Education & Training Cluster Agriculture Cluster Early Childhood Care & Education Agriscience Yr. 1 – Early Childhood Education I Yr. 1 – Basic Agriculture Science Yr. 2 – Early Childhood Education II Yr. 2/3 – Plant Science & Biotech*+ Yr. 3 – Early Childhood Education III or Yr. 2/3 – Animal Science & Biotech⁺ Yr. 3 – Early Childhood Practicum (AAS only) Yr. 4 - Biotechnology Veterinary Science - AAS only Teaching as a Profession - AAS only Yr. 1 – Basic Agriculture Science Yr. 1 - Examining the Teaching Profession Yr. 2 - Small Animal Care Yr. 2 - Contemporary Issues in Education Yr. 3 - Veterinary Science Yr. 3 - Teaching as a Profession Practicum Yr. 4 - Biotechnology **Architecture and Construction Cluster Energy Cluster** Architectural Drawing and Design Energy & Power: Generation, Transmission, and Yr. 1 – Intro to Drawing & Design Distribution – AAS only Yr. 2 – Arch. Drawing and Design I Yr. 1 – Found. of Energy Technologies Yr. 3 – Arch. Drawing and Design II Yr. 2 – Energy & Power: Generation, Transmission, and Distribution Construction - AAS only Yr. 1 – Industry Fund. & Occupational Safety Yr. 3 – Energy Systems Applications Yr. 2 – Intro to Construction Yr. 3 – Carpentry, Masonry, Electrical or Plumbing (student will select specialty) Welding – AAS only Yr. 1 – Industry Fund. & Occupational Safety Yr. 2 – Intro to Metals Yr. 3 – Welding I Arts, A/V Tech and Communications Cluster **Finance Cluster** Audio/Video Technology & Film Advanced Accounting – AAS only Yr. 1 – Intro to Business & Technology Yr. 1 – A/V Technology and Film 1 Yr. 2 – Financial Literacy Yr. 2 – A/V Technology and Film II Yr. 3 – Accounting and Banking Yr. 3 – A/V Technology and Film III Yr. 4 – Accounting and Investing *Graphics Design*– AAS only Basic Accounting Yr. 1 – Introduction to Graphics & Design Yr. 1 – Intro to Business & Technology Yr. 2 – Graphics Design & Production Yr. 2 – Financial Literacy Yr. 3 – Adv. Graphic Design or Adv. Graphic Output Yr. 3 – Principles of Accounting I **Processes** Banking, Investing and Insurance

Yr. 1 – Intro to Business & Technology

Yr. 3 – Banking, Investing and Insurance

Yr. 2 – Financial Literacy

Business Mgmt. and Admin. Cluster Government and Public Admin Cluster Small Business Development Air Force JROTC - DH and OHS Yr. 1 – JROTC Aerospace Science I Yr. 1 – Intro to Business & Technology Yr. 2 – JROTC Aerospace Science Yr. 2 – Legal Environ. of Business Yr. 3 – Entrepreneurship Yr. 3 – JROTC Aerospace Science III Yr. 4 – JROTC Aerospace Science IV Navy JROTC - AAS, ELH, HCH, LH, SH, UGH Yr. 1 – JROTC Navy I Yr. 2 – JROTC Navy II Yr. 3 – JROTC Navy III Yr. 4 – JROTC Navy IV **Health Science Cluster Hospitality & Tourism Cluster** Allied Health and Medicine Culinary Arts – AAS only Yr. 1 – Intro to Culinary Arts Yr. 1 - Intro to Healthcare Yr. 2 – Culinary Arts I Yr. 2 – Essentials of Healthcare⁺ Yr. 3 – Culinary Arts II Yr. 3 – Allied Health and Medicine Emergency Medical Responder - AAS only **Human Services Cluster** Yr. 1 - Intro to Healthcare Nutrition and Food Science Yr. 2 – Essentials of Healthcare + Yr. 1 - Food, Nutrition, and Wellness Yr. 3 - Emergency Medical Responder Yr. 2 – Food for Life⁺ Yr. 3 - Food Science*+ *Health Information Technology* – AAS only Yr. 1 – Intro to Healthcare Personal Care Services - Cosmetology - AAS only Yr. 2 – Essentials of Health IT Yr. 1 – Intro to Personal Care Services Yr. 2 - Cosmetology II Yr. 3 – Applications of Health IT Yr. 3 - Cosmetology III *Pharmacy* – AAS only Yr. 1 – Intro to Healthcare Yr. 2 – Essentials of Healthcare + **Information Technology Cluster** Yr. 3 – Pharmacy Operations & Fundamentals *IT Support and Services* – AAS only Yr. 1 – Intro to Digital Technology *Phlebotomy* – AAS only Yr. 2 - IT Essentials Yr. 1 – Intro toHealthcare Yr. 3 – IT Support Yr. 2 – Essentials of Healthcare⁺ Yr. 3 – Diagnostics Phlebotomy Networking - AAS only Yr. 1 – Intro to Digital Technology Sports Medicine – AAS only Yr. 2 – Networking Fundamentals Yr. 1 – Intro to Healthcare Yr. 3 – Networking Systems & Support Yr. 2 – Essentials of Healthcare⁺ Yr. 3 – Principles of Sports Medicine⁺ Programming Yr. 1 – Intro to Digital Technology Surgical Technician I - AAS only Yr. 2 – Computer Science Yr. 1 – Intro to Healthcare Principles⁺ Yr. 3 – Programming, Games, Apps & Society⁺ Yr. 2 – Essentials of Healthcare⁺ Yr. 3 – Surgical Tech I Advanced Programming Yr. 1 – Intro to Digital Technology Yr. 2 – Computer Science Principles⁺ Yr. 3 – AP Computer Science⁺ *Cybersecurity* – AAS only Yr. 1 – Intro to Digital Technology Yr. 2 – Intro to Cybersecurity Yr. 3 – Advanced Cybersecurity

