TEXAS ONLINE PREPARATORY SCHOOL

Course Catalog 2024-2025

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English Courses

English I

This course challenges students to improve their written and oral communication skills, while strengthening their ability to understand and analyze literature in a variety of genres.

Literature: Students read a broad array of short stories, poetry, drama, novels, autobiographies, essays, and famous speeches. The course guides students in the close reading and critical analysis of classic works of literature and helps them appreciate the texts and the contexts in which the works were written. Literary selections range from classic works such as Shakespeare's *Romeo and Juliet* to contemporary pieces by authors such as Maya Angelou.

Language Skills: Students broaden their composition skills by examining model essays in various genres by student and published writers. Through in-depth planning, organizing, drafting, revising, proofreading, and feedback, they hone their writing skills. Students build on their grammar, usage, and mechanics skills with in-depth study of sentence analysis and structure, agreement, and punctuation, reinforced by online activities (Skills Updates). Student vocabularies are enhanced through the study of Greek and Latin root words, improving students' ability to decipher the meanings of new words.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): None

Honors English I

This course challenges students to improve their written and oral communication skills, while strengthening their ability to understand and analyze literature in a variety of genres. Students enrolled in this course work on independent projects that enhance their skills and challenge them to consider complex ideas and apply the knowledge they have learned.

Literature: Students read a broad array of short stories, poetry, drama, novels, autobiographies, essays, and famous speeches. The course guides students in the close reading and critical analysis of classic works of literature and helps them appreciate the texts and the contexts in which the works were written. Literary selections range from the Greek tragedy *Antigone* to Shakespeare's *Romeo and Juliet* to contemporary pieces by authors such as Annie Dillard and Maya Angelou.

Language Skills: Students broaden their composition skills by examining model essays in various genres by student and published writers. Through in-depth planning, organizing, drafting, revising, proofreading, and feedback, they hone their writing skills. Students build on their grammar, usage, and mechanics skills with in-depth study of sentence analysis and structure, agreement, and punctuation, reinforced by online activities. Student vocabularies are enhanced through the study of Greek and Latin root words, improving students' ability to decipher the meanings of new words. The Honors Project is a mandatory assignment for all students assigned to Honors courses.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): None

English II

In this course, students build on existing literature and composition skills and move to higher levels of sophistication.

Literature: Students hone their skills of literary analysis by reading short stories, poetry, drama, novels, and works of nonfiction, both classic and modern. Authors include W. B. Yeats, Sara Teasdale, Langston Hughes, Robert Frost, Edgar Allan Poe, Nathaniel Hawthorne, Kate Chopin, Amy Tan, and Richard Rodriguez. Students read Shakespeare's *Macbeth*. They are offered a choice of novels and longer works to study, including works by Jane Austen, Charles Dickens, Elie Wiesel, and many others.

Language Skills: In this course, students become more proficient writers and readers. In composition lessons, students analyze model essays from readers' and writers' perspectives, focusing on ideas and content, structure and organization, style, word choice, and tone. Students receive feedback during the writing process to help them work toward a polished final draft. In addition to writing formal essays, résumés, and business letters, students write and deliver a persuasive speech. Students expand their knowledge of grammar, usage, and mechanics through sentence analysis and structure, syntax, agreement, and conventions. Unit pretests identify skills to address more fully. Students strengthen their vocabularies through thematic units focused on word roots, suffixes and prefixes, context clues, and other important vocabulary-building strategies.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): English I

Honors English II

In this course, students build on existing literature and composition skills and move on to higher levels of sophistication. Students work on independent projects that enhance their skills and challenge them to consider complex ideas and apply the knowledge they have learned.

Literature: Students hone their skills of literary analysis by reading short stories, poetry, drama, novels, and works of nonfiction, both classic and modern. Authors include W. B. Yeats, Sara Teasdale, Langston Hughes, Robert Frost, Edgar Allan Poe, Nathaniel Hawthorne, Kate Chopin, Amy Tan, Richard Rodriguez, and William Shakespeare. Students have a choice of novels and longer works to study, including works by Jane Austen, Charles Dickens, and Elie Wiesel.

Language Skills: In this course, students become more proficient writers and readers. In composition lessons, students analyze model essays from readers' and writers' perspectives, focusing on ideas and content, structure and organization, style, word choice, and tone. Students receive feedback during the writing process to help them work toward a polished final draft. In addition to writing formal essays, résumés, and business letters, students write and deliver a persuasive speech. Students expand their knowledge of grammar, usage, and mechanics through sentence analysis and structure, syntax, agreement, and conventions. Unit pretests identify skills to address more fully. Students strengthen their vocabularies through thematic units focused on word roots, suffixes and prefixes, context clues, and other important vocabulary-building strategies. The Honors Project is a mandatory assignment for all students assigned to Honors courses.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): English I

English III

In this course, students read and analyze works of American literature from colonial to contemporary times, including poetry, short stories, novels, drama, and nonfiction. The literary works provide opportunities for critical writing, creative projects, and online discussions. Students develop vocabulary skills and refresh their knowledge of grammar, usage, and mechanics in preparation for standardized tests.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): English I and English II

AP English Language and Composition

Students learn to understand and analyze complex works by a variety of authors. They explore the richness of language, including syntax, imitation, word choice, and tone. They also learn composition style and process, starting with exploration, planning, and writing. This continues with editing, peer review, rewriting, polishing, and applying what they learn to academic, personal, and professional contexts. In this equivalent of an introductory college-level survey class, students prepare for the AP exam and for further study in communications, creative writing, journalism, literature, and composition.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): Recommended 80 or above in English II

English IV

Students read selections from British and world literature in a loosely organized chronological framework. They analyze the themes, styles, and structures of these texts and make thematic connections among diverse authors, periods, and settings. Students complete guided and independent writing assignments that refine their analytical skills. They have opportunities for creative expression in projects of their choice. Students also practice test-taking skills for standardized assessments in critical reading and writing.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): English I, II, and III

AP English Literature and Composition

In this course, the equivalent of an introductory college-level survey class, students are immersed in novels, plays, poems, and short stories from various periods. Students read and write daily, using a variety of multimedia and interactive activities, interpretive writing assignments, and discussions. The course places special emphasis on reading comprehension, structural and critical analyses of written works, literary vocabulary, and recognizing and understanding literary devices. Students prepare for the AP Exam and for further study in creative writing, communications, journalism, literature, and composition.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): Recommended 80 or above in AP English Language and Composition or English III.

Texas College Bridge English

This course is equivalent to English 4. It is self-paced and completely online in a separate learning platform with TOPS teacher support**.** The course is adaptive and covers only the skills the student needs. The course has four parts: a diagnostic test, Stage 1, an essay, and Stage 2. In Stage 1, students identify the main idea, discover implied meaning, learn to interpret bias, and analyze through definition. In Stage 2, students learn across the disciplines, explore comparative elements, applied critical analysis, and learn how to use sources in critical reading and writing. By completing this course, students can earn a TSI exemption at more than 80 partnering colleges and universities across Texas.

Course Length: Self-paced. Can be taken in one semester or two within the same school year.
Credit: 1.0
Grade: 12
Prerequisite(s): English I, II, and III or concurrent enrollment with English III.

Math Courses

Algebra I

Students develop algebraic fluency by learning the skills needed to solve equations and perform manipulations with numbers, variables, equations, and inequalities. They also learn concepts central to the abstraction and generalization that algebra makes possible. Topics include simplifying expressions involving variables, fractions, exponents, and radicals; working with integers, rational numbers, and irrational numbers; graphing and solving equations and inequalities; using factoring, formulas, and other techniques to solve quadratic and other polynomial equations; formulating valid mathematical arguments using various types of reasoning; and translating word problems into mathematical equations and then using the equations to solve the original problems.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): None

Honors Algebra I

Students develop algebraic fluency by learning the skills needed to solve equations and perform manipulations with numbers, variables, equations, and inequalities. They also learn concepts central to the abstraction and generalization that algebra makes possible. Topics include simplifying expressions involving variables, fractions, exponents, and radicals; working with integers, rational numbers, and irrational numbers; graphing and solving equations and inequalities; using factoring, formulas, and other techniques to solve quadratic and other polynomial equations; formulating valid mathematical arguments using various types of reasoning; and translating word problems into mathematical equations and then using the equations to solve the original problems. The Honors Project is a mandatory assignment for all students assigned to Honors courses.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): None

Geometry

In this comprehensive course, students are challenged to recognize and work with geometric concepts in various contexts. They build on ideas of inductive and deductive reasoning, logic, concepts, and techniques of Euclidean plane and solid geometry. They develop deeper understandings of mathematical structure, method, and applications of Euclidean plane and solid geometry. Students use visualizations, spatial reasoning, and geometric modeling to solve problems. Topics of study include points, lines, and angles; triangles; right triangles; quadrilaterals and other polygons; circles; coordinate geometry; three-dimensional solids; geometric constructions; symmetry; the use of transformations; and non-Euclidean geometries.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): Algebra I

Honors Geometry

Students work with advanced geometric concepts in various contexts. They build in-depth ideas of inductive and deductive reasoning, logic, concepts, and techniques of Euclidean plane and solid geometry. They also develop a sophisticated understanding of mathematical structure, method, and applications of Euclidean plane and solid geometry. Students use visualizations, spatial reasoning, and geometric modeling to solve problems. Topics of study include points, lines, and angles; triangles; right triangles; quadrilaterals and other polygons; circles; coordinate geometry; three-dimensional solids; geometric constructions; symmetry; the use of transformations; and non-Euclidean geometries. Students work on additional challenging assignments, assessments, and research projects. The Honors Project is a mandatory assignment for all students assigned to Honors courses.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): Algebra I.

