voice-overs, music videos, Garage Band music beats, smartphone-ready videos, and mobile websites? Then this may be the right academy for you. The Academy of Digital Video Production is for students interested in creating hands-on video and audio animated digital projects.

Television and Media Production

Do you enjoy using your creativity and digital design skills related to broadcast and video production to the next level in an environment that encourages life-long learning, teamwork, flexibility, and the ability to meet deadlines? Then this might be the right pathway for you.

If you are serious about working in the entertainment world, you need education, training, and experiences in media production. While you may aspire to be a producer or director, there are a number of television and media production roles you may play for, including film and video editor, camera operator, talent scout, set designer, sound engineer, screenwriter, writer, and broadcaster.

Pathway Sequence



Suggested Electives

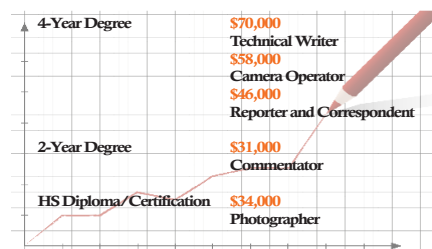
- Digital Media and Entertainment Arts
- Communication Systems
- Digital Visualization Journalism

Target Certification

Adobe Certified Associate



Possible Industry Entry Points



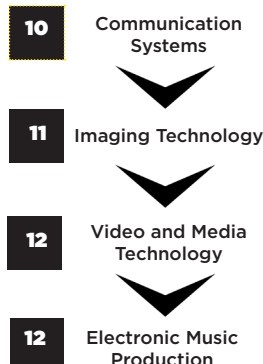
Median salaries for Virginia.
Data retrieved from - The U.S. Department of Labor
Bureau of Labor Statistics (www.BLS.gov)

Video Media Production

Do you enjoy learning and participating in all aspects of video production: editing, camera work, script-writing, storyboarding, producing, and directing using the school's television studio? Then this might be the right pathway for you.

The behind-the-scenes workers are as important to broadcast and video production as the actors and journalists in front of the camera. Using video equipment and associated computer programs allows digital video production workers to create factual and fictional audio visual productions.

Pathway Sequence



Suggested Electives

- 3D Computer Animation, I
- 3D Computer Animation, II
- Graphic Imaging Technology I
- Marketing

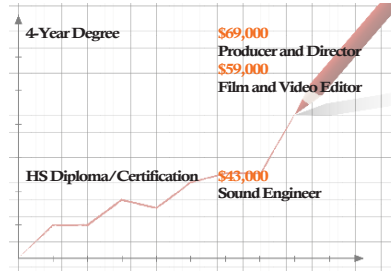
Target Certification

Adobe Premiere Pro

3D Visualization and Animation



Possible Industry Entry Points



Median salaries for Virginia.
Data retrieved from - The U.S. Department of Labor
Bureau of Labor Statistics (www.BLS.gov)

Academy of Advanced College Experience (ACE)

Program Goals and Objectives

Enrollment in the Academy of Advanced College Experience (ACE) provides an opportunity for qualified high school students to enhance their education by enrolling early in college courses. This allows students to progress toward their next academic goal without having to wait until high school graduation. The innovative approach is designed around the idea that academic rigor, combined with the opportunity to save time and money toward an associate degree, are powerful motivators for students to work hard and rise to new intellectual challenges.

Application Process

Rising 9th grade students will apply to ACE in accordance with the guidelines outlined by HCS. Panel interviews will be required by all applicants. Admissions requirements are as follows:

- I. Completion of Algebra I in middle school with a minimum final grade of B
- II. Minimum cumulative 3.0 GPA
- III. Passing scores on SOL math and reading tests
- IV. Essay submission
- V. Letters of recommendation (2)
- VI. Recommendation of the selection committee

Once admitted into ACE, students will pursue the Advanced Studies Diploma course of study. During the sophomore year, students will take the Virginia Placement Test (VPT), which is required by Thomas Nelson Community College for dual enrollment placement.

General Course Curriculum

Students will take all courses required for an Advanced Studies Diploma. Where appropriate, dual enrollment courses will replace a traditional HCS course. Below is a general overview of the core courses students will need to take in the academy.

	9th Grade	10th Grade	11th Grade	12th Grade
English	English 9 or Honors	English 10 Honors	DE English	DE English
Math	Geometry (or higher)	Algebra II (or Higher)	DE Math	DE Math
History	World History I (or higher)	World History II (or higher)	DE History	DE Political Science
Science	Biology	Chemistry	DE Science	DE Science

Students will also take a College Success Skills (SDV 100) course, as well as additional dual enrollment courses in health and physical education, social science, and humanities during their junior and senior years. Some students will attend college courses during the summer between their sophomore and junior year. The number of courses required varies and is dictated by the degree being sought.

Degrees and Credits Awarded

The ACE students will have two Associate of Science (A.S.) degree options. The Associate of Science - Social Science degree is designed for students who wish to complete a bachelor's degree in the social sciences. Students will earn a minimum of 61 credit hours. The Associate of Science - Science degree focuses on physical or natural science, and is designed for students interested in a pre-professional or scientific program. Students will earn a minimum of 60 credit hours.

Pathway leads to Virginia Early College Scholars Program - See high school counselor for additional information.

CONTINUING THE CONVERSATION AT HOME

For Parents and Families

Career Exploratory Question Ideas

If you didn't have to go to school, what would you do during the day that interests you?
What is it about this interest that you enjoy?

If you had to select a career today, what would you do?
What is it about this career?

Who is someone you admire?
What is it about this person that is appealing to you?
What traits of this person would you like to emulate?

Career Exploratory Activity - Twenty Statement Career Test and Conversation

1. Give your young person a piece of paper and set a timer for five minutes. Ask your young person to write as many careers they can think of until the timer goes off - you should join in.
2. After the timer ends, ask your young person to look at each career and to put **yes** by any careers that interest him or her, and to put **no** by any professions that do not interest him or her - you should do the same.
3. Now have your young person identify the top 3 careers he or she would like to become and **do not** want to become - of course, you do this part, too.

You can add them below:

"When I grow up I want to become..." **"When I grow up I DO NOT want to become..."**

- | | |
|----|----|
| 1. | 1. |
| 2. | 2. |
| 3. | 3. |

4. Now deepen this activity by asking the following questions around the careers highlighted above - remember to take turns answering.

"When I grow up I want to become..."

What is it about this career that you like?
Where did you learn about this career?
How would you feel if you secured this career?

"When I grow up I DO NOT want to become..."

What is it about this career that you do not like?
Where did you learn about this career?
How would you feel if you secured this career?

MOST IMPORTANT QUESTION:

**HOW CAN I SUPPORT
YOU TOWARD
ACHIEVING YOUR
CAREER GOAL(S)**

Now turn to **page 60**, and highlight the academies and pathways that best align with your young person's career goals. Also, cross out the academies and pathways that do not.

