

Central Academy of Technology and Arts Pathways “Class of 2028”

Information Technology – Cyber Security

9th	CompTIA IT Fundamentals	AP Computer Science Principles
10th	Network Engineering Tech I Honors Python Programming 1 Honors (Optional)	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 (Arts track)	AP Computer Science A (Programming track) OR Adobe Video Design 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

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

Performing Arts – Music Production and Recording Arts

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

Performing Arts - Theatre

9 th	Theatre I	Apparel I & Musical Theatre
10 th	Technical Theatre I and Theatre II	Theatre III Honors
11 th	Theatre III Honors	Theatre IV Honors
12 th	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**

9 th	PLTW Intro to Engineering Design (IED) (Both tracks)	Robotics I Honors (Both tracks)
10 th	Electronics DC Honors (Both tracks)	Electronics AC Honors (Both tracks)
11 th	PLTW Principles of Engineering (POE) Advanced Manufacturing 1 Honors	Manufacturing Robotics Honors
12 th	PLTW Engineering Design & Development (EDD) Advanced Manufacturing 2 Honors	Elective Options – PLTW Aerospace Engineering (AE), PLTW Civil Engineering & Architecture (CEA), AP Computer Science, Advanced Manufacturing I and II, PLTW Computer Integrated Manufacturing, Manufacturing Robotics Honors

Transportation - Auto Technology

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

Transportation – Collision

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

International Academy

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