Math Models (Practical Math)

In this course, students use algebraic, graphical, and geometric reasoning to recognize patterns and structure, to model information, and to solve problems from various disciplines. Students use mathematical methods to model and solve real- life applied problems involving money, data, chance, patterns, music design, and science. Math models from algebra, geometry, probability, and statistics and connections among these are used to solve problems from a wide variety of advanced applications in both mathematical and nonmathematical situations. Note: This math course cannot fulfill the math requirement for the STEM endorsement

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): Algebra I

Algebra II

This course builds upon algebraic concepts covered in Algebra I and prepares students for advanced-level courses. Students extend their knowledge and understanding by solving open-ended problems and thinking critically. Topics include conic sections; functions and their graphs; quadratic functions; inverse functions; and advanced polynomial functions. Students are introduced to rational, radical, exponential, and logarithmic functions; sequences and series; and data analysis.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): Algebra I and Geometry

Honors Algebra II

This course builds upon advanced algebraic concepts covered in Algebra I and prepares students for advanced-level courses. Students extend their knowledge and understanding by solving open-ended problems and thinking critically. Topics include functions and their graphs; quadratic functions; complex numbers, and advanced polynomial functions. Students are introduced to rational, radical, exponential, and logarithmic functions; sequences and series; probability; statistics; and conic sections. Students work on additional challenging assignments, assessments, and research projects. The Honors Project is a mandatory assignment for all students assigned to Honors courses.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): Algebra I and Geometry

Pre-Calculus/Trigonometry

Pre-calculus weaves together previous study of algebra, geometry, and functions into a preparatory course for calculus. The course focuses on the mastery of critical skills and exposure to new skills necessary for success in subsequent math courses. Topics include linear, quadratic, exponential, logarithmic, radical, polynomial, and rational functions; systems of equations; and conic sections in the first semester. The second semester covers trigonometric ratios and functions; inverse trigonometric functions; applications of trigonometry, including vectors and laws of cosine and sine; polar functions and notation; and arithmetic of complex numbers. Cross-curricular connections are made throughout the course to calculus, art, history, and a variety of other fields related to mathematics.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): Algebra I, Geometry, Algebra II

MTH510 AP(R) Statistics

This course is the equivalent of an introductory college-level course. Statistics—the art of drawing conclusions from imperfect data and the science of real-world uncertainties—plays an important role in many fields. Students collect, analyze, graph, and interpret real-world data. They learn to design and analyze research studies by reviewing and evaluating examples from real research. Students prepare for the AP exam and for further study in science, sociology, medicine, engineering, political science, geography, and business.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): Algebra I, Geometry, Algebra II. Recommended 80 or above in previous math course.

AP Calculus AB

In AP Calculus AB, students learn to understand change geometrically and visually (by studying graphs of curves), analytically (by studying and working with mathematical formulas), numerically (by seeing patterns in sets of numbers), and verbally. Instead of simply getting the right answer, students learn to evaluate the soundness of proposed solutions and to apply mathematical reasoning to real-world models. Calculus helps scientists, engineers, and financial analysts understand the complex relationships behind real-world phenomena. The equivalent of an introductory college-level calculus course, AP Calculus AB prepares students for the AP exam and further studies in science, engineering, and mathematics.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): Algebra I, Geometry, Algebra II and Pre-Calculus/Trigonometry. Recommended 80 or above in previous math course.

Texas College Bridge Math

Students can take this self-paced 4th math course that is completely online in a separate learning platform with TOPS teacher support**.** The course is adaptive and covers only the skills the student needs. The course has three parts: a diagnostic test, Stage 1, and Stage 2. Stage 1 covers basic math and beginning Algebra and Statistics including the following skills: whole numbers, fractions, decimals, rates and ratios, percentages, geometry, real numbers, graphing, concepts in statistics, and measurement. Stage 2 covers Intermediate Algebra skills including solving equations, exponents, factoring, functions, rational expressions, and radical expressions and quadratic equations. By completing this course, students can earn a TSI exemption at more than 80 partnering colleges and universities across Texas.

Course Length: Self-paced. Can be taken in one semester or two within the same school year.
Credit: 1.0
Grade: 12
Prerequisite(s): Algebra I, Geometry, 3rd math or concurrent enrollment with 3rd math.

Science Courses

Integrated Physics and Chemistry

Students explore the relationship between matter and energy by investigating force and motion, the structure of atoms, the structure and properties of matter, chemical reactions, and the interactions of energy and matter. Students develop skills in measuring, solving problems, using laboratory apparatuses, following safety procedures, and adhering to experimental procedures. Students focus on inquiry-based learning, with hands-on laboratory investigations making up half of the learning experience. K12 lab kits contain all lab materials that cannot easily be found in the home. This course cannot count as a science course on the STEM: Science endorsement.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): None

Biology

In this comprehensive course, students investigate the chemistry of living things: the cell, genetics, evolution, the structure and function of living things, and ecology. The program consists of in-depth online lessons including extensive animations, an associated reference book, collaborative explorations, and hands-on laboratory experiments students can conduct at home. K12 lab kits contain all lab materials that cannot easily be found in the home.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): None

Honors Biology

This course provides students with a challenging honors-level biology curriculum, focusing on the chemistry of living things: the cell, genetics, evolution, the structure and function of living things, and ecology. The program consists of advanced online lessons including extensive animations, an associated reference book, collaborative explorations, and hands-on laboratory experiments students can conduct at home. Honors activities include debates, research papers, extended collaborative laboratories, and virtual laboratories. K12 lab kits contain all lab materials that cannot easily be found in the home. The Honors Project is a mandatory assignment for all students assigned to Honors courses.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): None

Chemistry

This comprehensive course gives students a solid basis to move on to future studies. The course provides an in-depth survey of all key areas, including atomic structure, chemical bonding and reactions, solutions, stoichiometry, thermochemistry, organic chemistry, and nuclear chemistry. The course includes direct online instruction and related assessments, used with a problem-solving book. Instructions for hands-on labs are included. K12 lab kits contain all lab materials that cannot easily be found in the home.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): Biology and Algebra I

Physics

This course provides a comprehensive survey of all key areas: physical systems, measurement, kinematics, dynamics, momentum, energy, thermodynamics, waves, electricity, and magnetism, and introduces students to modern physics topics such as quantum theory and the atomic nucleus. The course gives students a solid basis to move on to more advanced courses later in their academic careers. The program consists of online instruction and related assessments, plus an associated problem-solving book and instructions for conducting hands-on laboratory experiments at home. K12 lab kits contain all lab materials that cannot easily be found in the home.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): Biology and Algebra I

Environmental Science

This course surveys key topic areas including the application of scientific process to environmental analysis; ecology; energy flow; ecological structures; earth systems; and atmospheric, land, and water science. Topics also include the management of natural resources and analysis of private and governmental decisions involving the environment. Students explore actual case studies and conduct five hands-on, unit-long research activities, learning that political and private decisions about the environment and the use of resources require accurate application of scientific processes, including proper data collection and responsible conclusions.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): Biology and either Chemistry or Physics

AP Environmental Science

This course provides students with scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world, to identify and analyze environmental problems, to evaluate the relative risks associated with these problems, and to examine alternative solutions for resolving and/or preventing them. The nine major units that are covered in this course include: ecosystems, biodiversity, populations, earth systems and resources, land and water use, energy resources and consumption, atmospheric pollution, aquatic and terrestrial pollution, and global change. This course prepares the student to take the Advanced Placement exam.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): Algebra I, Biology, and Chemistry or Physics

Forensic Science

This Career Learning course is part of the Law Enforcement pathway but also can be taken as a separate science course. The course surveys key topics in forensic science, including the application of the scientific process to forensic analysis, procedures and principles of crime scene investigation, physical and trace evidence, and the law and courtroom procedures from the perspective of the forensic scientist. Through online lessons, virtual and hands-on labs, and analysis of fictional crime scenarios, students learn about forensic tools, technical resources, forming and testing hypotheses, proper data collection, and responsible conclusions.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): Biology and Chemistry

Anatomy and Physiology

This College and Career Preparation course is part of the Healthcare Therapeutic pathway but also can be taken as a separate science course. The course is designed for students to conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Anatomy and Physiology will study a variety of topics, including the structure and function of the human body and the interaction of body systems for maintaining homeostasis.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): Biology, Second Science credit

AP Biology

This course guides students to a deeper understanding of biological concepts, including the diversity and unity of life, energy and the processes of life, homeostasis, and genetics. Students learn about regulation, communication, and signaling in living organisms, as well as interactions of biological systems. Students carry out several learning activities, including readings, interactive exercises, extension activities, hands-on laboratory experiments, and practice assessments. These activities are designed to help students gain an understanding of the science process and critical-thinking skills necessary to answer questions on the AP Biology Exam. The content aligns to the sequence of topics recommended by the College Board.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): Biology and Chemistry. Recommended 80 or above in previous science course.

