

Charting the Course

CLICK THE LINKS BELOW TO EXPLORE...



Career Clusters

- [Agriculture, Food & Natural Resources](#)
- [Architecture & Construction](#)
- [Arts, A/V Technology & Communications](#)
- [Business Management & Administration](#)
- [Education & Training](#)
- [Finance](#)
- [Government & Public Administration](#)
- [Health Science](#)
- [Hospitality & Tourism](#)
- [Human Services](#)
- [Information Technology](#)
- [Law, Public Safety, Corrections & Security](#)
- [Manufacturing](#)
- [Marketing](#)
- [Science, Technology, Engineering & Mathematics \(STEM\)](#)
- [Transportation, Distribution & Logistics](#)

TCE Center Programs

- [Advanced Technology Center](#)
- [Tech Center](#)

High School Academies

- [Entrepreneurship & Business](#)
- [Global Studies & World Languages](#)
- [Governor's STEM & Technology](#)
- [Green Run Collegiate](#)
- [Health Sciences](#)
- [International Baccalaureate](#)
- [Legal Studies](#)
- [Mathematics & Science](#)
- [Visual & Performing Arts](#)

Dual Enrollment Programs

- [Tidewater Community College \(TCC\)](#)

Agriculture, Food & Natural Resources

This Program of Study prepares learners for careers in the planning, implementation, production, management, processing and/ or marketing of agricultural commodities and services. This includes food, fiber, wood products, natural resources, horticulture and other plant and animal products. It also includes related professional, technical and educational services.

Pathways:

- Agribusiness Systems
- Animal Systems
- Environmental Service Systems
- Food Products and Processing Systems
- Natural Resources Systems
- Plant Systems
- Power, Structural and Technical Systems



Map pin denotes Virginia Beach Economic Development key industries aligned with career clusters

Suggested Learning Experiences

Middle School Electives	<ul style="list-style-type: none"> • Exploratory Teen Living, Technology Education Exploratory, Computer Solutions and Advanced Computer Solutions
Advanced Studies Diploma Coursework	<ul style="list-style-type: none"> • ENGLISH: Any sequence meeting graduation requirements • MATH: Algebra I, Geometry, Algebra II or Algebra II Trigonometry, Probability & Statistics and Trigonometry or any 4th math credit • SCIENCE: Earth Science, Biology, Chemistry, AP Environmental Science • SOCIAL STUDIES: Any sequence meeting graduation requirements
Standard Diploma Coursework	<ul style="list-style-type: none"> • ENGLISH: Any sequence meeting graduation requirements • MATH: Algebra I, Geometry, Algebra II or any 3rd math credit • SCIENCE: Earth Science, Biology or any 3rd science credit • SOCIAL STUDIES: Any sequence meeting graduation requirements
Career Coursework	<ul style="list-style-type: none"> • Introduction to Culinary Occupations I & II, Construction Technology, Landscape Design and Management, Turf Management, Outdoor Power Equipment I & II
Academy/Center Programs	<ul style="list-style-type: none"> • Technical & Career Education Center
Industry Certifications	<ul style="list-style-type: none"> • AAFCS: Broad Field FCS Examination, Certified Crew Chief (Turf Management), NOCTI Horticulture/Landscape, NOCTI Nursery & Landscape Management, NOCTI Small Engine Technology, OSHA 10-Hour Construction Safety and Health, Private Applicator Certification, VA Department of Agriculture Commercial Pesticide Applicator Certification
Student Organizations	<ul style="list-style-type: none"> • SkillsUSA
Career Exploration/Enrichment	<ul style="list-style-type: none"> • RU Ready • VA Wizard for College & Career Information • VA Career V.I.E.W. for K-8 Career Information • Major Clarity
Co-operative Education/Internships	<ul style="list-style-type: none"> • Co-op or internship recommended



Agriculture, Food & Natural Resources

Career Types by Pathway

HIGH SCHOOL DIPLOMA ON-THE-JOB TRAINING	CERTIFICATE/LICENSE	ASSOCIATE'S DEGREE	BACHELOR'S DEGREE	MASTER'S/DOCTORAL PROFESSIONAL DEGREE
AGRIBUSINESS SYSTEMS				
Farm & Ranch Workers	Agriculture Contact Provider	Agribusiness Management Agribusiness Operations Technology Agriculture Agri-Communications Farm & Ranch Business Management	Agricultural Economics Agribusiness Agricultural Education Agricultural Journalism Hospitality Restaurant & Tourism Management Professional Golf Management	Agricultural Economics Agriculture Leadership Education Statistics
ANIMAL SYSTEMS				
Animal Caretakers Feed Sales	Dairy Technician Beef Quality Assurance Livestock Production Pork Quality Assurance	Animal Science Equine Industry Management Livestock Industry Management Swine Management Veterinary Technology	Animal Science Biochemistry Grazing Livestock Systems Veterinary Science Veterinary Technologist	Animal Science (Nutrition, Genetics or Physiology Focus) Biochemistry Integrative Biomedical Sciences Veterinary Medicine
ENVIRONMENTAL SERVICE SYSTEMS				
Refuse & Recyclable Material Collection		Environmental Science Laboratory Science Technology	Aquatic Ecology Conservation Biology Environmental Soil Science Environmental Studies Habitat Management Insect Science	Entomology Natural Resource Sciences
FOOD PRODUCTS & PROCESSING SYSTEMS				
Butchers & Meat Cutters Meat Processing Slaughter & Meat Packer	Ag Dairy Technician Commercial Plant Production Food Handlers Permit Quality Control	Agronomy Diversified Agriculture Dietary Management Food Science & Technology Quality Control	Agronomy Animal Science Food Science & Technology Hospitality, Restaurant & Tourism Management Mechanized Systems Management	Agronomy Animal Science (Meat Science Focus) Food Science & Technology Nutrition
NATURAL RESOURCES SYSTEMS				
		Natural Resources Systems Soil & Water Conservation Wildlife Management	Environmental Soil Sciences Environmental Studies Fisheries & Wildlife Grassland Ecology/Management Natural Resources & Environmental Economics Water Science	Horticulture & Forestry Natural Resources Sciences
PLANT SYSTEMS				
Nursery & Greenhouse Workers Seed Sales Tree Trimmers & Pruners	Commercial Horticulture	Agronomy Commercial Horticulture Crop Production Forestry Landscape/Nursery Sport Turf Technology	Agronomy Biochemistry Diversified Agriculture Studies Grazing Livestock Systems Horticulture Insect Science Plant Protection Sciences	Agriculture Agronomy Biochemistry Entomology Horticulture Horticulture & Forestry
POWER, STRUCTURAL & TECHNICAL SYSTEMS				
Electrician Apprenticeship Plumbing Apprenticeship Welding Apprenticeship	Parts Distribution & Management Parts/Sales & Management	Agri-Technology Farm Mechanics Irrigation Technology John Deere Ag Technician Mechanized Agriculture	Agricultural Operations Mechanized Marketing Mechanized Science Mechanized Systems Management Processing Operations	Agricultural & Biological Systems Engineering Mechanized Systems Management

