

NEW KENT CTE CAREER CLUSTERS

INFORMATION
TECHNOLOGY

LAW, PUBLIC
SAFETY,
CORRECTIONS &
SECURITY

MARKETING

FINANCE

BUSINESS MGT. &
ADMINISTRATION

SCIENCE, TECH.
ENGINEERING &
MATHEMATICS

AGRICULTURE,
FOOD & NATURAL
RESOURCES

HOSPITALITY &
TOURISM

EDUCATION &
TRAINING

ARTS, A/V TECH. &
COMMUNICATION

HEALTH SCIENCE

TRANSPORTATION,
DISTRIBUTION &
LOGISTICS

CTE CLASSES GROW
YOUR INTERESTS



INFORMATION TECHNOLOGY

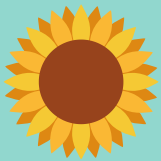
This cluster uses your love of technology to learn how to design, develop & manage different types of software & hardware programs. This field requires a solid foundation in math & science, as well as strong technical skills. There are careers in information technology in virtually every part of the economy. These careers are in demand!

CONSIDER THESE CLASSES

- 6-8th: Digital Technology Foundations or Introduction to Technology (6), Computer Solutions or Inventions & Innovations, Design (7), Multimedia, & Web Technology or Technological Systems (8)
- 9-12th: Digital Applications, Computer Information Systems & Advanced Computer Information Systems
- 11-12th: Attend Bridging Communities for Coding: Programming Web Gaming I & Advanced Web Gaming Design II
- Industry Certification Tests: Microsoft Office Specialist, Microsoft Technology Associate's HTML5, with opt. Networking Fundamentals, Intro to Programming, & Software Development Fundamentals
- Student Organizations: Technology Student Association or SkillsUSA

QUICK FACTS

- Job growth rate in VA is a robust 17%
- A majority of careers in this field require a bachelor's degree
- Typically salary range: \$50k-\$100,000k+
- Sample Pathways: Network Systems, Web & Digital Communication, Programming & Software Development, & Information Support & Services
- Apply for Bridging Communities during the winter of 10th grade; students must meet testing & other application requirements
- Slots are limited & students are only accepted into Bridging during 10th to participate in 11-12th



LAW, PUBLIC SAFETY, CORRECTIONS & SECURITY

Apply your love of people & passion for your community to prepare for careers in law, public safety & security. Responsibilities may include protecting people from harm, crime or natural disasters. Job opportunities range from public safety officers, lawyers, firefighters, corrections officer, to legal services.

CONSIDER THESE CLASSES

- 9-12th: Business Law (NKHS)
- 11-12th: Criminal Justice I-II (Bridging Communities)
- Consider additional career-related electives like: Public Speaking, Spanish, & Weightlifting
- Industry Certification Tests: Workplace Readiness Skills for the Commonwealth & NOCTI Criminal Justice
- Student Organizations: SkillsUSA

QUICK FACTS

- Job growth rate in VA is 7%; that's 2% better than the state average
- Many careers in this cluster only require an associate's degree
- This cluster is varied, with careers making anywhere between \$30k-\$100k+
- Sample Pathways: Correction Services, Emergency & Fire Management Services, Legal Services, Law Enforcement Services, & Security & Protective Services



MARKETING

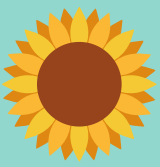
Flex your creative skills for a career in advertising, public relations, sales, or planning. Work on projects like promotional campaigns, event planning & new sales techniques. Sample careers include: market research analysts, event planners, marketing managers, public relations specialists, real estate agents, and more!

CONSIDER THESE CLASSES

- 9-12th: Introduction to Business & Marketing, Principles of Business & Marketing, & Sports & Entertainment Marketing (NKHS)
- Strongly consider complementing your study with electives Business Management & Administration
- Industry Certification Tests: Workplace Readiness Skills for the Commonwealth, College & Work Readiness Assessment
- Student organizations: Future Business Leaders of America

QUICK FACTS

- Job growth rate in VA is 7%; that's 2% better than the state average
- Many careers only require an associate's degree
- This is a varied cluster, earning between \$30k-\$100k+
- Sample Pathways: Correction Services, Emergency & Fire Management Services, Legal Services, Law Enforcement Services, & Security & Protective Services



FINANCE

The Finance cluster is about using your skills in math & statistics to prepare for well-paying careers in financial & investment planning, banking, insurance, & business financial management. The economy offers many careers in this field. Careers include: insurance sales, tax preparers, financial planners, account managers, accountants, bank tellers...