AP Chemistry

AP Chemistry is a second-year chemistry course. The major units of study include Atomic Structure and Properties, Molecular and Ionic Compound Structure and Properties, Intermolecular Forces and Properties, Chemical Reactions, Kinetics, Thermodynamics, Equilibrium, Acids and Bases, and Application of Thermodynamics. This course prepares students to take the Chemistry Advanced Placement exam.

Course Length: Two semesters

Credit: 1.0

Prerequisite(s): Biology, Chemistry and Algebra II. Recommended 80 or above in previous science course.

Social Studies Courses

World Geography

This course examines a broad range of geographical perspectives covering all of the major regions of the world. Students clearly see the similarities and differences among the regions as they explore the locations and physical characteristics, including absolute and relative location, climate, and significant geographical features. They look at each region from cultural, economic, and political perspectives, and closely examine the human impact on each region. Students take diagnostic tests that assess their current knowledge and generate individualized study plans, so students can focus on topics that need review. Audio readings and vocabulary lists in English and Spanish support reading comprehension.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): None

AP Human Geography

This course explores how humans have understood, used, and changed the surface of Earth. Students use the tools and thinking processes of geographers to examine patterns of human population, migration, and land use. Students learn how to connect geographic concepts and processes to real-life scenarios, and understand information shown in maps, tables, charts, graphs, infographics, images, and landscapes. Students also learn to see patterns and trends in data and in visual sources such as maps and learn to draw conclusions from them. This course is a substitute for World Geography.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): None. Recommended 80 or above on previous social studies course.

World History

In this comprehensive survey of world history from prehistoric to modern times, students focus in depth on the developments and events that have shaped civilization across time. The course is organized chronologically and, within broad eras, regionally. Lessons address developments in religion, philosophy, the arts, science and technology, and political history. The course also introduces geography concepts and skills within the context of the historical narrative. Students are challenged to consider topics in depth as they analyze primary sources and maps, create timelines, and complete other projects—practicing historical thinking and writing skills as they explore the broad themes and big ideas of human history.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): None

Honors World History

In this challenging survey of world history from prehistoric to modern times, students focus in depth on the developments and events that have shaped civilization across time. The course is organized chronologically and, within broad eras, regionally. Lessons address developments in religion, philosophy, the arts, science and technology, and political history. The course also introduces geography concepts and skills within the context of the historical narrative. Students are challenged to consider topics in depth as they analyze primary sources and maps, create timelines, and complete other projects—practicing advanced historical thinking and writing skills as they explore the broad themes and big ideas of human history. The Honors Project is a mandatory assignment for all students assigned to Honors courses.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): None

US History

This course is a full-year survey that provides students with a comprehensive view of American history from the industrial revolution of the late nineteenth century to recent events. Readings are drawn from K12's *The American Odyssey: A History of the United States*. Online lessons help students organize study, explore topics in depth, review in preparation for assessments, and practice skills of historical thinking and analysis. Activities include analyzing primary sources and maps, creating timelines, completing projects and written assignments, and conducting independent research. This course is an EOC tested subject.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): World History and/or World Geography

US Government and Politics

This course studies the history, organization, and functions of the United States government. Beginning with the Declaration of Independence and continuing through to the present day, students explore the relationship between individual Americans and our governing bodies. Students take a close look at the political culture of our country and gain insight into the challenges faced by citizens, elected government officials, political activists, and others. Students also learn about the roles of political parties, interest groups, the media, and the Supreme Court, and discuss their own views on current political issues.

Course Length: One semester
Credit: .5
Prerequisite(s): Recommended US History

AP US Government and Politics

This course is the equivalent of an introductory college-level course. Students explore the operations and structure of the U.S. government and the behavior of the electorate and politicians. Students gain the analytical perspective necessary to evaluate political data, hypotheses, concepts, opinions, and processes and learn how to gather data about political behavior and develop their own theoretical analysis of American politics. Students also build the skills they need to examine general propositions about government and politics, and to analyze specific relationships between political, social, and economic institutions. Students prepare for the AP exam and for further study in political science, law, education, business, and history.

Course Length: One semester, offered only in the fall semester.
Credit: .5
Prerequisite(s): Recommended 80 or above in US History.

Economics

In this course on economic principles, students explore choices they face as producers, consumers, investors, and taxpayers. Students apply what they learn to real-world simulation problems. Topics of study include markets from historic and contemporary perspectives; supply and demand; theories of early economic philosophers such as Adam Smith and David Ricardo; theories of value; money (what it is, how it evolved, the role of banks, investment houses, and the Federal Reserve); Keynesian economics; how capitalism functions, focusing on productivity, wages, investment, and growth; issues of capitalism, such as unemployment, inflation, and the national debt; and a survey of markets in such areas as China, Europe, and the Middle East.

Course Length: One semester
Credit: .5
Prerequisite(s): Recommended US History

Personal Financial Literacy and Economics

In this course students will demonstrate the ability to anticipate and address financial challenges. Students are introduced to common economic and personal financial planning terms and concepts. Students will survey the impact of demand, supply, various industry structures, and government policies on the market for goods, services, and wages for workers. Macroeconomic study involves economic systems with an emphasis on free enterprise market systems, goals of full employment, price stability, and growth while examining problems such as unemployment and inflation and the policies enacted to address them. It is an integrative course that applies the same economic way of thinking developed to making choices about how to allocate scarce resources in an economy to how to make them at the personal level. The course requires that students demonstrate critical thinking by exploring how to invest in themselves with education and skill development, earn income, and budget for spending, saving, investing, and protecting. Students will examine their individual responsibility for managing their personal finances and understand the impact on standard of living and long-term financial well-being. Further, students will connect how their financial decision-making impacts the greater economy. This course satisfies the high school Economics graduation requirement.

Course Length: One semester
Credit: .5
Grade: 11-12
Prerequisite(s): None

AP Macroeconomics

This course is the equivalent of an introductory college-level course. Students learn why and how the world economy can change from month to month, how to identify trends in our economy, and how to use those trends to develop performance measures and predictors of economic growth or decline. Students also examine how individuals and institutions are influenced by employment rates, government spending, inflation, taxes, and production. Students prepare for the AP exam and for further study in business, political science, and history.

Course Length: One semester, offered only in the fall semester.

Credit: .5

Prerequisite(s): Recommended US History and Algebra II. Recommended 80 or above in previous social studies course.

Foreign Language

Spanish I

Students begin their introduction to Spanish with fundamental building blocks in four key areas of world language study: listening comprehension, speaking, reading, and writing. Students are initially trained to recognize key sounds and basic vocabulary, not only in written form but also through ear training that leads quickly to oral production. Vocabulary and grammar topics are introduced in an ongoing adventure story that prompts students to use skills from all four language- learning areas. Students learn fundamental grammar as embedded in authentic spoken language. Cultural information covers major Spanish-speaking areas in Europe and the Americas. Engaging graphics, videos, and games keep students interested, and make learning languages exciting.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): None

Spanish II

In this continuing introduction to Spanish, students deepen their focus on four key skills in world language acquisition: listening comprehension, speaking, reading, and writing. A continuing storyline introduces and reinforces new vocabulary, while activities prompt students to analyze meaning from context, and then to reproduce new vocabulary in real-life oral expression. Additional verb tenses and idiomatic expressions are also introduced. As in Spanish I, students learn grammar through supplemental texts that supply traditional charts, tables, and explanations. Cultural information addresses Spanish as it is used around the globe. Engaging graphics, videos, and games keep students interested, and make learning languages exciting.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): Spanish I

Spanish III

Intermediate Spanish students who have a strong base of vocabulary, speaking, and listening skills reach a new level of mastery and fluency in this course. Through games and compelling stories, students learn advanced grammar and vocabulary, with an emphasis on correct accents and comprehension of real-world native speech. Error-recognition technology helps students eliminate common mistakes from their speaking and writing. Engaging graphics, videos, and games keep students interested, and make learning languages exciting.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): Spanish I and Spanish II

Fine Arts

Art I

This course combines art history, appreciation, and analysis, while engaging students in hands-on creative projects. Lessons introduce major periods and movements in art history while focusing on masterworks and the intellectual, technical, and creative processes behind those works. Studio lessons provide opportunities for drawing, painting, sculpting, and other creative endeavors.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): None

Music Appreciation

This course introduces students to the elements, instrumentation, and historical periods of music. Students will learn significance of surroundings and time periods and how they both influenced the music of the day. Students will listen to and evaluate several types of music, and will be assessed through projects, presentations, and exams on the knowledge and understanding of music.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): None

Physical Education

PE Foundations

This course combines online instructional guidance with student participation in weekly cardiovascular, aerobic, muscle- toning, and other activities. Students fulfill course requirements by keeping weekly logs of their physical activity. The course promotes the value of lifetime physical activity and includes instruction in injury prevention, nutrition and diet, and stress management.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): None

Off-Campus Physical Education (OCPE)

Students submit an application to participate in the OCPE program. Once approved, the student must participate in a minimum of eighty clock hours for each .5 credit each semester. There are two levels of participation. Level I- students participate in a minimum of 15 hours per week of highly intensive, professional, supervised training. Level 2- Students participate in a minimum of 5 hours per week of high-quality activities supervised by appropriately trained instructors. Students must submit a weekly log to receive a grade for participation.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): None. Students must meet eligibility requirements and submit application to participate.

