

Central Academy of Technology and Arts Pathways

“Class of 2027”

Information Technology – Cyber Security

9th	CompTIA IT Fundamentals AP Computer Science Principles	
10th	Network Engineering Tech I Honors PLTW Intro to Cyber Security	Optional: Python Programming I Honors; AP Computer Science A
11th	CTI 140: Virtualization Concepts NOS 120: Linux/UNIX Single User CTI 141: Cloud and Storage Concepts NOS 230: Windows Administration I	
12th	SEC 110: Security Concepts SEC 150: Secure Communications SEC 160: Security Administration I SEC 258: Security Compliance	

Information Technology – Computer Engineering

9th	CompTIA IT Fundamentals Microsoft Excel	
10th	Computer Engineering Tech I Computer Engineering Tech II Honors	
11th	Network Engineering Tech I Honors Network Engineering Tech II Honors	
12th	Networking Engineering Tech III Honors	Optional electives: Electronics DC Honors (Level 1), Electronics AC Honors (Level 2), Robotics Honors

Information Technology – Software & Game Design

9th	Microsoft Excel or Visual Art I AP Computer Science Principles	
10th	Python Programming I Honors AP Computer Science A (Programming Track) OR Adobe Visual Design 1 Honors Adobe Video Design 1 Honors (Arts track)	
11th	3D Modeling and Animation I 3D Modeling and Animation II or AP Computer Science A	
12th	Game Art & Design Honors Advanced Game Art & Design Honors	

Medical Science

9th	PLTW Principles of Biomedical Honors Health Science I Honors	
10th	PLTW Human Body Systems Honors Health Science II Honors	
11th	PLTW Medical Interventions Honors	
12th	PLTW Biomedical Innovation (Required for students who took MI in 11 th grade. Elective for students who didn't take MI) PLTW Medical Intervention: For students who didn't take it 11 th grade year.	Optional: Sports Medicine 1 Honors

Performing Arts - Dance

9th	Dance I Tech Theatre I	
10th	Dance II Dance III Honors	
11th	Dance III Honors Dance IV Honors	
12th	Dance IV Honors	Optional: Fashion and Textiles Fund., Apparel II, Dance Specialization Honors

Performing Arts – Music Production and Recording Arts

9th	Music Theory Honors Band or Chorus	
10th	Adobe Video Design I Honors Audio Engineering Tech I Honors Band, Chorus, or Music Specialization	
11th	Audio Engineering Tech II Honors Adobe Video Design II Honors Band, Chorus, or Music Specialization	Optional: Adobe Visual Design I Honors
12th	CTE Advanced Studies in AATV Band, Chorus, or Music Specialization	Optional: Adobe Visual Design I Honors

Performing Arts - Theatre

9th	Theatre I Chorus Apparel I	
10th	Technical Theatre I Theatre II Theatre III Honors	
11th	Theatre Arts III Honors Theatre Arts IV Honors	
12th	Theatre Arts IV Honors	Optional: Theatre Specialization Honors, Tech Theatre II, Play Production, Apparel II, Physical Theatre

Pre-Engineering: Pre-Engineering Track ; Pre-Engineering Tech Track

9th	PLTW Intro to Engineering Design Robotics I Honors	
10th	Electronics DC Honors Electronics AC Honors	
11th	PLTW Principles of Engineering (POE) Advanced Manufacturing 1 Honors Robotics II Honors	
12th	PLTW Capstone	Optional: PLTW Aerospace Engineering (12th), PLTW Civil Engineering & Architecture (12th), AP Computer Science, Advanced Manufacturing I and II

Transportation - Auto Technology

9th	Automotive Service Fundamentals	
10th	Auto Service I Auto Service II	
11th	Auto Service III Auto Service – Engine Drivetrain	
12th	Auto Service – Hybrid & EV Technologies Honors	Optional: CTE Advanced Studies

Transportation – Automotive Body Repair

9th	Collision Repair Fundamentals
10th	Collision Repair I
11th	Automotive Body Repair III Non-structural Automotive Body Repair III Refinishing & Plastic Repair
12th	CTE Advanced Studies

International Academy

9th and 10th	IB Diploma Programme Prerequisites: Honors Math 1, 2, AND 3 Honors English 1 OR Adv. Inquiry AND Honors English 2 Honors Earth Science, Honors Biology, AND Honors Chemistry Honors Civic Literacy AND Honors Economics and Personal Finance Spanish/French 1, 2, AND 3 Health/PE Visual Art 1	<i>Suggested courses (These courses are not required but are helpful for success in the IB DP)</i> AP Precalculus Spanish/French IV Honors Advanced Inquiry Honors
11th and 12th	IB Diploma Programme requirements: IB Language and Literature* IB French IB Spanish IB History* IB Biology IB Environmental Systems and Societies IB Applications and Interpretation* IB Visual Arts IB Theory of Knowledge	<i>These courses will be taken yearlong on an A/B schedule over two years.</i> *This course will also count towards graduation requirements