

Class of 2028

Freshman Course Guide



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Project-Based Learning

Project-Based Learning (PBL) is the primary means of instruction at CSA. Students are expected to produce solutions to ill-defined problems, respond to rigorous challenges that require creative and complex solutions and collaborate with others to achieve results. Content standards are integrated into all projects so that students can master traditional course content through projects that require students to be evaluated on a wide variety of developmental skills

Curriculum

Our curriculum brings together the strength of modern technology, community partnerships, problem-solving, interdisciplinary instruction, and global perspectives in a student-centered, collaborative, project-based community. CSA's goal is to provide an education on 21st Century Skills in a project-based learning environment. This is accomplished through unprecedented collaboration between K-12 public schools, higher education, business, organized labor, and government. Through these partnerships, the lessons taught at CSA are continually updated to remain relevant to the students. Students benefit from having unique opportunities to visit and experiment in laboratories and workplaces and from having access to leaders from all levels of society.

Traditionally, high-performing students opt to take AP courses. Because the prescriptive nature of AP courses does not align well with an in-depth project-based learning curriculum, CSA New Tech does not offer AP courses; however, student performance in their post-secondary courses delivered on the Ivy Tech or IU Columbus campus demonstrates how students can adapt their learning to traditional post-secondary environments.

Assessment

Along with being assessed on content, all students are assessed on 21st-century learning outcomes:

- Content
- Written Communication
- Oral Communication
- Collaboration

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- Agency

CSA Diplomas and New Tech Seal

Because CSA is a magnet school, students' diplomas will be from Columbus East High School or Columbus North High School. Therefore, students will be awarded the Indiana Core 40 diploma, a Technical Honors Diploma, or the Academic Honors Diploma based on specific credit requirements completed. To earn a diploma, students must also demonstrate completion of an Indiana Graduation Pathway.

Students who have met all Columbus Signature Academy New Tech's additional graduation expectations will also earn a CSA New Tech Seal. To earn this honorary New Tech Seal, students must do the following*:

1. complete 100 hours of community service
2. complete a career-related internship during senior year
3. complete a senior project
4. complete a STEM-focused curriculum
5. earn 12 college credit hours

*see www.bcscschools.org/csaneutec for more details

English

Global Science Perspectives (012021/012022)

English 9 is integrated with Environmental Studies. Students read, write and create projects that tie into science, culture, natural disasters, current events, religion, and climate. English 9 with Honors available via an application process in August.

GRAD REQUIREMENTS: English 9, Environmental Studies (elective)
TOTAL CREDITS: 2 each semester, 4 total

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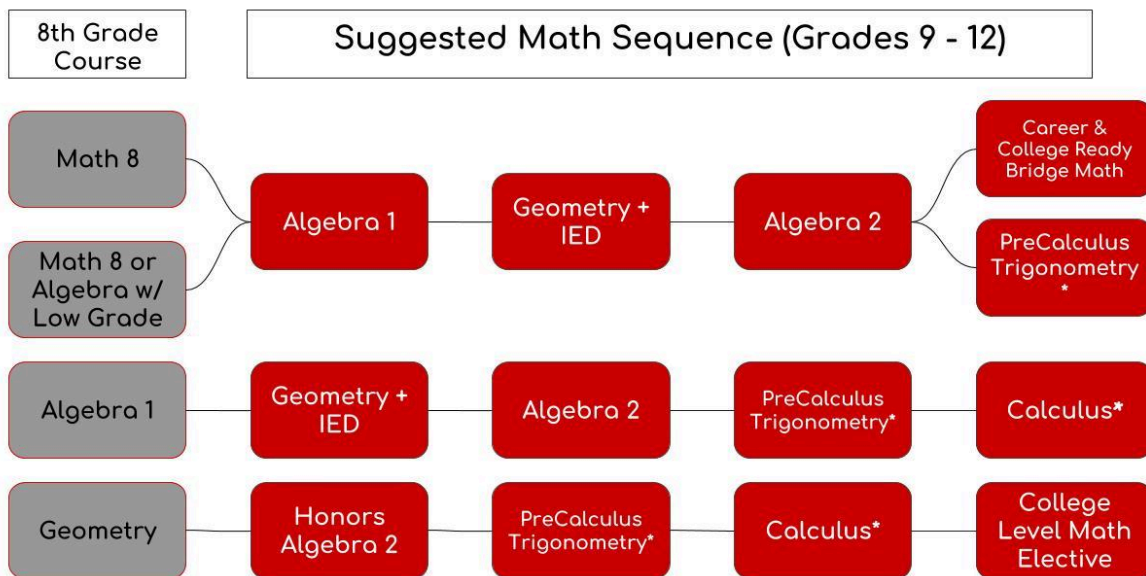
Social Studies

World History & Civilization (311011/311012)

This required course meets the graduation requirement for the Core 40 (plus Academic or Technical Honors) diploma. Students will compare and contrast events and developments involving diverse peoples and civilizations in different regions of the world. They will also examine examples of continuity and change, universality and particularity, and unity and diversity among various people and culture from the past to the present.