General Electives

Anthropology (Special Topics in Social Studies)

This course presents a behavioral science that focuses on the study of humanity and culture. Students learn the foundations of the five main branches of anthropology including physical, social, linguistic, archeological, and cultural. They are provided the opportunity to apply their observational skills to the real-life study of cultures in the United States and around the world.

Course Length: One semester
Credit: .5
Prerequisite(s): None

AP Psychology

This course is the equivalent of an introductory college-level course. Students learn the psychological perspectives, broad concepts, and personalities that have shaped psychology. Students will develop a strong foundation in the understanding of human behavior and critical thinking which will prepare them for life issues such as privacy, genetic manipulation, free will, human dignity, health, and well-being. Students prepare for the AP Exam and for further study in advanced psychological subjects.

Course Length: One semester, offered only in fall semester.
Credit: .5
Grade: 11-12
Prerequisite(s): None

College Readiness and Study Skills

Students learn essential academic skills within the context of their learning style, individual learning environment, and long-term goals. This course helps students develop habits for more successful reading, writing, studying, communication, collaboration, time management, and concentration. It also provides insights into how the brain works when they are learning, and ways to maximize its potential.

Course Length: One semester
Credit: .5
Prerequisite(s): None

Communication Applications (Public Speaking)

Students are introduced to public speaking as an important component of their academic, work, and social lives. They study public speaking occasions and develop skills as fair and critical listeners, or consumers, of spoken information and persuasion. Students study types of speeches (informative, persuasive, dramatic, and special occasion), read and listen to models of speeches and prepare and present their own speeches to diverse audiences. Students learn to choose speaking topics and adapt them for specific audiences, to research and support their ideas, and to benefit from listener feedback. They study how to incorporate well-designed visual and multimedia aids in presentations and how to maintain a credible presence in the digital world. Students also learn about the ethics of public speaking and about techniques for managing communication anxiety.

Course Length: One semester
Credit: .5
Prerequisite(s): None

Contemporary World Issues (Special Topics in Social Studies)

In this course, students will compare the geography, governments, economies, and cultures of the world. Emphasis will be placed on learning about the civics, politics, economics, structures, processes, and policies of the United States and then comparing them with those of the international community. Students will use what they know and learn about the United States and the world to analyze current events and contemporary issues. Reasoning and research skills will be applied to the content throughout the course.

Course Length: Two semesters
Credit: 1.0
Prerequisite(s): None

Creative Writing

Students create original essays, poems, and short stories in this course, which uses two textbooks and focuses on the four- step process writing model. They read professionally written forms of creative writing as models and then integrate their impressions of these works with their personal life experiences as they compose their own writing projects. Students are encouraged to write about topics they find engaging as they practice writing on the following themes: narration, definition, process analysis, cause and effect, and comparison/contrast. After students turn in each assignment, the teacher supplies detailed suggestions for revision. This feedback helps students learn how to improve their self-expression and self-editing skills.

Course Length: Two semesters
Credit: 1.0
Grade: 10-12
Prerequisite(s): None

Health Education

This course focuses on important skills and knowledge in nutrition; physical activity; the dangers of substance use and abuse; injury prevention and safety; growth and development; and personal health, environmental conservation, and community health resources. The curriculum is designed around topics and situations that engage student discussion and motivate students to analyze internal and external influences on their health-related decisions. The course helps students build the skills they need to protect, enhance, and promote their own health and the health of others.

Course Length: One semester
Credit: .5
Prerequisite(s): None

Journalism

Students enrolled in Journalism write in a variety of forms for a variety of audiences and purposes. High school students enrolled in this course are expected to plan, draft, and complete written compositions on a regular basis, carefully examining their papers for clarity, engaging language, and the correct use of the conventions and mechanics of written English. In Journalism, students are expected to write in a variety of forms and for a variety of audiences and purposes. Students will become analytical consumers of media and technology to enhance their communication skills. Published work of professional journalists, technology, and visual and electronic media are used as tools for learning as students create, clarify, critique, write, and produce effective communications. Students enrolled in Journalism will learn journalistic traditions, research self-selected topics, write journalistic texts, and learn the principles of publishing.

Course Length: One semester
Credit: .5
Prerequisite(s): None

Literary Genres

Mighty heroes. Angry gods and goddesses. Cunning animals. Mythology and folklore have been used since the first people gathered around the fire as a way to make sense of humankind and our world. This course focuses on the many myths and legends woven into cultures around the world. Starting with an overview of mythology and the many kinds of folklore, the student will journey with ancient heroes as they slay dragons and outwit the gods, follow fearless warrior women into
battle and watch as clever animals outwit those stronger than themselves. They will explore the universality and social significance of myths and folklore and see how they are still used to shape society today.

Course Length: One semester
Credit: .5
Prerequisite(s): None

Personal Financial Literacy (Introductory Finance)

Students gain knowledge and skills to make sound, informed financial decisions that will allow them to lead financially secure lifestyles and understand personal financial responsibility. The course will teach students to apply critical-thinking and problem-solving skills to analyze decisions involving earning and spending, saving and investing, credit and borrowing, insuring and protecting, and college and postsecondary education and training. This course includes instruction in methods of paying for college and other postsecondary education and training along with completing the application for federal student aid provided by the U.S. Department of Education. Students analyze the relationship between education and training and earnings potential.

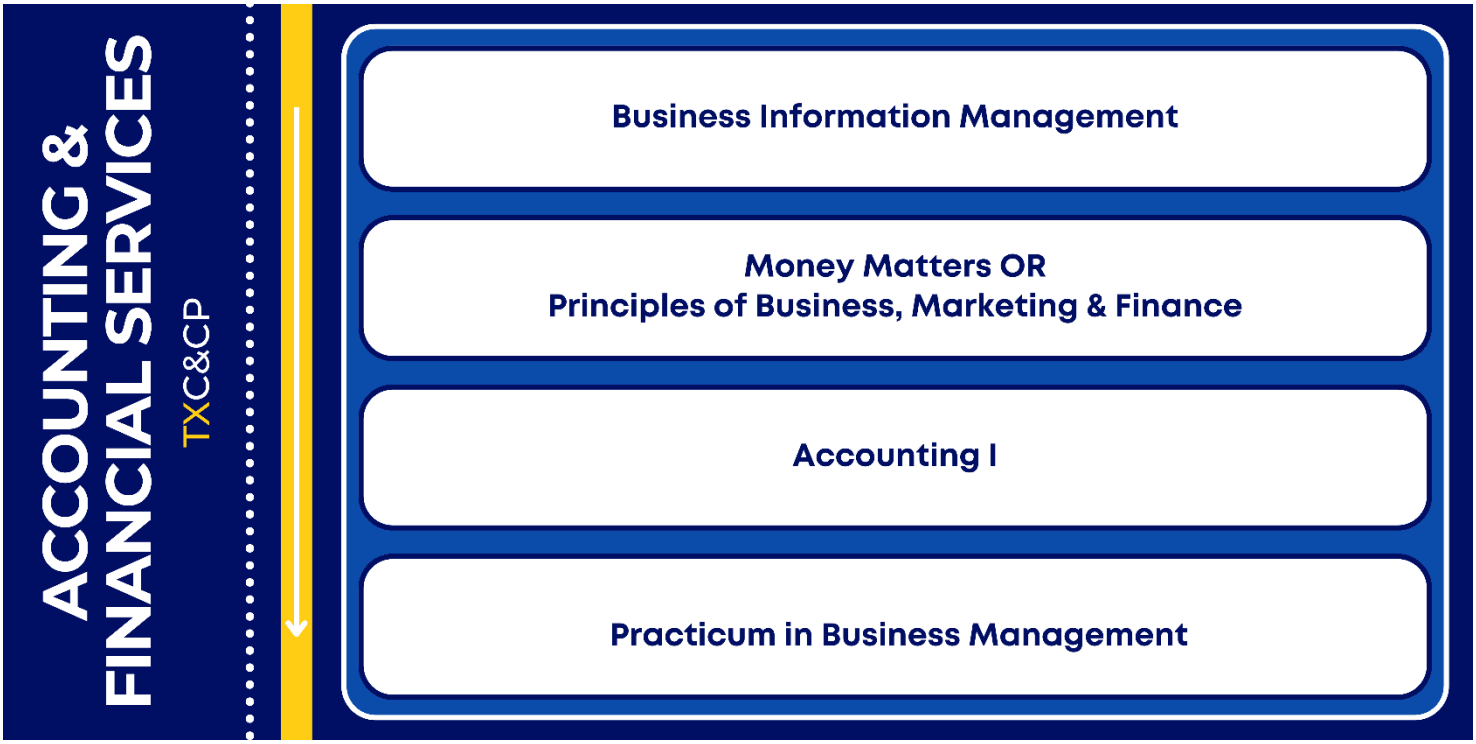
Course Length: One semester
Credit: .5
Prerequisite(s): None