Course Descriptions

3D COMPUTER ANIMATION LEVEL I (9180)

- This course introduces fundamental 3D theories and principles of computer modeling and animation
- Use current industry standard software to gain working knowledge of computer animation processes
- Commitment to rigorous completion of quality animation work
- Explore concepts of 3D animation using the computer
- Learn the basics of modeling, to include textures, lighting, basic animation skills, and rendering objects
- Develop 3D models/characters and learn to create virtual environments in which these models move
- Develop storyboards and analyze story lines
- Develop vocabulary skills and analyze artwork
- Create a body of work for a digital portfolio

3D COMPUTER ANIMATION LEVEL II (9181)

Prerequisite: Successful completion of 3D Computer Animation – Level I

- This course builds on the digital modeling and animation concepts learned in the Level I course.
- Use current industry standard software to gain a more advanced knowledge of 3D modeling and simulation within virtual environments
- Focus on developing expertise using more advanced tools and techniques
- Apply basic concepts learned in the Level I course

3D Design (9120)

One semester class (1/2 credit)

- Hands-on art class that investigates the three-dimensional nature of art
- Learn how the elements and principles of art are used to create art
- Develop foundational skills using a variety of three-dimensional media such as clay, wire, wood, textiles, etc.
- Develop imagination and problem-solving skills
- Expand vocabulary and writing skills through analyzing and critiquing artwork
- Explore art history and aesthetics in three-dimensional artwork

ACAPPELLA CHOIR (9283)

Prerequisite: Middle school chorus or approval of Choral Director

- After-school rehearsals are required
- Performance attendance is required

ACCOUNTING (6320)

- Learn generally accepted accounting principles and the need for standard financial procedures
- Learn financial management and records management for business and home
- Learn to use accounting software and spreadsheets
- Learn to evaluate accounting records

ACCOUNTING, ADVANCED (6321)

Prerequisite: Accounting

- Learn to automate and interpret payroll, inventory, accounts payable, and accounts receivable
- Learn management of financial records through business activities, partnership and corporate accounting, general ledger, and cost accounting

ACTING I (1410)

One semester course (1/2 credit)

- Performance class
- The use of voice and body in stage projection

ACTING II (1430)

Prerequisite: Acting I

One semester course (1/2 credit)

- Act in several one-act plays

ACTING III/DIRECTING (1440)

Prerequisite: Acting II

- Expand knowledge of Theater Arts through expression and performance
- Investigate dramatic literature, theatrical styles, and historical periods
- Study and respond to a variety of theater experiences that will refine their communicative, collaborative, analytical, interpretive, and problem-solving skills
- Refine teamwork and leadership skills through production performances

ACTING AND DRAMATIC LITERATURE / HISTORY (1420 & 1425)

- Acting: The use of voice and body in stage projection (one-semester)
- Dramatic Literature & History: Investigate dramatic literature, theatrical styles, and historical periods (one-semester)

ARCHITECTURAL DRAWING AND DESIGN (8437)

Prerequisite: Technical Drawing

- Continue Technical Drawing skill development
- Learn principles of architectural drafting
- Draw site plans, foundations, and house plans
- Draw elevations and sections
- Draw electrical, heating, ventilation and air conditioning (HVAC), plumbing, and mechanical plans

ARCHITECTURAL DRAWING AND DESIGN, ADVANCED (8438)

Prerequisites: Technical Drawing/Design AND Architectural Drawing Design

- Further develop design skills needed for building design
- Learn to use Architectural CADD software
- Increase understanding of drawing techniques learned in Architectural Drawing and Design
- Research building design-related fields and the role of advanced drawing and design processes in the construction industry
- Apply the design process, analyze design solutions, construct physical models, and create multimedia presentations of finished design
- Students must complete a work portfolio based on a graphic project the construction industry

BIOLOGY (4310)

Levels: 2, 3-Honors

- Biology is the science which deals with life
- Topics include specific organisms to the complex interrelationship of all living organisms, including human beings

BUSINESS LAW (6131)

- Students examine the foundations of the American legal system and learn the rights and responsibilities of citizens
- Prepare for employment by making a resume and job application

BUSINESS LAW (6132)

One semester class (1/2 credit)

- Examine the foundations of the American legal system and learn the rights and responsibilities of citizens
- Gain practical knowledge and life skills by exploring economic and social concepts related to laws governing business and individuals
- Focus areas include contracts, consumer protection, criminal law, tort law, international law, family/domestic law, employment law, cyber law, and careers in the legal profession

BUSINESS MANAGEMENT (6135)

- Study basic management concepts and leadership styles as they explore business ownership, planning, operations, marketing, finance, economics, communications, the global marketplace, and human relations centered around the transportation industry
- Quality concepts, project management, problem solving, and ethical decision making are an integral part of the course

BUSINESS MANAGEMENT (6136)

One semester class (1/2 credit)

- Students study basic management concepts and leadership styles as they explore business ownership, planning, operations, marketing, finance, economics, communications, the global marketplace, and human relations
- Quality concepts, project management, problem solving, and ethical decision-making are an integral part of the course

CHEMISTRY (4410)

Level: 3-Honors

Prerequisite: 1 credit of Algebra I Co-requisite: Algebra II or AFDA

- Chemistry is the science which deals with the composition of matter including the many physical and chemical changes which matter undergoes
- Experiments concerning such topics as the gas laws, acids, bases, solutions, and structure of matter

CHEMISTRY II: FORENSIC SCIENCE (4420)

Level 3-Honors

Prerequisite: 1 credit of Biology and 1 credit of Chemistry

- Assess multidisciplinary laboratory course and biology, mathematics, statistics, psychology, communications, and law
- Gain an appreciation of scientific concepts that are applied to real world situations
- Learn the role of chemical reactions and techniques used to analyze evidence
- Focus on problem solving and synthesizing evidence-based conclusions

CHILD DEVELOPMENT AND PARENTING (8232)

- Assess the impact of the role of parenting in society
- Learn to take responsibility for individual growth within the parenting role
- Prepare for healthy emotional and physical beginning for parent and child

Cisco Networking Cybersecurity - NHREC

- One-year rigorous program taught by a CISCO certified instructor in a highly technical networking lab
- Computer ethics, identifying security threats, and security defense will be covered in the 1st semester
- Configuring and troubleshooting routers, switches, and network devices will be covered in the 2nd semester

COMMUNICATIONS SYSTEMS (8415)

- Learn a variety of communication technologies such as photography, global positioning systems, geographic information systems, and computer aided design
- Study layout and design, composition, and finishing operations
- Learn basic photographic principles
- Learn to use digital and film cameras to create a variety of photographic images
- Use software to manipulate digital photographs
- Learn basic audio, video, video game design and animation principles
- Learn basic CAD principles

COMPUTER GRAPHIC DESIGN (9181)

- Create art through technology and appropriate software
- Learn how technology and traditional artwork can work together to create art
- Apply the design principles to artwork created using computer graphic software
- Explore concepts of two-dimensional art and design
- Create projects emphasizing print media and real life applications in graphic art and illustration design field

COMPUTER INFORMATION SYSTEMS (6612)

- Earn industry certification and use for SOL verified credit when student passes industry test
- Learn computer terminology and develop proficiency in using spreadsheet, word processing, database management, and graphics software
- Explore applications using presentation and desktop publishing software
- Learn the fundamentals of Windows and programming concepts
- Learn many areas of MS Office