Law, Public Safety, Corrections & Security Cluster	Science, Technology, Engineering & Mathematics Cluste
Law Enforcement Services	Engineering and Technology
Yr. 1 - Intro to Law, Public Safety, Corrections &	Yr. 1 - Found. of Engineering & Technology
Security Security	Yr. 2 - Engineering Concepts
Yr. 2 – Criminal Justice Essentials	Yr. 3 - Engineering Applications
Yr. 3 - Forensic Science and Criminal Investigations	Yr. 4 - Research, Design, and Project Mgmt.
	Electronics – AAS only
	Yr. 1 - Foundations of Electronics
	Yr. 2 - Advanced AC and DC Circuits ⁺
	Yr. 3 - Digital Electronics*
	Engineering Graphic and Design – AAS only Yr. 1 – Intro to Mechanical Drafting and Design
	Yr. 2 – Survey of Engineering Graphics
	Yr. 3 – 3D Modeling and Analysis
Manufacturing Cluster Mechatronics – AAS only	Transportation, Distribution & Logistics Cluster Automobiles Maintenance & Light Repair – AAS only
Yr. 1 – Intro to Mechatronics	Yr. 1 – Basic Maintenance and Light Repair
Yr. 2 – AC Theory, Electric Motors, and Hydraulic	Yr. 2 – Maintenance and Light Repair II
11. 2 – AC Theory, Electric Wotors, and Trydraunc	Vr 3 Maintenance and Light Renair III
Systems	Yr. 3 – Maintenance and Light Repair III
Systems Yr. 3 – Semiconductors, Mechanical Systems, and Pump and Piping Systems	Automotive Service Technology – AAS only
Yr. 3 – Semiconductors, Mechanical Systems, and Pump	Automotive Service Technology – AAS only Yr. 1 – Automobile Service Technology IV
Yr. 3 – Semiconductors, Mechanical Systems, and Pump	Automotive Service Technology – AAS only
Yr. 3 – Semiconductors, Mechanical Systems, and Pump and Piping Systems Marketing Cluster Marketing Communications & Promotions – AAS only	Automotive Service Technology – AAS only Yr. 1 – Automobile Service Technology IV Yr. 2 – Automobile Service Technology V Yr. 3 – Automobile Service Technology VI Diesel Maintenance – AAS only
Yr. 3 – Semiconductors, Mechanical Systems, and Pump and Piping Systems Marketing Cluster Marketing Communications & Promotions – AAS only Yr. 1 – Marketing Principles	Automotive Service Technology – AAS only Yr. 1 – Automobile Service Technology IV Yr. 2 – Automobile Service Technology V Yr. 3 – Automobile Service Technology VI
Yr. 3 – Semiconductors, Mechanical Systems, and Pump and Piping Systems Marketing Cluster Marketing Communications & Promotions – AAS only Yr. 1 – Marketing Principles Yr. 2 – Promotion and Professional Sales	Automotive Service Technology – AAS only Yr. 1 – Automobile Service Technology IV Yr. 2 – Automobile Service Technology V Yr. 3 – Automobile Service Technology VI Diesel Maintenance – AAS only Yr. 1 – Intro to Diesel Mechanics
Yr. 3 – Semiconductors, Mechanical Systems, and Pump and Piping Systems Marketing Cluster Marketing Communications & Promotions – AAS only Yr. 1 – Marketing Principles Yr. 2 – Promotion and Professional Sales	Automotive Service Technology – AAS only Yr. 1 – Automobile Service Technology IV Yr. 2 – Automobile Service Technology V Yr. 3 – Automobile Service Technology VI Diesel Maintenance – AAS only Yr. 1 – Intro to Diesel Mechanics Yr. 2 – Diesel I Yr. 3 – Diesel II