Mathematics

All students are required to take a math or quantitative reasoning course EACH year of high school. Your 8th-grade math teacher will recommend the correct class for you based on your 8th-grade performance.



*This course is currently offered as a dual credit course through Ivy Tech. Students who meet the dual credit requirements can earn credits for the following classes.

- Geometry + Introduction to Engineering & Design - Design 101 + Design 103 (3 Credits each)
- PreCalculus/Trigonometry - Math 136 (3 Credits) + Math 137 (3 Credits)
- Calculus - Math 211 (4 Credits)

College Level Math Electives: Finite Math, AP Statistics, Early College Courses at Ivy Tech or IUPUC. Not all of these options will be offered every year.

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Algebra I (113011/113012)

This is the first math course of a Core 40 diploma. With honors distinction available upon facilitator recommendation.

Geometry / PLTW: Introduction to Engineering (113021/113022)

This class is more commonly called GEO/IED. This is geometry integrated with Project Lead the Way's Introduction to Engineering. Geometry is a graduation requirement for all students and is taken after Algebra I.

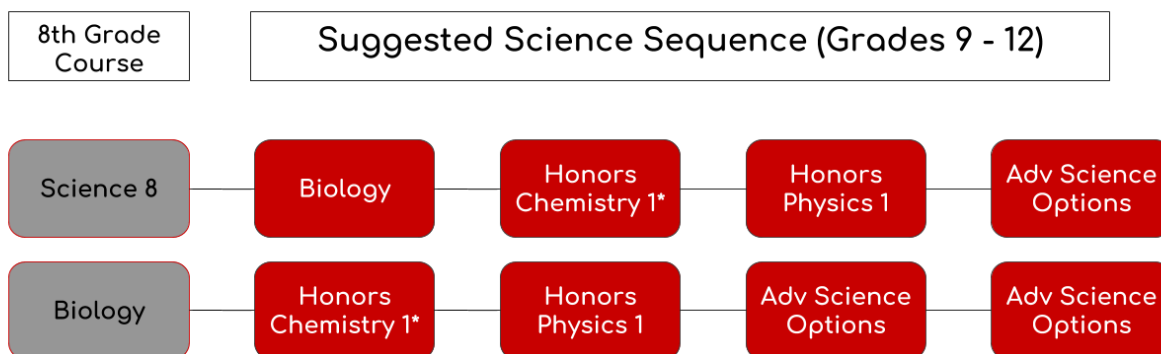
GRAD REQUIREMENT: Geometry
TOTAL CREDITS: 2 each semester, 4 total
DUAL CREDITS: DESN 103 (3 crdts, Ivy Tech) + DESN 113 (3 crdts, Ivy Tech)

Algebra II (113031/113032)

This course is for students who complete both Algebra I and Geometry successfully in middle school. With honors distinction available upon facilitator recommendation.

Science

The Core 40 diploma requires 6 credits in science; to earn the New Tech Seal, students must take science all 4 years. Your 8th-grade science teacher will recommend the correct class for you.



*This course is currently offered as a dual credit course through Ivy Tech. Students who meet the dual credit requirements can earn credits for CHEM 101 (3 credits).

Advanced Science Options: Adv Chemistry 2, Adv Physics 2, Adv Biology 2, Environmental Science, Early College Courses at Ivy Tech or IUPUC. Not all of these options will be offered every year.

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Biology I (214011/214012)

All students must earn two credits in biology and complete the end of course exam to earn a high school diploma. Biology is the study of the natural world and living organisms.

Integrated Chemistry-Physics (ICP) (234011/234012)

Students in ICP explore the basic principles of chemistry and physics. This course *does* count as a science graduation requirement and is good preparation for students before they take Biology.

Chemistry Honors (224111/224112)

This course is a consideration for students who successfully complete Biology in 8th grade. This is a Dual Credit course: CHEM 101 (3 credits, Ivy Tech).

Health & PE

Students must earn 1 credit each of PE Team, PE Individual, and Health for the Core 40 diploma.

PE Individual (71101)

This course is a graduation requirement and includes physical activity, strength training, flexibility exercises, and personal fitness.

PE Team (71102)

This course is a graduation requirement and includes physical activity, strength training, flexibility exercises, and team-based sports.

Health (74301)

This course shows students how to protect and promote health and avoid or reduce health risks. This is a graduation requirement.

PE Option (71202)

This course is an option for students who qualify via participation in a BCSC qualified activity. See our website (under Learning, Courses) for more detailed information on the Waiver Program. Note: there is required paperwork to successfully enroll in the PE (Option) Waiver Program for credit.

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Electives

These are courses that students can “elect” or choose to take, in order to meet the requirements of Directed Electives and Required Elective credits for the Indiana Core 40 Diploma (or Core40 with Academic and/or Technical Honors).