College and Career Preparation Programs of Study

Business & Industry Endorsement

Accounting and Financial Services

This pathway meets the requirements of the Business and Industry endorsement. Students complete the pathway by completing the courses in sequence. The course pathways are intended to provide guidance to students seeking college and career readiness through course content and industry-based certifications.



Level 1:

Business Information Management I

In Business Information Management I, students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce and postsecondary education. Students apply technical skills to address business applications of emerging technologies, create word-processing documents, develop a spreadsheet, formulate a database, and make an electronic presentation using appropriate software. This course meets the high school technology requirement.

Course Length: Two semesters
Credit: 1.0
Grade: 9-12
Prerequisite(s): None

Level 2:

Money Matters

In this course, students learn basic principles of economics and best practices for managing their own finances. Students learn skills in creating budgets, developing long-term financial plans, and making responsible choices about income and expenses. They gain a deeper understanding of capitalism and other systems so they can better understand their role in the economy. Students are inspired by experiences of finance professionals and stories of everyday people and the choices they make to manage their money.

Course Length: Two semesters
Credit: 1.0
Grade: 9-12
Prerequisite(s): None

Principles of Business, Marketing, and Finance

Students find out what it takes to market a product or service in today's fast-paced business environment. They learn the fundamentals of marketing using real-world business examples. They learn about buyer behavior, marketing research principles, demand analysis, distribution, financing, pricing, and product management.

Course Length: Two semesters
Credit: 1.0
Grade: 8-12
Prerequisite(s): None

Level 3:

Accounting I

In Accounting I, students will investigate the field of accounting, including how it is impacted by industry standards as well as economic, financial, technological, international, social, legal, and ethical factors. Students will reflect on this knowledge as they engage in the process of recording, classifying, summarizing, analyzing, and communicating accounting information. Students will formulate and interpret financial information for use in management decision making.

Course Length: Two semesters
Credit: 1.0
Grade: 10-12
Prerequisite(s): None

Level 4:

Practicum of Business Management

Practicum in Business Management is designed to give students supervised practical application of previously studied knowledge and skills. Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and to make a successful transition to the workforce or postsecondary education. Students apply technical skills to address business applications of emerging technologies. Students develop a foundation in the economic, financial, technological, international, social, and ethical aspects of business to become competent consumers, employees, and entrepreneurs. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the business environment. Students incorporate a broad base of knowledge that includes the legal, managerial, marketing, financial, ethical, and international dimensions of business to make appropriate business decisions.

Course Length: Two semesters
Credit: 2.0
Grade: 11-12
Prerequisite(s): Completion of first three courses in sequence of pathway.

Animal Sciences/Plant Sciences

This pathway meets the requirements of the Business and Industry endorsement. Students complete the pathway by completing the courses in sequence. The course pathways are intended to provide guidance to students seeking college and career readiness through course content and industry-based certifications.

Level 1:

Foundations of Agriculture

This comprehensive course prepares students for careers in agriculture, food, and natural resource management. Students benefit from the basis of agricultural knowledge as this course allows students to explore areas of animal, plant, food, agribusiness, and environmental sciences while developing their awareness and gaining knowledge and skills that promote personal development and career success.

Course Length: Two semesters
Credit: 1.0
Grade: 8-12
Prerequisite(s): None

Entrepreneurship

This pathway meets the requirements of the Business and Industry endorsement. Students complete the pathway by completing the courses in sequence. The course pathways are intended to provide guidance to students seeking college and career readiness through course content and industry-based certifications.

Level 1:

Business Information Management I

In Business Information Management I, students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and make a successful transition to the workforce and postsecondary education. Students apply technical skills to address business applications of emerging technologies, create word-processing documents, develop a spreadsheet, formulate a database, and make an electronic presentation using appropriate software. This course meets the high school technology requirement.

Course Length: Two semesters
Credit: 1.0
Grade: 9-12
Prerequisite(s): None

Level 2:

Principles of Business, Marketing, and Finance

Students find out what it takes to market a product or service in today's fast-paced business environment. They learn the fundamentals of marketing using real-world business examples. They learn about buyer behavior, marketing research principles, demand analysis, distribution, financing, pricing, and product management.

Course Length: Two semesters
Credit: 1.0
Grade: 8-12
Prerequisite(s): None

Level 3:

Entrepreneurship

In Entrepreneurship, students will gain the knowledge and skills needed to become an entrepreneur. Students will learn the principles necessary to begin and operate a business. The primary focus of the course is to help students understand the process of analyzing a business opportunity, preparing a business plan, determining feasibility of an idea using research, and developing a plan to organize and promote the business and its products and services. In addition, students will understand the capital required, the return on investment desired, and the potential for profit.

Course Length: Two semesters
Credit: 1.0
Grade: 10-12
Prerequisite(s): None

Level 4:

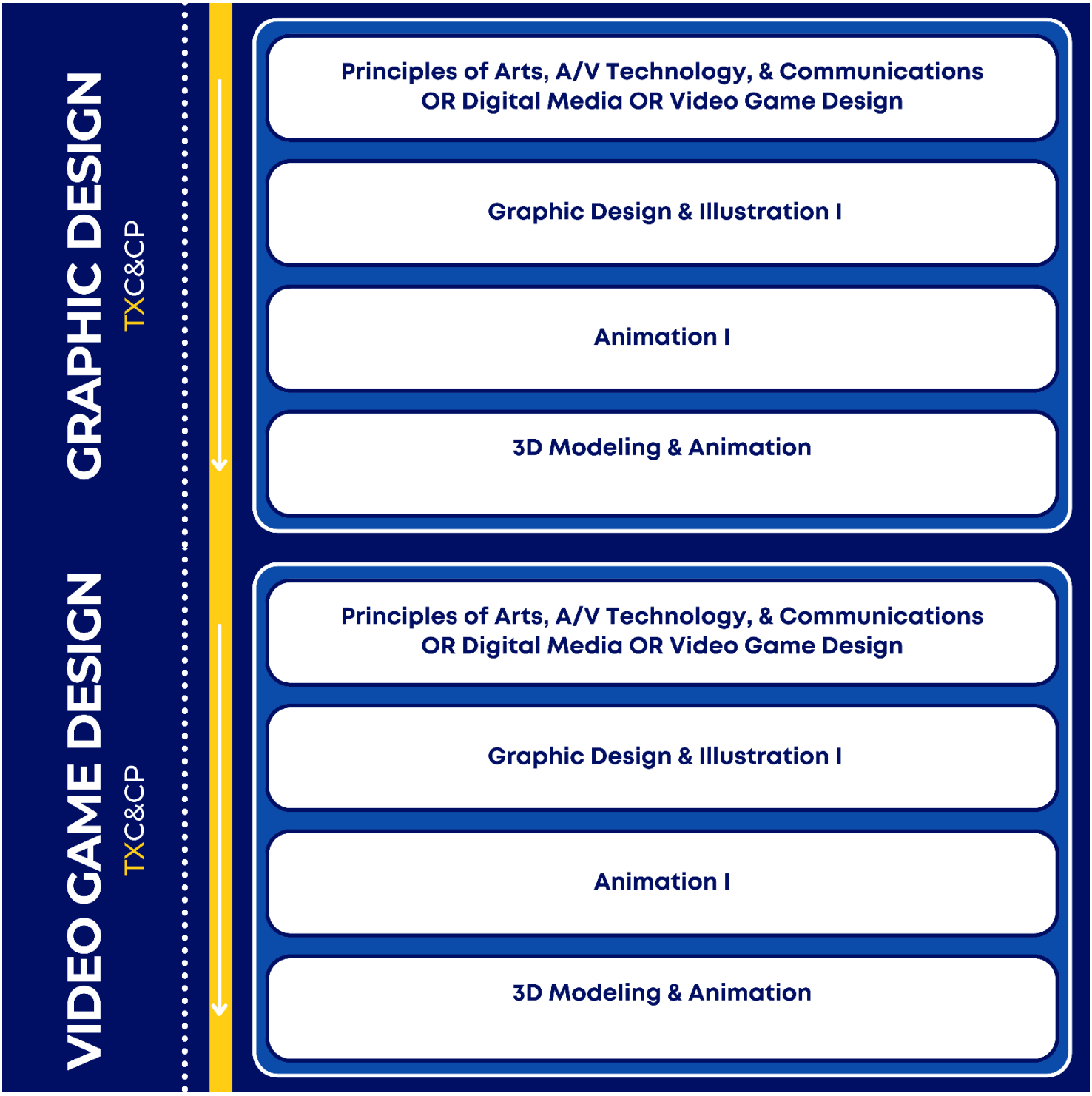
Practicum of Business Management

Practicum in Business Management is designed to give students supervised practical application of previously studied knowledge and skills. Students implement personal and interpersonal skills to strengthen individual performance in the workplace and in society and to make a successful transition to the workforce or postsecondary education. Students apply technical skills to address business applications of emerging technologies. Students develop a foundation in the economic, financial, technological, international, social, and ethical aspects of business to become competent consumers, employees, and entrepreneurs. Students enhance reading, writing, computing, communication, and reasoning skills and apply them to the business environment. Students incorporate a broad base of knowledge that includes the legal, managerial, marketing, financial, ethical, and international dimensions of business to make appropriate business decisions.

Course Length: Two semesters
Grade: 11-12
Credit: 2.0
Prerequisite(s): Completion of first three courses in sequence of pathway.

Graphic Design
Video Game Design

These pathways meet the requirements of the Business and Industry endorsement. Students complete the pathway by completing the courses in sequence. The course pathways are intended to provide guidance to students seeking college and career readiness through course content and industry-based certifications.



Level 1:

Digital Media

In Digital Media, students will analyze and assess current and emerging technologies, while designing and creating multimedia projects that address customer needs and resolve a problem. Students will implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. The knowledge and skills acquired and practiced will enable students to successfully perform and interact in a technology-driven society. Students will enhance reading, writing, computing, communication, and critical thinking and apply them to the IT environment. This course meets the high school technology requirement.

Course Length: Two semesters
Credit: 1.0
Grade: 9-12
Prerequisite(s): None

Principles of Art, A/V Technology, & Communication

The goal of this course is that the student understands arts, audio/video technology, and communications systems. Within this context, students will be expected to develop an understanding of the various and multifaceted career opportunities in this cluster and the knowledge, skills, and educational requirements for those opportunities. This course meets the high school technology requirement.

Course Length: Two semesters
Credit: 1.0
Grade: 8-12
Prerequisite(s): None

Video Game Design

This course will allow students to explore one of the largest industries in the field of technology. Students will learn gaming, computerized gaming, evolution of gaming, and artistic aspects of perspective, design, and animation. Technical concepts of collision theory and programming logic will be covered in this course. This course meets the high school technology requirement.

Course Length: Two semesters
Credit: 1.0
Grade: 9-12
Prerequisite(s): None

Level 2:

Graphic Design and Illustration I

In this course students will demonstrate professional standards/employability skills as required by business and industry and apply academic knowledge and skills in art and design projects. The student will also demonstrate an understanding of artistic design. Students will also analyze and apply art elements and principles in photographic works, multimedia applications, and digital and print media.

Course Length: Two semesters
Credit: 1.0
Grade: 10-12
Prerequisite(s): None

Level 3:

Animation I

This course introduces students to the history of animation, traditional animation methods as well as various forms of modern techniques and software. Students learn to develop and communicate animation ideas through 3D modeling, animation, concept drawings, storyboards, virtual lights and cameras, and scene design using the same techniques and software used by professionals.

Course Length: Two semesters
Credit: 1.0
Grade: 10-12
Prerequisite(s): None

Level 4:

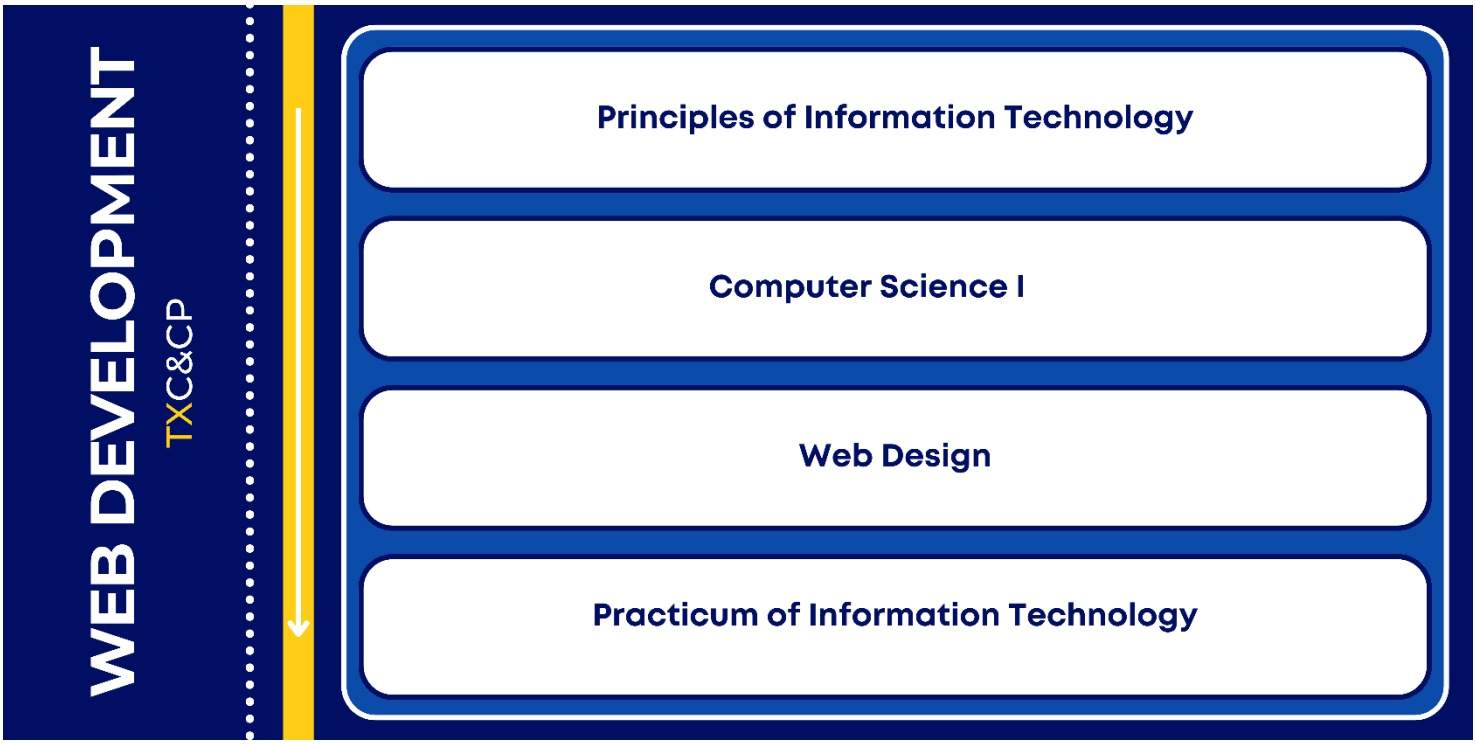
3D Modeling and Animation

Students will explore the basic principles, concepts, and methodologies of 3D animation. 3-D Modeling and Animation consists of computer images created in a virtual three-dimensional (3-D) environment. Students in this course will produce various 3-D models of real-world objects. This course satisfies the high school fine arts graduation requirement.

Course Length: Two semesters
Credit: 1.0
Grade: 11-12
Prerequisite(s): Completion of three courses in sequence of pathway.

Web Development

This pathway meets the requirements of the Business and Industry endorsement. Students complete the pathway by completing the courses in sequence. The course pathways are intended to provide guidance to students seeking college and career readiness through course content and industry-based certifications.



Level 1:

Principles of Information Technology

In Principles of Information Technology, students will develop computer literacy skills to adapt to emerging technologies used in the global marketplace. Students will implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. Students will enhance reading, writing, computing, communication, and reasoning skills and apply them to the information technology environment. This course meets the high school technology requirement.

Course Length: Two semesters
Credit: 1.0
Grade: 8-12
Prerequisite(s): None

Level 2:

Computer Science I

Students are presented opportunities to design, implement, and present meaningful programs through a variety of media. Students will collaborate with one another, their instructor, and various electronic communities to solve the problems presented throughout the course. Through data analysis, students will identify task requirements, plan search strategies, and use computer science concepts to access, analyze, and evaluate information needed to solve problems. By using computer science knowledge and skills that support the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. Students will learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. This course meets the high school technology requirement.