COMPUTER INFORMATION SYSTEMS, ADVANCED (6613)

Prerequisite: Computer Information Systems

- Earn industry certification and use for SOL verified credit when student passes industry test
- Evaluate software programs for features and functionality
- Create professional documents demonstrating principles of layout design and desktop publishing
- Use computer peripherals such as scanners, digital cameras, and video devices to produce multimedia presentations or interactive web pages

COMPUTER INTEGRATED MANUFACTURING PLTW (8442)

Level: 3-Honors

Prerequisite: PLTW Introduction to Engineering Design, PLTW Principles of Engineering, Algebra II

- Possible dual enrollment credit
- A rigorous curriculum for Pre-Engineering students equivalent to college-level coursework
- Explore industrial and mechanical engineering careers, history, practices, and concepts
- Set up and program automated machines used in industry
- Apply mathematical and scientific principles to technical problems

COMPUTER NETWORK SOFTWARE OPERATIONS (6650)

Prerequisite: Information Technology Fundamentals or Computer Information Systems

- Students will learn many aspects of computer support and network administration
- Create peer-to-peer network systems and client server networks
- Install and configure network cards and connect them to networks
- Install the operating system, set up and manage accounts, load software, and establish and implement security plans

COMPUTER NETWORK SOFTWARE OPERATIONS, ADVANCED (6651)

Prerequisite: Computer Network Software Operations

- Students will learn aspects of network administration, focusing on the management and support of network users and systems
- Topics covered include the responsibilities of computer professionals, training end users, evaluating new technology, developing system policies, troubleshooting workstations, managing network services and protocols

COMPUTER PROGRAMMING APPLICATIONS AND GAMING AND ADVANCED PROGRAMMING - NHREC

- One-year program focused on computer science and apply key programming concepts, algorithmic procedures, programming languages, and web-based applications

COMPUTER SCIENCE PRINCIPLES, AP (3185)

- May be used as 4th math credit for an Advanced Studies Diploma
- Programming methodology with concentration on problem solving and algorithm development
- Equivalent to a semester college course in Computer Science
- Study data structures and abstractions

CONSTITUTIONAL LAW

- Students learn about the foundations of the U.S. Constitution as well as study pivotal Supreme Court decisions affecting religious freedom, abortion, free speech, and judicial review

CONSTRUCTION TECHNOLOGY (8431)

- Learn basic carpentry, electrical, and mechanical skills used in the construction industry
- Learn the safe use of shop tools and equipment
- Learn basic blueprint reading
- Learn various building materials, codes, and standards related to the construction industry

CREATIVE WRITING (1171)

- Write various kinds of poetry and prose
- Develop expression of feelings and ideas
- Apply compositions skills

CREATIVE WRITING, ADVANCED (1171)

Prerequisite: Creative Writing or teacher recommendation

- Build on skills students have learned in Creative Writing
- Produce school literary magazine

CRIMINAL JUSTICE I (8702)

- Students are introduced to the legal foundations and processes, and the principles, techniques, and practices for exploring careers within the criminal justice system

CRIMINAL JUSTICE II (8703)

Prerequisite: Criminal Justice I

Double Blocked Course

- Students are introduced to the legal foundations and processes, and the principles, techniques, and practices for exploring careers within the criminal justice system, and the history of terrorism in the United States
- Students combine classroom instruction and supervised, practical experience throughout the school year

CULINARY ARTS I (8275)

Class meets every day (students earn 2 credits)

- This is the first year of a two-year occupational program designed to prepare students for food industry occupations
- Study the care and use of institutional foods equipment, safety requirements, health practices, sanitation and storage of food
- Explore food career paths
- Study basic skills in food preparation and waiter/waitress training
- Earn ServSafe food handler certification (requirement)

CULINARY ARTS II (8276)

Prerequisite: Culinary Arts I

Class meets every day (students earn 2 credits)

- This is the second year of a two-year occupational program designed to prepare students for food industry occupations
- Emphasis is on quantity cookery
- Learn the operation of a food establishment and catering techniques
- Study cost analysis and restaurant management in a working restaurant
- Create menus, work schedules, and assign staff to duties in a working restaurant
- Earn ProStart certification and ServSafe management certification (at least one is required)

CULTURAL ART FORMS (9160)

- Project-based art class that investigates the history, aesthetics, and culture of crafts in a studio setting
- Will learn how the elements and principles of art are used to create art
- A variety of experiences will be offered such as jewelry-making, macramé, calligraphy, quilting, clay, textiles, leather-working, mask-making, paper making, and others, to create artwork in the traditions of various cultures from around the world

CYBERSECURITY FUNDAMENTALS (6302)

- Course focuses on the evolving and all-pervasive technological environment with an emphasis on securing personal, organizational, and national information
- Students will be introduced to the principles of cybersecurity, explore emerging technologies, examine threats and protective measures, and investigate the diverse high-skill, high-wage, and high-demand career opportunities in the field of cybersecurity

CYBERSECURITY SYSTEMS TECHNOLOGY - NHREC

- Computer technology course where students gain practical experience in assembling a computer system
- Install, configure, and secure various operating systems
- Troubleshoot computers and peripherals and use system tools and diagnostic software
- Develop skills in computer networking and resource sharing
- Explore the relationships between internal and external computer components

CYBERSECURITY SYSTEMS TECHNOLOGY, ADVANCED - NHREC

- Advanced computer technology course that provides training in procedures for optimizing and troubleshooting concepts for computer systems, subsystems, and networks.
- Exploration of basic network design and connectivity, network documentation, network limitations and weaknesses and network security, standards and protocols

CYBERSECURITY SOFTWARE OPERATIONS (6304)

- Cybersecurity Software Operations is designed to teach many aspects of computer support and network administration
- Learn networking concepts, from usage to components, and create peer-to-peer network systems and client server networks
- Learn how to install and configure network cards and connect them to networks; to install the operating systems; to create, set up, and manage accounts; to load software; and to establish, implement, and maintain network integrity security plans
- Course may cover software-based network operating systems, such as Windows Server or Linux, to prepare students with a foundation in computer network administration

CYBERSECURITY SOFTWARE OPERATIONS, ADVANCED (6306)

- Learn aspects of network administration, focusing on the management and support of network users and systems
- Topics covered include understanding the responsibilities of computer professionals, training end users, evaluating new technology, developing system policies, troubleshooting workstations, managing network services and protocols, and effectively using email and business communications
- Learn communication protocols, troubleshooting techniques for systems and client-server networks, website management, and other advanced networking topics
- Techniques that are used to install operating systems, set up and manage accounts, load software, and create and implement security plans are taught
- This course may provide instruction about software-based network operating systems, such as Windows Server or Linux

DATABASE DESIGN AND MANAGEMENT, ORACLE (6660)

- Course includes database design and Structured Query Language (SQL) programming
- Study database fundamentals, including database development, modeling, design, and normalization. In addition, students are introduced to database programming
- Gain the skills and knowledge needed to use features of database software and programming to manage and control access to data. Students will prepare for the first of two certification exams

DATABASE DESIGN AND MANAGEMENT WITH PL/SQL (PL)/STRUCTURED QUERY LANGUAGE (SQL) (6662)