CONSIDER THESE CLASSES

- 11-12th: Economics & Personal Finance
- Completion of this course is required for the Standard or Advanced Diplomas
- Strongly consider complementing this area of study with electives in the Business Management & Administration or Marketing clusters
- Industry Certification Tests: WISE Financial Literacy Test
- Student Organizations: Future Business Leaders of America

QUICK FACTS

- Job growth rate in VA is 11%, which is much faster growth than the 8% national average
- A majority of the careers in this cluster require a bachelor's degree
- This cluster is varied, with careers making anywhere between \$30k-\$100k+
- Sample Pathways: Accounting, Banking Services, Business Finance Insurance, & Securities & Investments



BUSINESS MANAGEMENT & ADMINISTRATION

Use your organizational & leadership skills to prepare for careers where you plan, direct & evaluate operations to run a successful business. There are a variety of career opportunities ranging from top executive, manager, customer service, administration, & entrepreneurs. This career cluster employs the largest number of workers in Virginia.

CONSIDER THESE CLASSES

- 11-12th: Introduction to Business & Marketing, Principles of Business & Marketing, Business Law, Business Management
- Strongly consider electives in the Marketing cluster
- Industry Certification Tests: Workplace Readiness Skills for the Commonwealth, College & Work Readiness Assessment
- Student Organizations: Future Business Leaders of America

QUICK FACTS

- VA job growth rate 7%, faster than the 2% national average
- Most careers require an associate's or bachelor's degree
- This cluster is varied, with careers making anywhere between \$30k-\$100k+
- Sample Pathways: Administration Support, Business Information Management, General Management, Human Resource Management & Operation Management



SCIENCE, TECHNOLOGY, ENGINEERING & MATHEMATICS (STEM)

Apply problem solving in careers with STEM. People in this cluster conduct in-depth research to provide solutions to a variety of technical problems within many fields.

Careers fields range from engineering, alternative energies, bio technology, scientific researcher, nanotechnology, medical science & more.

CONSIDER THESE CLASSES

- 9-12th: (NKHS) Introduction to Engineering & Design, Engineering Drawing & Design, Architectural Drawing & Design, Electronic Systems I, Electronic Systems II
- 11-12th: Engineering Explorations I & Engineering Studies (Bridging Communities)
- Industry Certification Tests: Project Lead the Way End of Course, NOCTI Electronics, NOCTI Diesel Technology & Energy Industry Fundamentals Certificate Assessment, NOCTI Architectural Drafting
- Student Organizations: Technology Student Association or SkillsUSA

QUICK FACTS

- Job growth rate in VA is 12%, significantly faster than the national average of 8%
- Nearly all careers require at least a bachelor's degree
- This cluster boasts, on average, the highest salary potential, ranging from \$50k to well above \$100k
- Sample Pathways: Engineering, Technology, Energy & Power, Agriculture, & Science & Math



AGRICULTURE, FOOD & NATURAL RESOURCES

The cluster is about using your love of science, the environment or animals to prepare for careers that involve improving the quality & safety of food, cultivating & preserving our natural resources, & caring for animals. Agriculture makes the largest impact on Virginia's economy, providing 300,000 jobs with an estimated \$52 billion in the economy.

CONSIDER THESE CLASSES

- 9-12th: Horticulture Science & Practices, Greenhouse Plant Production & Management, & Landscaping
- Consider gaining experience through part-time or summer jobs in the industry
- Industry Certification Tests: Workplace Readiness Skills for the Commonwealth
- Student Organizations: None at this time

QUICK FACTS

- Job growth rate in VA is 5%, above the national average
- Depending on the career, you may need anywhere from a high school diploma to a master's degree
- This cluster is varied, with careers earning anywhere between \$23k-\$100k+
- Sample Pathways: Agribusiness Systems, Animal Systems, Environmental Services Systems, Food Products & Processing Systems, Natural Resources Systems, Plant Systems, & Power, Structure, & Technical Systems



HOSPITALITY & TOURISM

Hospitality & Tourism includes the management, marketing & operations of restaurants & other food services, lodging, attractions, recreation events & travel related services. Careers in this cluster include: chef, recreation worker, tour guides, food service managers, event planners, and more. Work in restaurants, hotels, resorts, amusement parks, camps, parks...

