Troy Tech

Grade 9:
AP Computer
Science Principles

Grades 10-12: Pathways offer Honors (H), AP, IB, Cambridge (CAM), and Certifications*

Media	Business	Computer Science	Cyber Defense	Engineering	Governmental Leadership
Media Concepts H Film 1 CAM AS Media Studies (IB SL 11th) Film 2 CAM A Media Studies (IB HL2 12th) Sports Broadcast H1&2 Broadcast Journalism H1&2 Advanced Journalism Yearbook H	Empowering Entrepreneurs H International Business H (CAM) Business Management IB SL (CAM)	Cambridge Advanced Computer Science AS Year 1 (CAM) Computer Science A AP (IB HL 1) Cambridge Advanced Computer Science A Year 2(CAM) Computer Sci. IB HL 2	Digital Technology Fundamentals H* Networking Security Essentials H* Cybersecurity 101 H*	Mechatronics H Cambridge Design & Technology AS Year 1 (IB SL 11th, CAM)* Cambridge Design & Technology A Year 2 (CAM)*	Naval Junior Reserve Officers Training Corps (NJROTC) 1 NJROTC 2 NJROTC 3 H NJROTC 4 H

Senior Internship
(374 Interns Class of 2023)

Choosing a pathway can be a tough decision – ALL the pathways are excellent, rigorous, and expertly-designed by Troy's own teachers. See troytech.troyhigh.com for additional information and course catalog.

Media
- Troy Productions, Omnia daily broadcast, Oracle newspaper, Illium yearbook. All American HS Film Festival NY, OC Artist of the Year, OC Journalism Education Assoc. IB and Cambridge options.
- The pathway can start with Media Concepts Honors (Adobe foundation for media pathway options) or Film 1 CAM AS Media Studies (fiction) as well as Sports Broadcast H (non-fiction). For those interested in publications, Oracle and Ilium are available; **enrollment available** through application & interview.

Business
- FBLA is incorporated into the pathway. In 2022, FBLA competed at both State and National conferences and received 1 national and 7 state championships. IB and Cambridge options.
- Empowering Entrepreneurs Honors includes project-based learning about entrepreneurship in a global world.
- Students collaboratively assess business objectives, develop critical thinking and problem solving skills by working with real world case studies, and evaluate decisions for today's multicultural markets.

Computer Science
- 4 years of honors programming. AP, IB and Cambridge exams qualify for college credit. Recognized #1 CS program in the world by College Board. Programming contests Wittry, Cal Poly Pomona, and more. Competitive Esports.
- Computer science develops students' computational and critical thinking skills and shows them how to create, not simply use, new technologies. This fundamental knowledge prepares students for the 21st century, regardless of their ultimate field of study.www.code.org

Cyber Defense
- Largest competitive program in the U.S. with over 300 students. Presidential recognition 2022. Annual CyberPatriot Nationals including three-time National Champions 2021/2019/2018, Leadership opportunities teaching peers, middle school, and elementary students.
- Courses offer certifications including: Digital Technology Fundamentals with CompTIA A+, Networking Security Essentials with CompTIA Networking+, Cybersecurity 101 with CompTIA Security+. Annual Troy's Cyber Defense Summer Camp includes Grades K-8.