- Web-based technologies used throughout industry, including interactive websites, accounting programs, research tools, search engines, e-learning environments, e-mail managers, and numerous other applications, depending upon relational databases
- PL/SQL, an extension of the SQL programming language, provides additional database functionality through variables, constants, and conditional statements. Students enhance their relational database design and management skills by learning to write PL/SQL code that includes anonymous blocks, sub programs, built-in functions, control structures, procedures, and triggers, all within a browser-based programming environment. In addition, fully functional web-based applications are created through the use of HTML DB

DESIGN, MULTIMEDIA, AND WEB TECHNOLOGIES (6630)

Prerequisite: Keyboarding, Keyboarding Application, or Computer Information Systems

- Develop proficiency in using Adobe software to create a variety of business publications work with hardware and software to develop interactive multimedia presentations
- Design and produce web pages using HTML, and website design software
- Design and create multimedia presentations and projects

DESIGN, MULTIMEDIA, AND WEB TECHNOLOGIES ADVANCED (6631)

Prerequisite: Design, Multimedia, and Web Technologies

- Industry certification testing offered; course may be used for SOL verified credit when student passes industry test
- Design and produce more advanced websites using HTML, Cascading Style sheets, JavaScript, and Adobe Dreamweaver
- Design and create advanced desktop publishing projects
- Design and create advanced interactive multimedia projects

DIGITAL ELECTRONICS, PROJECT LEAD THE WAY (8440)

Prerequisite: Passing Algebra I

Level: 3-Honors

- A rigorous curriculum for Pre-Engineering students equivalent to college-level coursework
- Explore electronic engineering careers, history, practices, and concepts
- Use tools and machines for designing and analyzing digital circuits
- Apply mathematical and scientific principles to technical problems
- Use a computer to program integrated circuits

DIGITAL MEDIA AND ENTERTAINMENT ARTS (9182)

- This course introduces the student to 2D and 3D digital media as they relate to the entertainment industry
- Using current technologies and industry standard software coupled with art design principles, students will sharpen their problem solving and critical thinking abilities while creating 2D and 3D digital and animation projects
- Explore the history of animation and how it has evolved over time
- Learn and create using 2D and 3D animation media principles

DIGITAL VISUALIZATION (8459)

- Students gain experiences related to computer animation by using graphics and design concepts
- Solve problems involving 3-D object manipulation, storyboarding, texturing/mapping, lighting concepts, and environmental geometry
- Create a variety of animations that reflect real-world applications and are introduced to interactive and 3-D animation software

DRAWING AND PAINTING FUNDAMENTALS (9130)

- This course is designed as a pathway for students who are interested in continuing to AP Studio Art with an emphasis in a Drawing or 2D Design portfolio submission
- Course content is rigorous and intended to address advanced drawing techniques
- Students should expect to continue work on artwork outside of scheduled class time
- Students will develop a personal style of drawing
- Emphasis on technical drawing skills
- Observational skills and life drawing skills are emphasized
- Will develop figure drawing skills through the use of models
- Will study and apply a variety of drawing media
- Expand vocabulary and writing through analyzing and critiquing artwork
- Create a body of work suitable for drawing or 2D design portfolio artwork

EARLY CHILDHOOD DEVELOPMENT (8232)

- Students focus on balancing work and family
- Analyze parenting roles and responsibilities
- Ensure a healthy start for mother and child
- Evaluate support systems that provide services for parents

EARLY CHILDHOOD, EDUCATION, AND SERVICES I (8285)

- Students prepare to be primary providers of home-, family-, or institution-based childcare services by focusing on the planning, organizing, and conducting of meaningful play and learning activities; child monitoring and supervision; record keeping; and referral procedures
- Critical thinking, practical problem solving and entrepreneurship opportunities within the field of early childhood education are emphasized
- Practical experiences (e.g., on-site lab, local daycare centers, elementary schools, other institutions) under the supervision of the instructor are required
- Students also prepare for continuing education leading to careers in early childhood field (e.g., medical, social services, and education)
- Work-based learning methods of instruction are encouraged for this course
- Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year

EARLY CHILDHOOD, EDUCATION, AND SERVICES II (8286)

- Students focus on occupational skills needed by personnel employed in early childhood-related fields, such as education, medical/healthcare, social services, counseling, psychology, and entrepreneurship
- Work-based learning experiences (e.g., on-site lab, local daycare centers, elementary schools, other institutions) under the supervision of the instructor are required
- Critical thinking, practical problem solving, and entrepreneurship opportunities within the field of early childhood education are emphasized
- Work-based learning methods of instruction are encouraged for this course
- Students combine classroom instruction and supervised on-the-job training in an approved position with continuing supervision throughout the school year

EARTH SCIENCE (4210)

Levels: 2, 3-Honors

- Earth Science deals with Earth and its place in the universe
- Topics included are geology, meteorology, oceanography, and astronomy

ECOLOGY AND ENVIRONMENTAL MANAGEMENT (8046)

- Students develop conservation competencies and skills through the understanding of environmental concerns
- Instructional content includes the care, management, and preservation of soil, air, water, forests, and wildlife
- Students identify and discuss prevalent environmental problems and learn methods and practices used to preserve natural resources and maintain a healthy ecology
- Teachers incorporate specific environmental concerns and issues common to the local community

ELECTRONIC MUSIC PRODUCTION I, II, III (9296)

No previous music experience required

- Students will use a variety of computer software and cloud-based music technology programs to create music applicable to all areas of the music industry
- Work at a digital audio station
- Engage in several types of audio and musical instrument digital interface recording, editing, and mixing
- Provides students a foundation in digital mixing and recording for a possible career in the music industry

EMERGENCY MEDICAL TELECOMMUNICATIONS (8337)

- Develop entry-level skills needed in a telecommunication environment for rescue, fire, and police
- Understand situations encountered in an emergency communications environment
- Summarize issues involving the telecommunication's role and responsibilities as a member of health and public safety environment
- Summarize issues involving available resources to a telecommunicator

EMERGENCY MEDICAL TECHNICIAN - NHREC

- One-year program that prepares students for the daily routine of dealing with crisis, trauma, hazardous materials, illness, injuries, mass casualty situations, disaster management, and terrorism awareness
- Students learn Medical, legal, and ethical issues, anatomy and physiology, vehicle design and extrication, and much more

ENGINEERING DRAWING AND DESIGN (8436)

Prerequisite: Technical Drawing

- Possible dual enrollment credit
- Continue Technical Drawing skill development
- Create complex mechanical drawing
- Learn 3-dimensional Computer Aided Design & Drafting
- Learn mechanical drafting skills that engineers use to solve design problems
- Gain exposure to solid modeling programs
- Gain exposure to rapid prototyping and 3-D printing processes

ENGINEERING EXPLORATIONS I (8450)

- Explore engineering careers, design processes, history, practices, and concepts
- Use tools and machines for designing and analyzing materials or products
- Apply mathematical and scientific principles to technical problems

ENGINEERING STUDIES (8491)

