

Central Academy of Technology and Arts Pathways

“Class of 2029”

Information Technology – Cyber Security

9th	CompTIA IT Fundamentals	AP Computer Science Principles
10th	Network Engineering Tech I Honors Python Programming 1 Honors (Optional)	PLTW Intro to Cyber Security AP Computer Science A (optional)
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 Expert
10th	Computer Engineering Tech I	Computer Engineering Tech II Honors
11th	Network Engineering Tech I Honors	Network Engineering Tech II Honors
12th	Optional electives: Electronics DC Honors (Level 1), Electronics AC Honors (Level 2), Robotics Honors	Network Engineering Tech III Honors

Information Technology – Software & Game Design

9th	Microsoft Excel Expert or Visual Art I	AP Computer Science Principles
10th	Python Programming I Honors (Programming Track) OR Adobe Visual Design 1 Honors (Arts track)	AP Computer Science A (Programming track) OR Adobe Video Design 1 Honors (Arts track)
11th	3D Modeling and Animation I	AP Computer Science A 3D Modeling and Animation II
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 Honors	Optional electives: Sports Medicine 1 Honors, CTE Medical Internship

Performing Arts - Dance

9th	Tech Theatre I	Dance I
10th	Dance II	Dance III Honors
11th	Dance III Honors	Dance IV Honors
12th	Optional electives: Tech Theatre I, Apparel II, Dance Specialization Honors	Dance IV Honors

Performing Arts – Music Production and Recording Arts

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

Performing Arts - Theatre

9th	Theatre I	Apparel I & Musical Theatre
10th	Technical Theatre I and Theatre II	Theatre III Honors
11th	Theatre III Honors	Theatre IV Honors
12th	Theatre IV Honors	Optional electives: 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 (IED) (Both tracks)	Robotics I Honors (Both tracks)
10th	Electronics DC Honors (Both tracks)	Electronics AC Honors (Both tracks)
11th	PLTW Principles of Engineering (POE) Advanced Manufacturing 1 Honors	PLTW Computer Integrated Manufacturing (CIM) Manufacturing Robotics Honors
12th	PLTW Capstone Advanced Manufacturing 2 Honors	Elective Options – PLTW Aerospace Engineering (AE), PLTW Civil Engineering & Architecture (CEA), AP Computer Science, Advanced Manufacturing I and II, Manufacturing Robotics Honors

Transportation - Auto Technology

9th	Collision Repair Fundamentals	Automotive Service Fundamentals
10th	Auto Service I	Auto Service II
11th	Auto Service III	Auto Service – Engine Drivetrain
12th	CTE Advanced Studies (optional)	Auto Service – Suspension Chassis Electrical

Transportation – Collision

9th		Collision Repair Fundamentals
10th	Collision Repair I	
11th	Collision Repair II Non-structural	Collision Repair II Refinishing
12th		CTE Advanced Studies

International Academy

9th and 10th	<i>IB Diploma Programme Prerequisites:</i> 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	<i>IB Diploma Programme requirements:</i> 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