World language

Grades earned in world language in middle school will be part of a student’s high school transcript and will count in the overall GPA. Students who earn a grade of C or below in middle school may repeat the course(s) in high school for a higher grade. The original grade remains on the transcript, but will not be calculated in the GPA.

World language study is not required for graduation; HOWEVER, it is a requirement for students seeking an *Academic Honors Diploma* (6 credits in 1 language or 8 credits in 2).

Spanish 1, 2, 3, 4

The courses are based on Indiana Academic Standards. Students are instructed in Spanish language learning and various aspects of Spanish-speaking culture.

World Language Lab (99977)

This course provides an opportunity to continue study in French or German that was started in middle school, with the support of multiple resources, including a licensed world language facilitator. Candidates must apply and be recommended for enrollment.

Fine Arts

These classes meet directed elective courses for the Core 40 diploma. Two fine art credits are required for an Academic Honors diploma.

Intro 2D Art (40211) - One Semester

All students are eligible for this course. Students taking this course engage in learning experiences that encompass art history, art criticism, aesthetics, production, and integrated studying leading to the creation of portfolio quality two-dimensional works.

Intro 3D Art (40411) - One Semester

All students are eligible for this course. Students will create realistic and abstract sculptures utilizing subtractive and additive processes of carving, modeling, construction, and assembling.

Advanced 2D Art (40412) - One Semester

Prerequisite: Intro 2D Art or Facilitator approval.

Advanced 3D Art (40412) - One Semester

Prerequisite: Intro 3D Art or Facilitator approval.

English Electives

CSA Publications (06137/061372) - One Semester

Students demonstrate their ability to do journalistic writing and design for high school publications (primarily the CSA Yearbook).

Creative Writing (061511) (Literature Through Music) - One Semester

This course is a study and application of writing strategies for prose and poetry. This first-semester course will focus on how literature is developed through music.

Dramatic Literature (061411) - One Semester

This course is a study and application of writing strategies uses specifically in a theatrical setting.

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English Seminar (02112) - One Semester

This course will help students improve their writing and reading skills. Some students may be assigned to this course for additional English support.

Other Electives

Topics in Social Science (399901)

This course provides students with an in-depth study of topics, themes, or concepts like diversity, stereotypes, and social norms.

Current Problems, Issues, & Events (318021/318022)

This course gives students the opportunity to apply investigative and inquiry techniques to the study of significant problems or issues in today's society.

Academic Lab (999091/999092)

Students are *encouraged* to take this course, which provides time for students to work on and get help with their projects. This is not for academic credit.

Engineering Immersion Pathway @ CSA New Tech

Students will begin on this pathway when taking GEO / IED. If a 9th grader has already taken Geometry, they can enroll in Algebra II and independent study Introduction to Engineering Design. At the conclusion of that year, choices for movement into Principles of Engineering and beyond are available.

Advisory

All students will have an Advisory period (you will NOT need to select it as one of your choices). Advisory is the heart of our CSA New Tech culture aligning with our collective vision and mission. Students will develop close relationships with their advisory facilitator and fellow students as well as their combined house team. Advisory curriculum includes study and experience with career and college exploration, community service learning, financial literacy, and collaboration conflict management.

Vision & Mission

Our vision is to be a revolutionary pathway for education.

Our mission is to prepare socially engaged citizens who excel in an information and technology-rich society.

Our students will:

- Know themselves and their talents well, identify areas for personal growth and create and identify paths that will fulfill their own destinies.
- Learn through collaboration with family, business, and community.
- Possess a strong sense of civic responsibility.
- Embrace and celebrate differences and appreciate individuality
- Think critically and practice 21st-century skills.
- Think creatively to solve authentic, real world problems.
- Sustain healthy, trusting relationships that support a safe learning environment.

Travel

Music

Students who participate in band and/or choir, will be able to access those classes at their home school [Columbus East or Columbus North]. Travel students will be shuttled to East/North for their music class.

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C4

Career and technical education courses are offered to all BCSC students through C4. These courses meet the requirements for the Core 40 diploma directed electives as well as provide the pathway to a *Technical Honors* Core 40 diploma. Most CSA New Tech students schedule their C4 electives during their Sophomore and Junior years (note that some C4 programs have age/grade level requirements).

See the BCSC homepage and choose the school C4 Columbus Area Career Center (www.bcscschools.org/c4) for more specific and detailed information on the different cluster offerings.

Dual Credit

CSA New Tech offers dual college credit through Ivy Tech. Dual Credit courses are high school accredited courses that all students take for high school credit. In addition, the facilitator of the dual credit course has been approved to also award Ivy Tech college credit to students who *qualify* for the additional Ivy Tech credits. Students can qualify via PSAT, ACT, SAT, and Accuplacer placement tests. Most dual credit courses are taken during Junior and Senior years.

Course offerings for dual credit are adjusted yearly based on the Indiana Department of Education dual credit crosswalk.



Questions? Contact Jen Morrill - Counselor - morrillj@bcsc.k12.in.us - 812-376-4595

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