Prerequisite: Engineering Explorations, Algebra I

- Work as a member of an engineering team
- Work on hands-on projects to solve engineering problems
- Use 3-D solid modeling programs, graphics, mathematics, and science to solve engineering problems

ENTERTAINMENT DESIGN AND TECHNOLOGY (8489)

- Students will learn and apply skills in various areas related to the creative process of live production
- Have the opportunity to explore scenic design and construction, lighting design and technology, and live sound reinforcement

ENTREPRENEURSHIP (9093)

- This course introduces students to the exciting world of creating, owning, and launching their own business
- Learn concepts and techniques for planning an innovative business and living the entrepreneurial lifestyle

ENTREPRENEURSHIP, ADVANCED (9094)

- This course is designed for students who wish to concentrate on advanced strategies for entrepreneurship, building upon concepts introduced in Entrepreneurship (9093)
- The focus of the course is on development of a business plan and small business management
- Students will establish, market, and maintain a business

ENVIRONMENTAL SCIENCE AP (4270)

Prerequisites: 1 credit each of Biology, Earth Science, and Algebra I

Co-requisites: Chemistry and Algebra II

- The goal of this AP science course is to provide students with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world
- Students will identify and analyze environmental problems, both natural and human-made, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them
- AP Environmental Science focuses on the “real science” behind environmental problems and issues
- Laboratory and field study are important elements of the course
- All students enrolled in AP Environmental Science have the option to take the AP exam

ETHICS AND LAW

1 Semester

- This course discusses the legal and ethical issues that govern the legal profession
- Topics include the attorney-client relationship, the duty of confidentiality, attorney-client privilege, conflicts of interest, ethics in advocacy, advertising
- Particular emphasis is given to the Model Rules of Professional Conduct and the Restatement of Law Governing Lawyers

FASHION CAREERS I (8280)

Class meets every day (students earn 2 credits)

- Learn the apparel and accessories industry
- Develop technical skills in design
- Design and construct apparel items

FIRE FIGHTER I,II - NHREC

- One-year program that introduces students to the exciting career of Fire Fighting – this also requires the successful completion of EMT-B
- Students learn basic life support, hazardous material awareness and operations, fire behavior, building construction, forcible entry, and much more.

FISHERIES AND WILDLIFE MANAGEMENT (8041)

- The Fisheries and Wildlife Management course offers instruction in identification and management of both terrestrial and aquatic wildlife and of their habitats
- Content addressing the issues related to endangered species and organizations that protect fisheries and wildlife is also included

GEOSPATIAL TECHNOLOGY I (8423)

- Learn Geospatial Technologies and Information Technology as it applies to careers in engineering, architecture, and geography
- Use GPS units photography, and geographical information systems (GIS) to create themes and maps
- Incorporate Drones and Unmanned System Technology to investigate additional Geospatial opportunities

GEOSPATIAL TECHNOLOGY II (8424)

Prerequisite: Geospatial Technology I

- Geospatial Technology II builds upon the study and use of Geospatial Technology I
- Explore and analyze the natural and human-made world, from local to global and beyond
- Use various tools, processes, and techniques to create, store, access, manipulate, and revise data to solve human challenges
- Data is created, collected, and used to analyze spatial relationships
- Incorporate Drones and Unmanned System Technology to investigate additional Geospatial opportunities
- Gain knowledge needed to be prepared for the Remote Drone Pilot license test

GLOBAL LOGISTICS AND ENTERPRISE SYSTEMS I (8419)

- This course is an analysis of logistics activities, distribution network alternatives, and customer service aspects; examination of freight traffic functions within the firm's logistics system, analysis of rate and classification systems and carrier selection; evaluation of logistics procedures and strategies and their appropriateness to different industries

GLOBAL LOGISTICS AND ENTERPRISE SYSTEMS II (8422)

- This second course in the sequence will introduce students to global logistics in a virtual enterprise systems environment.
- Topics include: Navigating logistics management and enterprise resource planning (ERP) systems while managing procurement fulfillment warehouse processes

GRAPHIC IMAGING TECHNOLOGY I (8660)

- Graphic Imaging Technology I introduces students to the graphic communications industry
- Gain an overview of digital file preparation, image capture, color theory, digital file output press operations, and bindery operations
- Learn to practice workplace safety and develop skills in measurement, mathematical problem solving, interpersonal communication, and the job application process

GRAPHIC IMAGING TECHNOLOGY II (8661)

- Prepares students for a career in the graphic communications industry
- Students gain knowledge and skills in digital file preparation and output
- Graphic Imaging Technology programs may be accredited by Graphic Arts Education and Research Foundation, the accrediting body for the nationally recognized Printed certification program

HEALTH INFORMATICS (8338)

- Students will have the opportunity to explore the importance of safeguarding electronic healthcare information.
- Be introduced to the various technologies and trends that affect the healthcare industry.
- Explore aspects of health informatics to include the history of health information technology (IT) in the United States, Electronic Health Record (EHR), ethical and privacy issues, and cybersecurity and data breaches

HOSPITALITY, TOURISM, AND RECREATION I (8202)

- Students begin preparation for employment in hospitality industries by focusing on principles of operations in food services, recreation, hospitality planning, and business relations
- Special attention is paid to the development of culinary skills (food sanitation, food preparation, and serving) and customer service skills

HOSPITALITY, TOURISM, AND RECREATION II (8203)

- Students continue preparation for employment in hospitality industries by focusing on principles of operations in travel and tourism, lodging, food services, hospitality planning, and business relations
- Special attention is paid to the development of skills used in the lodging industry (rooms, sales and marketing, front office, and housekeeping divisions) and customer service skills

HUMAN BODY SYSTEMS, PROJECT LEAD THE WAY (8380)

Prerequisite: Principles of the Biomedical Sciences (PLTW) (8379)

- In this specialization course for Project Lead the Way (PLTW), students explore the human body systems of communication, power, and movement.
- Students are taught the body's components, tissues, molecules, and cells, as well as concepts of homeostasis and body system defenses

IMAGING TECHNOLOGY (8455)

- Learn photography technologies such as camera use and film exposure
- Study layout and design, composition, and finishing operations
- Learn to use film camera to create a variety of photographic images
- Use software to process digital photographs
- Learn basic photography and film development processes
- Learn photographic history
- Study how photography is used in the workplace

INDIVIDUAL DEVELOPMENT (8210)

- Individual Development students focus on cultivating positive self-esteem; developing skills to build healthy relationships with family, peers, and community members; managing stress and conflict; and preparing to become college- and career-ready

INFORMATION TECHNOLOGY FUNDAMENTALS (6670)

- Use Microsoft Office applications
- Investigate careers in Information Technology
- Maintain, upgrade, and troubleshoot computers
- Understand network and Internet fundamentals
- Understand programming basics
- Apply basics of web page design
- Use graphics and interactive media
- Internet and Computing Core Competency (IC3) certification testing is required (pass all three)

INTRODUCTION TO CULINARY ARTS (8250)

- Provides students with opportunities to explore career options and entrepreneurial opportunities within the food service industry
- Investigate food safety and sanitation, explore culinary preparation foundations, practice basic culinary skills, explore diverse cuisines and service styles, investigate nutrition and menu development, and examine the economics of food