Course Length: Two semesters
Credit: 1.0
Grade: 9-12
Prerequisite(s): Algebra I

Level 3:

Web Design

This course provides a comprehensive introduction to the essentials of Web design, from planning page layouts to publishing a complete site to the Web. Students learn how to use HTML to design their own Web pages. The course covers basic HTML tags for formatting text, as well as more advanced tags. Through real-world design scenarios and hands-on projects, students create compelling, usable websites using the latest suite of free tools.

Course Length: Two semesters
Credit: 1.0
Grade: 10-12
Prerequisite(s): Computer Science I

Level 4:

Practicum in Information Technology

In the Practicum in Information Technology course, students will gain advanced knowledge and skills in the application, design, production, implementation, maintenance, evaluation, and assessment of products, services, and systems. Knowledge and skills in the proper use of analytical skills and application of IT concepts and standards are essential to prepare students for success in a technology-driven society.

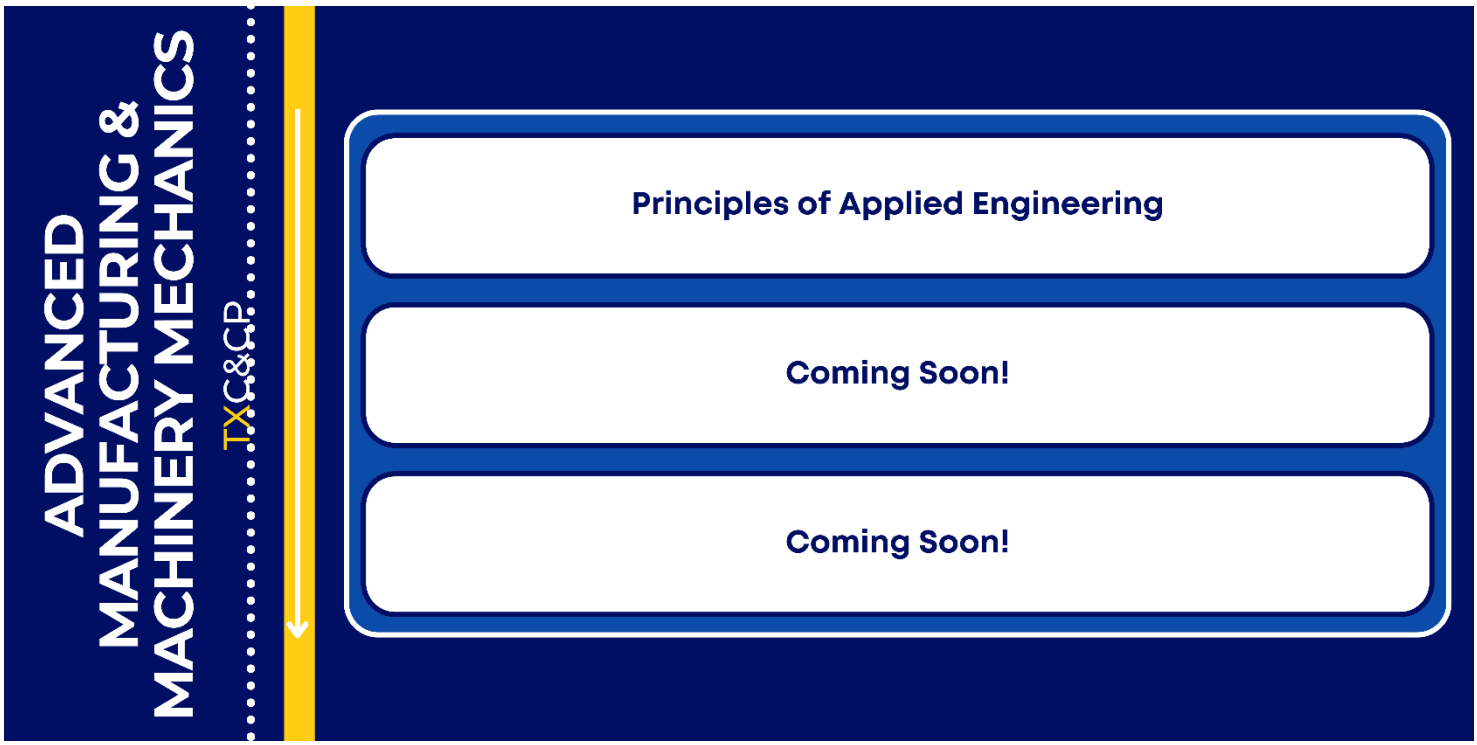
Course Length: Two semesters
Credit: 2.0
Grade: 11-12
Prerequisite(s): Completion of three courses in sequence of pathway

College and Career Preparation Programs of Study

Science, Technology, Engineering, and Mathematics (STEM) Endorsement

Advanced Manufacturing & Machinery Mechanics

This pathway meets the career learning requirements of the STEM endorsement. The additional math and science requirements for the STEM endorsement include completion of Algebra II and both Physics and Chemistry. Students complete the pathway by completing the courses in sequence.



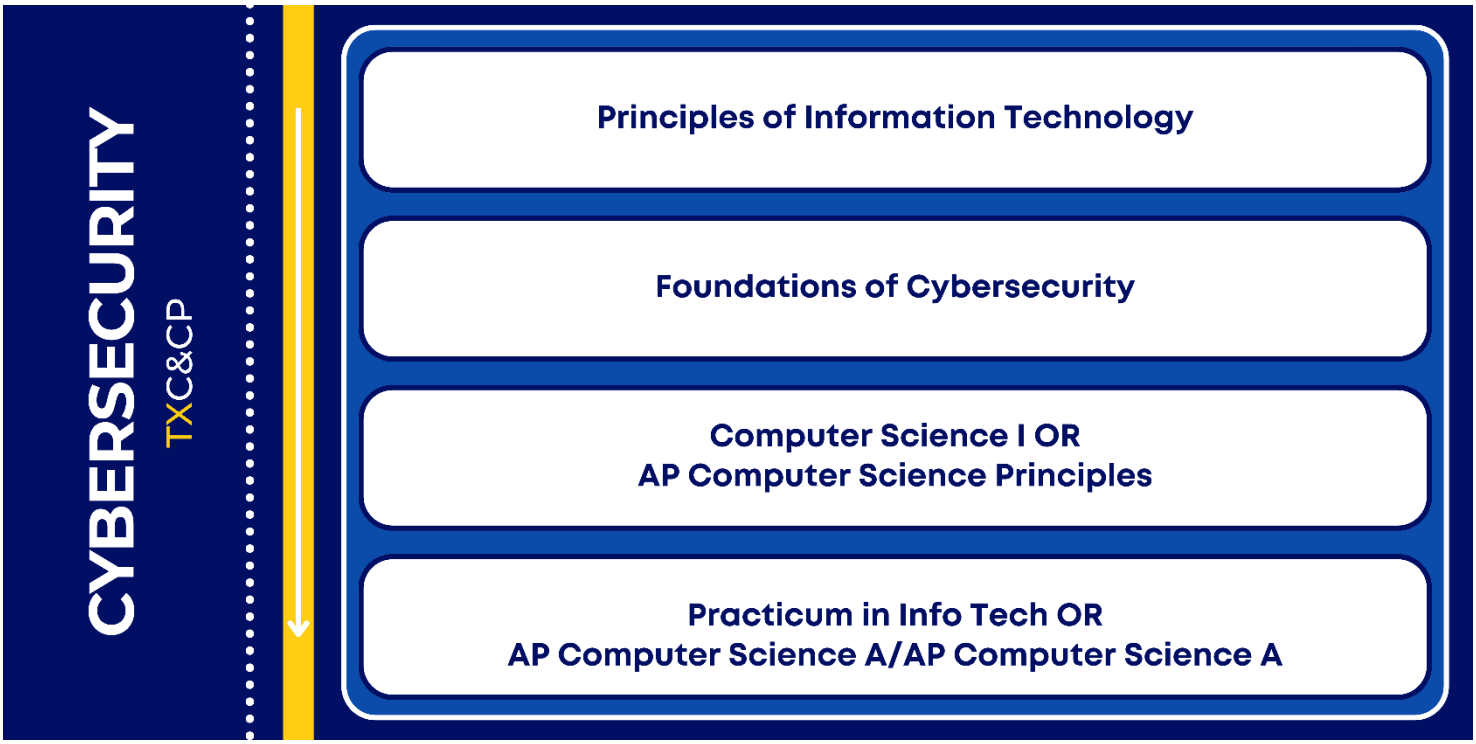
Principles of Applied Engineering

In Principles of Applied Engineering, students gain an overview of the various fields of science, technology, engineering, and mathematics and their interrelationships. Students will develop engineering communication skills, which include computer graphics, modeling, and presentations, by using a variety of computer hardware and software applications to complete assignments and projects. This course meets the high school technology requirement.

Course Length: Two semesters
Credit: 1.0
Grade: 8-12
Prerequisite(s): None

Cybersecurity

This pathway meets the career learning requirements of the STEM endorsement. The additional math and science requirements for the STEM endorsement include completion of Algebra II and both Physics and Chemistry. Students complete the pathway by completing the courses in sequence.