Engineering
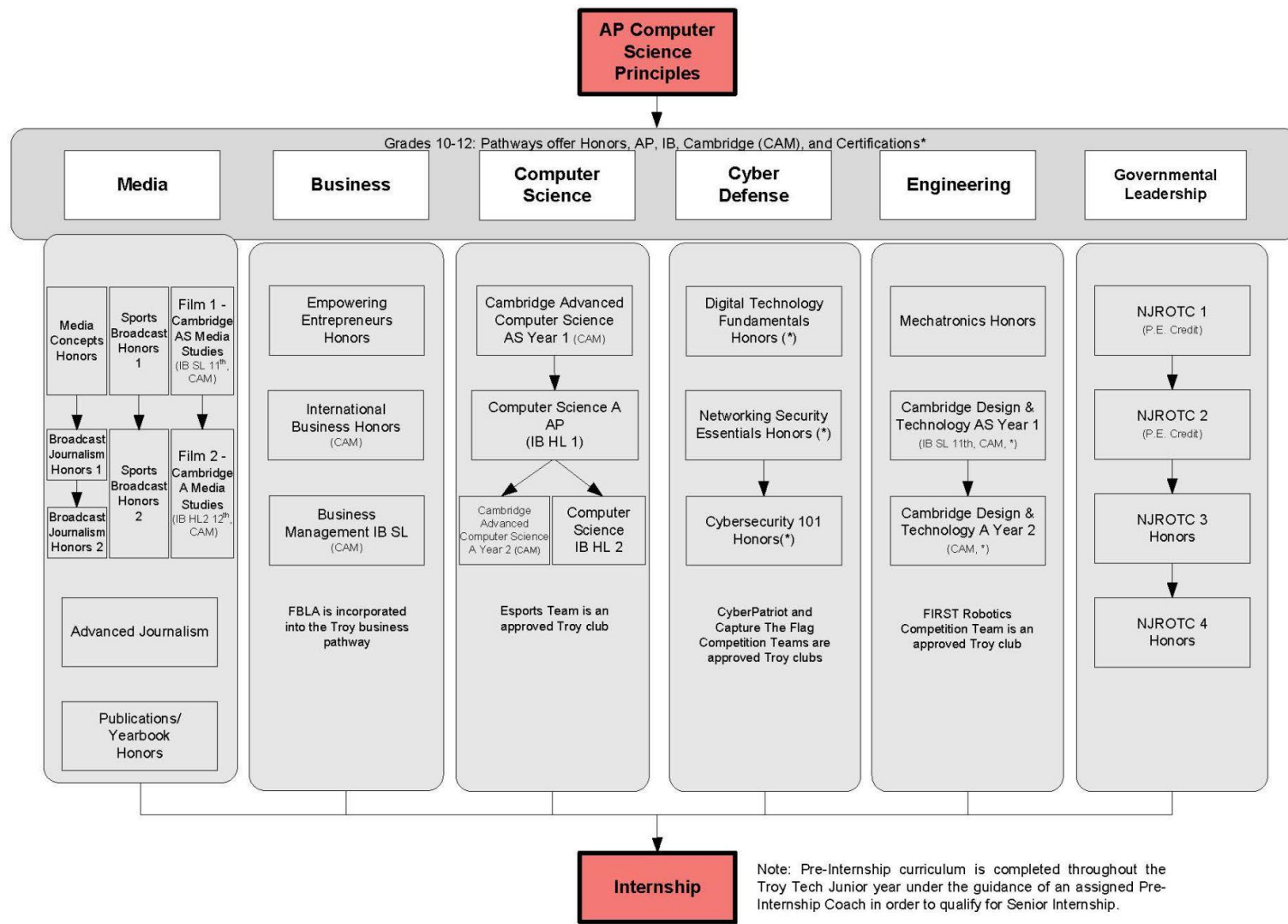- SolidWorks CSWA certification. IB and Cambridge options. FIRST Robotics Team participated in 2022 National build competition.
- Students learn the design process from start to finish as they design using SolidWorks software and then build using the power tools in the classroom's workshop. Mechatronics combines mechanical + electrical + computer technologies.

Governmental Leadership
- Largest CA NJROTC 300+ cadets. Distinguished Unit with Academic Honors 2022. Students have the option to join nationally competitive teams including Drill, Orienteering, Brain Brawl, Seaperch, and more. Students gain peer leadership experience and form strong bonds. For 9-10th grade, NJROTC counts as P.E. units toward graduation. Annual appointments to Academies.

Senior Internships
Students complete the program with a 150-hour experience (virtual or in-person) at a business site or university with a professional mentor. Approximately 400 seniors earn internship credit each summer. To locate Internships, students network with professionals through family member contacts, required job-shadowing experiences, and current Interns. Each Intern is guided by their Troy Tech Advisor during junior and senior year, who has access to a database of over 1,000 active mentors.