INTRODUCTION TO EARLY CHILDHOOD, EDUCATION, AND SERVICES (8234)

- Students focus on careers related to the early childhood field through hands-on exploration, projects, and cooperative learning experiences
- Students study an overview of principles of child growth and development; appreciation of diversity; engaging learning experiences for children; principles of appropriate and effective guidance; healthy and safe environments; and development of self-concepts and building self-efficacy

INTRODUCTION TO ENGINEERING DESIGN, PROJECT LEAD THE WAY (8439)

Level: 3-Honors

- A rigorous curriculum for Pre-Engineering students equivalent to college-level coursework
- Explore general engineering careers, history, practices, and concepts
- Use tools and machines for designing and analyzing mechanical parts
- Apply mathematical and scientific principles to technical problems
- Write reports and create drawings to solve problems

INTRODUCTION TO FAMILY AND HUMAN SERVICES (8238)

- The focus of Introduction to Family and Human Services is to identify professional opportunities within the Human Services career cluster
- Use practical problem solving, research, critical thinking, and career decision-making to investigate services for an aging population and intergenerational care services as well as family and social services in order to preserve, promote, and protect public health
- Assess the needs of clients, determine the support needed, and demonstrate human services career skills

INTRODUCTION TO HEALTH AND MEDICAL SCIENCES (8302)

- Introduces the student to a variety of healthcare careers and develops basic skills required in all health and medical sciences
- Learn basic healthcare terminology, anatomy and physiology for each body system, pathologies, diagnostic and clinical procedures, therapeutic interventions, and fundamentals of traumatic and medical emergency care

INTRODUCTION TO HOSPITALITY, TOURISM, AND RECREATION (8259)

- Focus on developing professional skills and using emerging technologies to prepare for employment in this global industry, rich in diverse career opportunities
- Includes instruction in the industries of lodging, food and beverage, travel and tourism, and recreation and fitness

INTRODUCTION TO LAW

- Distinguish different philosophies of law—schools of legal thought—and explain their relevance
- Identify the various aims that a functioning legal system can serve
- Explain how politics and law are related.

INTRODUCTION TO MARITIME STUDIES (8750)

- Introduces basic aspects of the maritime industry, including: ship classes, ship design, knot tying, ships nomenclature, compartmentalization, basic applied math skills, basic hand tools, and working in confined spaces
- Learn about the maritime function in US and world history and commerce
- Explore career options in the shipbuilding/repair industry and ship design careers with information on career pathways and registered apprenticeship opportunities in the region

INTRODUCTION TO MARKETING (8110)

- Acquire an understanding of marketing and its importance
- Prepare for entry-level marketing employment
- Develop social, economic, mathematical, marketing, job search, and occupational decision-making competencies for employment in retail, wholesale, or service business

INTRODUCTION TO NATURAL RESOURCES AND ECOLOGY SYSTEMS (8040)

- Explore the study of natural resources and begin to develop skills and knowledge required for employment in occupations related to forestry, wildlife and natural resources management, and conservation

JOURNALISM I, II, III (1200, 1210, 1211)

- Focus on writing skills and print media in the 20th century
- Write news stories, features, sports stories, and editorials for publication in the school newspaper
- Develop skills in newspaper style, news, features, sports, editorials, captions, and editing/proof symbols
- Develop production/graphics skills in design, paste-up, advertising, circulation photo cropping and sizing, and design elements
- Explore legal restraints on free speech that affects high school publications as well as metropolitan dailies

LEGAL ORATORY AND DEBATE**1 Semester Course**

- Make planned informative and persuasive multimodal, interactive presentations that correctly credit sources of information and anticipate and address alternative or opposing perspectives and counterclaims
- Use vocabulary appropriate to the topic, audience, and purpose
- Read, interpret, analyze, and evaluate arguments in a variety of texts, applying information from texts to clarify understanding of concepts
- Analyze multiple texts addressing the same topic to determine how authors reach similar or different conclusions
- Analyze false premises, claims, counterclaims, and other evidence in persuasive writing

LEGAL RESEARCH AND WRITING

- Write in a variety of forms, to include persuasive/argumentative, technical, and analytic
- Apply components of a recursive writing process for multiple purposes to create a focused, organized, and coherent piece of writing to address a specific audience and purpose
- Produce arguments in writing developing a thesis that demonstrates knowledgeable judgments, addresses counterclaims, and provides effective conclusions, organize claims, counterclaims, and evidence in a sustained and logical sequence, and adapt evidence, vocabulary, voice, and tone to audience, purpose, and situation
- Use words, phrases, clauses, and varied syntax to create a cohesive argument, and revise writing for clarity of content, accuracy and depth of information

LIFESPAN DEVELOPMENT (8227)

- Learn how to create and maintain healthy relationships, practicing personal nutrition, health, and wellness, and developing a life-management plan are emphasized through relevant life applications

MANUFACTURING SYSTEMS I (8425)

- This course provides an orientation to careers in various fields of manufacturing
- Emphasis will be placed on manufacturing systems, safety, materials, production, business concepts, and the manufacturing process
- Participate in individual and team activities to create products that demonstrate critical elements of manufacturing

MANUFACTURING SYSTEMS II (8427)

- Develop an in-depth understanding of automation and its applications in manufacturing
- Activities center on flexible manufacturing processes and computer integrated manufacturing (CIM)
- Work in teams to solve complex interdisciplinary problems that stem from the major systems in automated manufacturing

MARKETING (8120)

Students may earn 2 credits with work experience completion

- Industry certification testing offered; course may be used for SOL verified credit when student passes industry test
- Study the functions in the marketing of goods and services
- Develop the competencies for successful marketing employment
- Develop social and economic competencies in conjunction with marketing competencies
- Combine classroom instruction and a minimum of 396 hours of continuous, supervised on-the-job training when participating in cooperative education

MARKETING, ADVANCED (8130)

Prerequisite: Marketing

Students may earn 2 credits with work experience completion

- Industry certification testing offered; course may be used for SOL verified credit when student passes industry test
- Acquire knowledge of the marketing functions and supervisory responsibilities for those functions
- Prepare for supervisory employment and advancement to other management positions
- Develop advanced marketing competencies in professional selling, planning, mathematics, purchasing, physical distribution, advertising and visual merchandising
- Develop economic and social competencies related to the supervision of employees
- Combine classroom instruction and a minimum of 396 hours of continuous supervised on-the-job training throughout the school year when participating in cooperative education

MATERIALS AND PROCESSES TECHNOLOGY (8433)

- Learn the science of material design and use in manufacturing
- Study composition, strength, and properties of a variety of materials
- Design and build a product
- Learn how to process plastics, ceramics, woods, metals, and composite materials
- Apply chemistry and scientific concepts

MECHATRONICS (8554)

- Learn about mechatronic systems in this introductory course
- These systems are comprised of mechanical, electrical, and software systems
- Mechatronic systems form the foundation of robotics, automation, and advanced manufacturing (such as 3D printing)

MEDICAL CODING AND BILLING (8388)

- Introduction to healthcare systems
- Learn how to manage an office and the electronic medical record as it pertains to the field of medical coding and billing
- Students will be exposed to the medical terminology used to describe human anatomy and physiology
- Students will also be introduced to the field of health informatics