CONSIDER THESE CLASSES

- 9-12th: Introduction to Culinary Arts
- Strongly consider complementing your study with electives in the Marketing & Business Management & Administration clusters
- 11-12th: Culinary Arts I-II (Bridging Communities)
- Industry Certification Tests: ServSafe Manager Certification, Workplace Readiness Skills for the Commonwealth
- Student Organizations: Family Career & Community Leaders of America, SkillsUSA, or Future Business Leaders of America

QUICK FACTS

- Job growth rate in VA is 10%, close to the national average
- Depending on the career, you may need anywhere from a high school diploma to a master's degree
- Consider geography in relocating for jobs
- This cluster is varied, with careers earning anywhere between \$20k-\$80k+
- Sample Pathways: Lodging, Recreation, Amusement & Attractions, Restaurants & Food/Beverage Services, & Travel & Tourism



EDUCATION & TRAINING

Use your love of people & the ability to motivate to provide education & training for people across ages & industries. Careers include: teachers, aides, coaches, school administration & social worker. Demand in teaching is strong, as there are many anticipated retirements.

CONSIDER THESE CLASSES

- 9-12th: Virginia Teacher's for Tomorrow I, Virginia Teachers for Tomorrow II
- Industry Certification Tests: ParaPro Praxis, Workplace Readiness Skills for the Commonwealth
- Student Organizations: Educators Rising

QUICK FACTS

- Job growth rate in VA is 13%, above average!
- Most careers require a bachelor's degree
- This cluster is varied, with careers earning anywhere between \$30k-\$90k+
- Sample Pathways: Administration & Administration Support, Teaching & Training, & Professional Support Services



ARTS, A/V TECHNOLOGY & COMMUNICATION

Explore strengths in creativity, design, writing, performing, & multimedia skills in this cluster. Prepare for careers in graphic design, journalism, writing, art directing, photography, television directing & production & more. Demand & popularity are high in this cluster!

CONSIDER THESE CLASSES

- 9-12th: Video Media Technology, TV & Media Production I, TV & Media Production II, TV & Media Production III
- Industry Certification Tests: NOCTI Television Production, Workplace Readiness Skills for the Commonwealth
- Student Organizations: Technology Student Association

QUICK FACTS

- Job growth rate in VA is 5%, 3% above average
- Most careers in this cluster require an associate's or bachelor's degree
- This cluster is varied, with careers earning anywhere between \$20k-\$80k+
- Sample Pathways: Journalism & Broadcast, Audio/Video Technology & Film, Performing Arts, Printing Technology, Telecommunications, & Visual Arts



HEALTH SCIENCE

Do you love science & helping people? Work as a doctor, physical therapist, researcher, public health educator, dental assistant, pharmacist, EMT, radiologic technician, nurse & a myriad more! Work in hospitals, medical & dental offices, labs, physical therapy & chiropractic offices. Demand is huge!

CONSIDER THESE CLASSES

- 12th- A one-year dual enrollment program offered at Bridging Communities for seniors interested in pursuing a career as a Practical Nurse or RN
- To complete the full program, attend Rappahannock Community College for one year after graduation
- Applications are due in junior year; more information is available through School Counseling
- Industry Certification Tests: CNA Certification Test
- Student Organizations: Health Occupation Student Organization

QUICK FACTS

- Job growth rate in VA is a staggering 21%
- Most careers in this cluster require an associate's or bachelor's degree
- This cluster is varied, with careers earning anywhere between \$20k-\$100k+
- Sample Pathways: Biotechnology Research & Development, Diagnostic Services, Health Informatics, Therapeutic Services, & Support Services,



TRANSPORTATION, DISTRIBUTION & LOGISTICS

Use knowledge of mechanics, math & design to work in careers where you plan, manage & move everything from people to company products through a range of transportation services. Be involved in the logistics of all modes of transportation from road to rail to air to water. Careers include truck drivers, packers, billing, managers, handlers & logisticians.

CONSIDER THESE CLASSES

- 11-12th- Diesel Program at Bridging Communities, Diesel Equipment Technology I-II & Small Engine Repair at Bridging Communities, Small Engine Repair I-II
- Industry Certification Tests: Workplace Readiness Skills for the Commonwealth & NOCTI Diesel Technology. Briggs & Stratton (Small Engine) or Equipment & Engine Training Council (Small Engine)
- Student Organizations: SkillsUSA

QUICK FACTS

- Job growth rate in VA is 9%
- Most careers in this cluster require a high school diploma, certificate/credential, or associate's degree
- Varying careers earn between \$20k-\$80k+
- Sample Pathways: Facility & Mobile Equipment Maintenance, Health, Safety & Environmental Management, Logistics Planning & Management Services, Sales & Service, Transportation Operations & Systems, & Warehouse & Distribution Center Operations