Yr. 3 – Semiconductors, Mechanical Systems, and Pump and Piping Systems Marketing Cluster Marketing Communications & Promotions – AAS only Yr. 1 – Marketing Principles Yr. 2 – Promotion and Professional Sales Yr. 3 – Marketing Communications Essentials Marketing and Management	Automotive Service Technology – AAS only Yr. 1 – Automobile Service Technology IV Yr. 2 – Automobile Service Technology V Yr. 3 – Automobile Service Technology VI Diesel Maintenance – AAS only Yr. 1 – Intro to Diesel Mechanics Yr. 2 – Diesel I Yr. 3 – Diesel II Supply Chain Management – AAS only
Yr. 3 – Semiconductors, Mechanical Systems, and Pump and Piping Systems Marketing Cluster Marketing Communications & Promotions – AAS only Yr. 1 – Marketing Principles Yr. 2 – Promotion and Professional Sales Yr. 3 – Marketing Communications Essentials Marketing and Management Yr. 1 – Marketing Principles	Automotive Service Technology – AAS only Yr. 1 – Automobile Service Technology IV Yr. 2 – Automobile Service Technology V Yr. 3 – Automobile Service Technology VI Diesel Maintenance – AAS only Yr. 1 – Intro to Diesel Mechanics Yr. 2 – Diesel I Yr. 3 – Diesel II Supply Chain Management – AAS only Yr. 1 – Logistics Fundamentals
Yr. 3 – Semiconductors, Mechanical Systems, and Pump and Piping Systems Marketing Cluster Marketing Communications & Promotions – AAS only Yr. 1 – Marketing Principles Yr. 2 – Promotion and Professional Sales Yr. 3 – Marketing Communications Essentials Marketing and Management Yr. 1 – Marketing Principles Yr. 2 – Marketing & Entrepreneurship	Automotive Service Technology – AAS only Yr. 1 – Automobile Service Technology IV Yr. 2 – Automobile Service Technology V Yr. 3 – Automobile Service Technology VI Diesel Maintenance – AAS only Yr. 1 – Intro to Diesel Mechanics Yr. 2 – Diesel I Yr. 3 – Diesel II Supply Chain Management – AAS only Yr. 1 – Logistics Fundamentals Yr. 2 – Logistics Operations
•	Automotive Service Technology – AAS only Yr. 1 – Automobile Service Technology IV Yr. 2 – Automobile Service Technology V Yr. 3 – Automobile Service Technology VI Diesel Maintenance – AAS only Yr. 1 – Intro to Diesel Mechanics Yr. 2 – Diesel I Yr. 3 – Diesel II Supply Chain Management – AAS only Yr. 1 – Logistics Fundamentals
Yr. 3 – Semiconductors, Mechanical Systems, and Pump and Piping Systems Marketing Cluster Marketing Communications & Promotions – AAS only Yr. 1 – Marketing Principles Yr. 2 – Promotion and Professional Sales Yr. 3 – Marketing Communications Essentials Marketing and Management Yr. 1 – Marketing Principles Yr. 2 – Marketing & Entrepreneurship	Automotive Service Technology – AAS only Yr. 1 – Automobile Service Technology IV Yr. 2 – Automobile Service Technology V Yr. 3 – Automobile Service Technology VI Diesel Maintenance – AAS only Yr. 1 – Intro to Diesel Mechanics Yr. 2 – Diesel I Yr. 3 – Diesel II Supply Chain Management – AAS only Yr. 1 – Logistics Fundamentals Yr. 2 – Logistics Operations

~Work-Based Learning opportunities are available in all pathways~

AAS only - this pathway is available exclusively at the Academy for Advanced Studies

- *Designates CTAE courses that will count toward satisfying the fourth science requirement and are recognized by the Board of Regents as a fourth science
- + Designates CTAE courses that will count toward satisfying the fourth science requirement but are not recognized as a fourth science by the Board of Regents

 $\underline{https://www.gadoe.org/Curriculum-Instruction-and-Assessment/Curriculum-and-Instruction/Documents/Science/Science%20%28Fourth%20Science%20Options%29%202017-2018.pdf$