MEDICAL INTERVENTION, PROJECT LEAD THE WAY (8381)

Prerequisite: Human Body Systems (PLTW) (8380)

- In this specialization course for Project Lead the Way (PLTW), students are taught concepts in: fighting infections, understanding genetics, and preventing, detecting, and treating cancer and organ failure

MEDICAL SYSTEMS ADMINISTRATION (6730)

- Students wishing to gain employment in the healthcare field may take this course to learn how to use medical terminology and apply administrative procedures necessary to be productive employees in a healthcare environment
- Students will learn how to manage office activities, enhance communication skills, identify legal and ethical issues in healthcare practices, manage financial functions, and enhance employability skills

MEDICAL TERMINOLOGY (8383)

- Students learn common medical terms essential for safe patient care
- Topics are presented in logical order, beginning with each body system's anatomy and physiology and progressing through pathology, laboratory test and clinical procedures, therapeutic interventions, and pharmacology

MIXED CHOIR (9282)

- No previous experience is necessary
- After-school rehearsals and performance attendance are required

MODELING AND SIMULATION TECHNOLOGY (8460)

- Explore the use of modeling, simulation, and game development software to solve real-world problems in science, technology, engineering, and mathematics (STEM)
- Learn to evaluate and test engineering designs, modeling geospatial data, observing and analyzing physics simulations, programming games for educational purposes, and creating visualization systems with 3D models
- Develop an understanding of the systems, processes, tools, and implications of the field of modeling and simulation technology

NUTRITION AND WELLNESS (8229)

Prerequisite: Life Skills

- Learn decision-making skills that promote wellness and good health
- Obtain and safely store food for self and family
- Prepare and serve nutritious meals and snacks
- Select and use equipment for food preparation

OCEANOGRAPHY (4250)

Prerequisite: 1 credit of Earth Science

- This level 2 science course is designed for the average student who is interested in the ocean environment
- A survey of the history, instruments, and related sciences involved with oceanography will be presented
- Application of the above to the local area of Hampton Roads will involve student research and laboratory investigation

PERSONAL FITNESS (7510)

- Extends and deepens knowledge of fitness, strength training, physical conditioning, and lifetime health concepts, activities and knowledge to promote health and wellness

PRECISION MACHINING TECHNOLOGY (8539)

- Students are taught safety awareness and the foundations of machining, including how to accurately apply measurements, use engineering drawings and sketches, and apply metalworking theory in order to efficiently plan, manage, and perform general machine maintenance and machining jobs

PRINCIPLES OF BIOMEDICAL SCIENCES, PROJECT LEAD THE WAY (8379)

- In this Project Lead the Way (PLTW) course, students are taught concepts of forensic inquiry, DNA and inheritance, the function of human body systems, exploring the body through diseases, such as those leading to diabetes and heart, sickle cell, and infectious diseases
- Explore medical interventions, postmortem examination, bioprocessing, bioinformatics, and concepts of microbiology and genetic engineering

PRINCIPLES OF ENGINEERING, PROJECT LEAD THE WAY (8441)

- In this Project Lead the Way (PLTW) course, students explore the engineering profession and the fundamental aspects of engineering problem solving.
- Study the historical and current impacts of engineering on society, including ethical implications.
- Mathematical and scientific concepts will be applied to fundamental engineering topics, including mechanics and electrical-circuit theory

PRINCIPLES OF TECHNOLOGY I (9811)

- Apply physics and mathematics concepts through a unified systems approach to develop a broad knowledge base of the principles underlying modern technical systems
- Study seven technical principles: force, work, rate, resistance, energy, power, and force transformers, emphasizing how each principle plays a unifying role in the operation of mechanical, fluid, electrical, and thermal systems in high-technology equipment
- This “principles and systems” approach to studying these technical principles provides a foundation for further education and career flexibility as technology and technical systems advance

PRINCIPLES OF TECHNOLOGY II (9812)

- Apply physics and mathematics concepts through a unified systems approach to expand their knowledge base of the principles underlying modern technical systems
- This course focuses on seven technical principles: momentum, waves, energy converters, transducers, radiation, optical systems, and time constants, emphasizing how each principle plays a unifying role in the operation of mechanical, fluid, electrical, and thermal systems in high-technology equipment

PROBABILITY AND STATISTICS (3190)

Level 3

- This course is a comprehensive conceptual and practical presentation of probability, descriptive/inferential statistics, and the key ideas underlying statistical and quantitative reasoning
- Statistical methods of organizing, summarizing, and displaying data combined with statistical testing are used to solve problems from a myriad of areas such as business, engineering, biology, and medicine
- Advantages and limitations of statistical methods are developed.
- Graphing calculators and Minitab statistical software are extensively utilized

PRODUCTION SYSTEMS (8447)

- Produce major project of advanced design
- Learn the safe use of tools and equipment
- Design and build products in a manufacturing or automation environment
- Learn additive manufacturing and lean processes
- Course may be designed around woods, metal, plastics, or other materials
- Analyze markets, design and develop prototypes, and plan a business venture

PROGRAMMING (6640)

- Students in the Programming course explore programming concepts, use algorithmic procedures, implement programming procedures with one or more standard languages, and master programming fundamentals
- Coding is used throughout the course
- Graphical user interfaces may be used as students design and develop interactive multimedia applications, including game programs
- Employ HTML or JavaScript to create Webpages

PROGRAMMING, ADVANCED (6641)

Prerequisite: Programming

- Use object-oriented programming to develop database applications
- Create interactive multimedia applications including game applications, mobile applications, and web applications

PSYCHOLOGY (2900)

- Explore basic theories and principles of psychology
- Gain understanding about personal capacities or growth
- Study individual and group behavior, the effect of internal and external stimuli, and the interactions of individuals
- Increase critical thinking and improve communication through demonstrations, experiments, and simulations
- Emphasis on principles of learning, conditioning, memory and thought, and stages of human development

PSYCHOLOGY AP (2902)

- Study biological basis of behavior, developmental psychology, personality, testing and individual difference, treatment of psychological disorders, and social psychology
- Examine basic principles and theories of psychology
- Emphasis on learning and cognitive process, human development, understanding of basic problems of relationships to self and others, and choice selection
- Use advanced writing skills to analyze readings
- Students have the option to take the AP Psychology exam

PUBLIC SAFETY I (8700)

- Students perform procedures related to law enforcement and firefighting occupations, including the history of the criminal justice system, policing skills, the rule of law, crime scene investigation, the role of the courts, communications systems, first aid and CPR techniques, protective devices (e.g. sprinklers)
- The history and fundamentals of the fire service, rescue procedures, procedures for using personal protective equipment (PPE), the self-contained breathing apparatus (SCBA), water supply, hoses, and nozzles

SMALL VOCAL ENSEMBLE (9280)

Audition and approval of Choral Director

- Students may earn an honor's credit with successful completion of additional guitar portfolio requirements
- Auditions occur second semester
- After-school rehearsals required
- Performance attendance is required

SPORTS MEDICINE I (7760)