AP Computer Science Principles

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Media | **Business** | **Computer Science** | **Cyber Defense** | **Engineering** | **Governmental Leadership**

Media pathway:
- Media Concepts Honors
- Sports Broadcast Honors 1
- Film 1 - Cambridge AS Media Studies (IB SL 11th, CAM)
- Broadcast Journalism Honors 1
- Sports Broadcast Honors 2
- Film 2 - Cambridge A Media Studies (IB HL2 12th, CAM)
- Broadcast Journalism Honors 2
- Advanced Journalism
- Publications/ Yearbook Honors

Business pathway:
- Empowering Entrepreneurs Honors
- International Business Honors (CAM)
- Business Management IB SL (CAM)
- FBLA is incorporated into the Troy business pathway

Computer Science pathway:
- Cambridge Advanced Computer Science AS Year 1 (CAM)
- Computer Science A AP (IB HL 1)
- Cambridge Advanced Computer Science A Year 2 (CAM)
- Computer Science IB HL 2
- Esports Team is an approved Troy club

Cyber Defense pathway:
- Digital Technology Fundamentals Honors (*)
- Networking Security Essentials Honors (*)
- Cybersecurity 101 Honors(*)
- CyberPatriot and Capture The Flag Competition Teams are approved Troy clubs

Engineering pathway:
- Mechatronics Honors
- Cambridge Design & Technology AS Year 1 (IB SL 11th, CAM, *)
- Cambridge Design & Technology A Year 2 (CAM, *)
- FIRST Robotics Competition Team is an approved Troy club

Governmental Leadership pathway:
- NJROTC 1 (P.E. Credit)
- NJROTC 2 (P.E. Credit)
- NJROTC 3 Honors
- NJROTC 4 Honors

Internship

Note: Pre-Internship curriculum is completed throughout the Troy Tech Junior year under the guidance of an assigned Pre-Internship Coach in order to qualify for Senior Internship.

Troy Tech courses are year-long. This chart shows courses available in each pathway.
The courses that must be taken in sequence are noted with a connecting arrow.

Troy Tech Internship is a Summer Course listed on your transcript with a summer grade. Breakfast Event and Fair are expectations. Internships can be completed virtually or in-person.
Important Internship Dates for Troy Tech Juniors (Information is on Google classroom, sent by email and preinternship.troyhigh.com)**:**
Tues, Mar 14, 2023 Mandatory Intern/Parent Virtual Meeting (receive evening times/links and summer/fall internship forms by email)
Wed, April 26, 2023 Troy Tech Fair for 2023 Seniors – Virtual viewing available, Google Exploration Form Due
Thurs, April 27, 2023 Mandatory Junior Internship Virtual Meeting (student only)
Mon, June 5, 2023 Summer Internships Start/Mandatory Student Only Meeting 8am (virtual) & **Wed, July 12, 2023** Latest date to complete Summer Internship. All paperwork due by noon.
- Summer Interns must start the first week of summer school and intern a minimum of 25 hours and maximum of 40 hours per week consecutive weeks until the 150 hours are complete. **Summer Interns may not interrupt their Internship for vacation or any other purposes**. You may not exceed an 8-hour workday. **August 2023-May 2024** Fall/Spring is an option.
- Any programs or out-of-area internship considerations should be approved by Mrs. Downum-Bonnett Ldownum@fjuhsd.org
- Lists of past Troy Intern contacts are on Google classroom ("stream"). Coaches are available to you. Emails should be specific – include your full name, city where you live, interest area, and resume. Contact Mrs. Downum-Bonnett with questions or concerns.
- Prescreened sites: Boeing, Peraton, Raytheon, Google (business pathway), NOC Selpa, and Discovery Cube
- If you have other FJUHSD courses to take this summer (for remediation), FJUHSD limits 15 units max for summer; Internship=10 units. Any questions or concerns, contact Downum-Bonnett