- This course of studies provides students with the basic concepts and skill set required for an entry-level position as a sports medicine assistant
- Topics of study include injury prevention, nutrition, first aid/CPR/AED, exercise physiology, and biomechanics
- Study basic human anatomy and physiology, medical terminology, legal and ethical issues in sports medicine, and career preparation
- Course competencies have been constructed so as not to go beyond the professional scope of aide/assistant level
- Mastery of the material in this course would provide students with a strong background should they wish to pursue certification in areas such as first aid, CPR, AED, and/or personal trainer

SPORTS MEDICINE II (7762)

- This course of studies provides students with the basic concepts and skill set required for an entry-level position as a sports medicine assistant
- Topics of study include injury prevention, nutrition, first aid/CPR/AED, exercise physiology, and biomechanics
- Students study basic human anatomy and physiology, medical terminology, legal and ethical issues in sports medicine, and career preparation
- Course competencies have been constructed so as not to go beyond the professional scope of aide/assistant level

STATISTICS AP (3192)

Prerequisite: Algebra II

May be used as 4th math credit for an Advanced Studies Diploma

- Follows the College Entrance Examination Board Syllabus
- Presents concepts and techniques for exploring, collecting, and analyzing data, drawing conclusions, and making predictions
- Explore experimental design, produce models using probability and simulation, and select appropriate models for statistical inferences
- Applications will use a variety of disciplines including the sociology, allied health fields, business, economics, engineering, the humanities, physical sciences, journalism, communications, and liberal arts

TECHNICAL THEATER (1435)

One semester class (1/2 credit)

- Non-performance class
- Gain an introduction to basics of set construction and design, lighting and costume makeup
- Apply practical experiences to supplement classroom theory

TECHNICAL DRAWING AND DESIGN (8435)

- Learn the graphic language of business and industry
- Develop precision skills in mechanical drafting
- Develop sketches using different projections
- Learn lettering skills, board skills, and two and three dimensional computer aided design and drafting (CADD)

TECHNOLOGY FOUNDATIONS (8403)

- Learn the foundation in technological material, energy, and information and apply processes associated with the technological thinker
- Using laboratory activities, students create new ideas and innovations, build systems, and analyze technological products to learn
- Learn how and why technology works in the world of global logistics
- Build and control systems using engineering design in the development of a technology

TELEVISION AND MEDIA PRODUCTION I (8688)

- Engage in hands-on digital media production while using industry-standard equipment and software
- Learn how to work as media producers and explore careers in the dynamic industry of digital media production

TELEVISION AND MEDIA PRODUCTION II (8689)

- This course builds upon knowledge and skills from Television and Media Production I
- Generate fiction and non-fictional media content
- Enhance their digital media production skills by entering the studio and control room and become proficient with industry-standard equipment and software
- Put your knowledge of digital media production into action with the use of sophisticated tools and equipment as you begin to develop your personal portfolio

TELEVISION AND MEDIA PRODUCTION III (8690)

- This course builds upon knowledge and skills from Television and Media Production I and II
- Demonstrate mastery of media production knowledge and skills
- Create original productions, assemble a professional digital portfolio, and investigate the dynamic media production industry
- Research postsecondary opportunities and formulate strategies for both college and career success

THEATER TECHNICAL DRAWING AND DESIGN (8435)

- Learn the graphical language and theatrical set design
- Develop skills with drafting and creation of modular sets
- Develop sketches and design
- Learn two and three dimensional computer-aided and traditional design

TRAVEL AND TOURISM MARKETING AND SALES (8169)

- This course is designed to provide students with an in-depth look into marketing and sales in the travel and tourism field
- Learn about issues related to business and resource management, tourism's effect on the world economy, the political impact of tourism, and how the sales process affects the tourism industry

VIDEO AND MEDIA TECHNOLOGY (8497)

Prerequisite: Communication Systems or Imaging Technology

- Offers students an opportunity to study all aspects of video and media production
- Operate studio and editing equipment
- Gather news and information from individuals, research, and online resources to plan and write for production
- Students are introduced to analog and digital principles of production

VIRGINIA TEACHERS FOR TOMORROW I (9062)

- Virginia Teachers for Tomorrow (VTfT) fosters student interest, understanding, and appreciation of the teaching profession and allows secondary students to explore careers in education
- Students build a foundation for teaching; learn the history, structure and governance of teaching; apply professional teaching techniques in the VTfT classroom and field experience; and reflect on their teaching experiences

VIRGINIA TEACHERS FOR TOMORROW II (9072)

- Explore careers in the Education and Training Cluster and pathways
- Prepare for careers in education as they research postsecondary options, learn about the process of teacher certification in Virginia, and participate in a practicum experience

WELDING I,II (NHREC)

- Prepares and links students to employment with local manufacturers i.e. Newport News Shipbuilding, Liebherr, Arconic, Master Machines
- Students learn welding theory, shielded metal arc welding, and much more.

WHICH ACADEMY AND PATHWAY IS RIGHT FOR YOU...

NUMBER YOUR TOP FOUR ACADEMIES AND PATHWAYS FROM HIGHEST TO LOWEST

Academies at **Bethel** High School

Academy of Media Arts and Design

- ___ Journalism
- ___ Digital Media

Transportation, Analytics, Information, and Logistics Academy

- ___ Geospatial Technology and Unmanned Systems
- ___ Business Management and Logistics
- ___ Networking
- ___ Programming and Data Analysis

Academy of Law and Public Safety

- ___ Law and Legal Studies
- ___ Law Enforcement
- ___ Fire Fighter/EMT

Academy of Governor's Health Sciences (Governor's STEM)

- ___ Health Informatics and Support Services
- ___ Diagnostic Services
- ___ Therapeutic Services
- ___ Biotechnology Research and Development

Academies at **Hampton** High School

The Maritime Academy

- ___ Shipbuilding and Repair
- ___ Ship Design

Academy of Health, Human, and Financial Services

- ___ Counseling
- ___ Nutrition and Wellness
- ___ Financial Services

Academy of Technology and Engineering

- ___ Engineering Design and Development
- ___ Information Technology
- ___ Audio Engineering
- ___ Construction Technology

The International Baccalaureate (IB) Programme

- ___ IB

Academies at **Kecoughtan** High School

Academy of On Stage: Performing Arts

- ___ Theater Design and Technology
- ___ Theater Performance

Academy of Entrepreneurship and Information Design

- ___ Entrepreneurship and Marketing
- ___ World Banking and Finance
- ___ Information Design

Academy of Teaching, Education, and Learning

- ___ Education and Training
- ___ Child Development

The Architecture, Environment, and Engineering (Governor's STEM)

- ___ Architectural Engineering
- ___ Construction Design
- ___ Environmental Studies

Academies at **Phoebus** High School

Academy of Cybersecurity, Engineering, and Robotics

- ___ Engineering and Robotics
- ___ Manufacturing
- ___ Cybersecurity Systems Technology
- ___ Cybersecurity Software Operations

Academy of Hospitality and Tourism

- ___ Culinary Arts
- ___ Travel and Tourism

Academy of Digital Video Production

- ___ Television and Media Production
- ___ Video Media Production

Academy of Advanced College Experience

- ___ Advanced College Experience





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