Level 1:

Principles of Information Technology

In Principles of Information Technology, students will develop computer literacy skills to adapt to emerging technologies used in the global marketplace. Students will implement personal and interpersonal skills to prepare for a rapidly evolving workplace environment. Students will enhance reading, writing, computing, communication, and reasoning skills and apply them to the information technology environment. This course meets the high school technology requirement.

Course Length: Two semesters
Credit: 1.0
Grade: 8-12
Prerequisite(s): None

Level 2:

Foundations of Cybersecurity

Students will develop the knowledge and skills needed to explore fundamental concepts related to the ethics, laws, and operations of cybersecurity. Students will examine trends and operations of cyberattacks, threats, and vulnerabilities. Students will review and explore security policies designed to mitigate risks. The skills obtained in this course prepare students for additional study in cybersecurity.

Course Length: Two semesters
Credit: 1.0
Grade: 9-12
Prerequisite(s): None

Level 3:

Computer Science I

Students are presented opportunities to design, implement, and present meaningful programs through a variety of media. Students will collaborate with one another, their instructor, and various electronic communities to solve the problems presented throughout the course. Through data analysis, students will identify task requirements, plan search strategies, and use computer science concepts to access, analyze, and evaluate information needed to solve problems. By using computer science knowledge and skills that support the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. Students will learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. This course meets the high school technology requirement.

Course Length: Two semesters
Credit: 1.0
Grade: 9-12
Prerequisite(s): Algebra I

AP Computer Science Principles

Learn the principles that underlie the science of computing and develop the thinking skills that computer scientists use. You'll work on your own and as part of a team to creatively address real-world issues using the tools and processes of computation. Students learn skills including making connections between concepts in computing, designing a program to solve a problem or complete a task, applying abstractions in computation and modeling, and analyzing computational work. This course meets the high school technology requirement.

Course Length: Two semesters
Credit: 1.0
Grade: 9-12
Prerequisite(s): Algebra I

Level 4:

Practicum in Information Technology

In the Practicum in Information Technology course, students will gain advanced knowledge and skills in the application, design, production, implementation, maintenance, evaluation, and assessment of products, services, and systems. Knowledge and skills in the proper use of analytical skills and application of IT concepts and standards are essential to prepare students for success in a technology-driven society.

Course Length: Two semesters
Credit: 1.0
Grade: 11-12
Prerequisite(s): Completion of three courses in sequence of pathway.

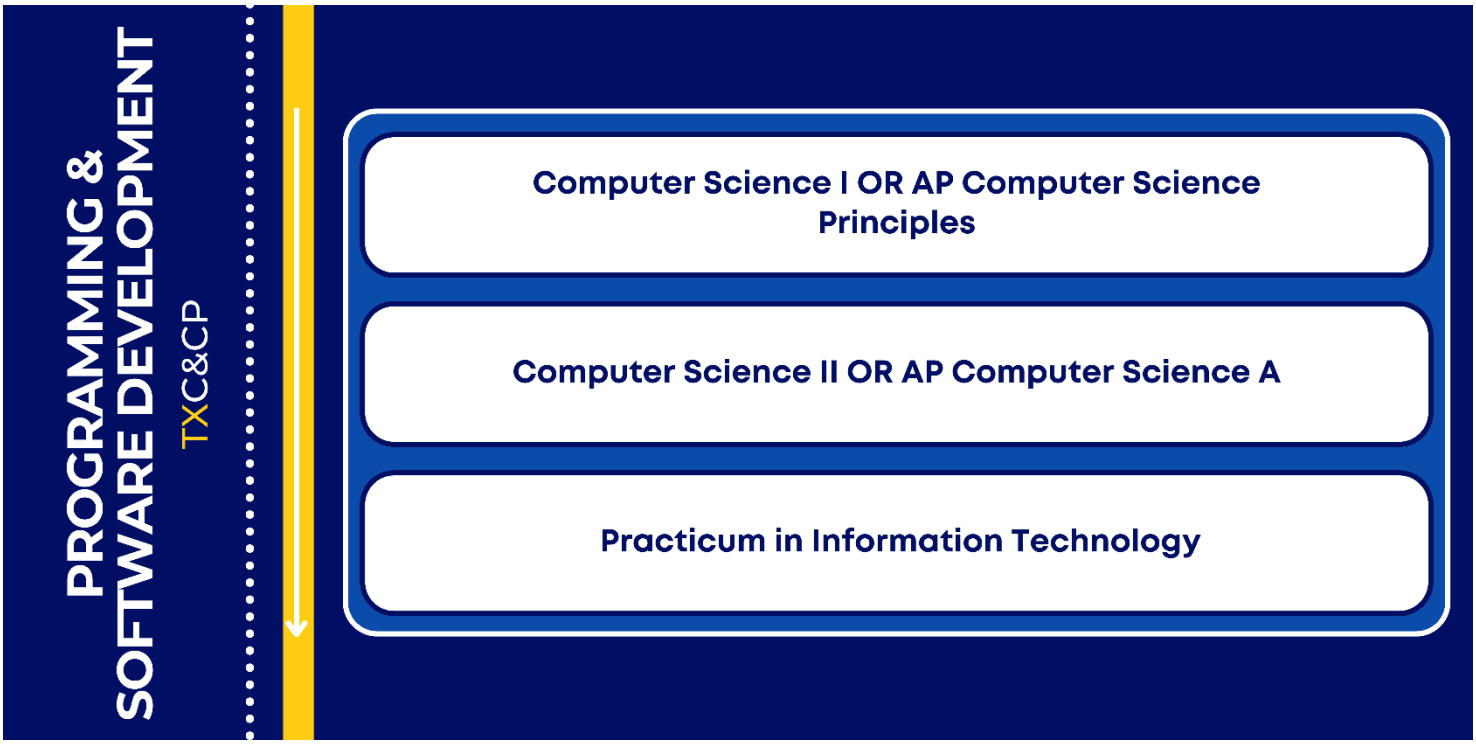
AP Computer Science A

This course serves as an introduction to computers and the study of managing and processing information. Students apply algebraic and logical reasoning acquired in mathematics to develop robust programming solutions. The emphasis is on solving real world problems by means of computer programming (software engineering). Students will thoroughly learn the Java programming language and apply those skills in exploring how computers work. Some topics covered include object-oriented techniques, file management, data structures, classes, objects, graphics, debugging, hardware components, and social implications.

Course Length: Two semesters
Credit: 2.0 (1.0 Math, 1.0 LOTE)
Grade: 10-12
Prerequisite(s): Algebra 2 or concurrent enrollment in Algebra 2 and Computer Science I or AP Computer Science Principles

Programming & Software Development

This pathway meets the career learning requirements of the STEM endorsement. The additional math and science requirements for the STEM endorsement include completion of Algebra II and both Physics and Chemistry. Students complete the pathway by completing the courses in sequence.



Level 2:

Computer Science I

Students are presented opportunities to design, implement, and present meaningful programs through a variety of media. Students will collaborate with one another, their instructor, and various electronic communities to solve the problems presented throughout the course. Through data analysis, students will identify task requirements, plan search strategies, and use computer science concepts to access, analyze, and evaluate information needed to solve problems. By using computer science knowledge and skills that support the work of individuals and groups in solving problems, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. Students will learn digital citizenship by researching current laws and regulations and by practicing integrity and respect. This course meets the high school technology requirement.

Course Length: Two semesters
Credit: 1.0
Grade: 9-12
Prerequisite(s): Algebra I

AP Computer Science Principles

Learn the principles that underlie the science of computing and develop the thinking skills that computer scientists use. You'll work on your own and as part of a team to creatively address real-world issues using the tools and processes of computation. Students learn skills including making connections between concepts in computing, designing a program to solve a problem or complete a task, applying abstractions in computation and modeling, and analyzing computational work. This course meets the high school technology requirement.

Course Length: Two semesters
Credit: 1.0
Grade: 9-12
Prerequisite(s): Algebra I

Level 3:

Computer Science II

Computer Science II fosters students' creativity and innovation by presenting opportunities to design, implement, and present programs through a variety of media. Students will collaborate with one another, their instructor, and various electronic communities to solve the problems presented. Through data analysis, students will identify task requirements, plan search strategies, and use computer science concepts to access, analyze, and evaluate information needed to solve problems. By using computer science knowledge and skills, students will select the technology appropriate for the task, synthesize knowledge, create solutions, and evaluate the results. Students will learn digital citizenship by researching current laws and regulations and by practicing integrity and respect.

Course Length: Two semesters
Credit: 1.0
Grade: 10-12
Prerequisite(s): Computer Science I or AP Computer Science Principles.

AP Computer Science A

This course serves as an introduction to computers and the study of managing and processing information. Students apply algebraic and logical reasoning acquired in mathematics to develop robust programming solutions. The emphasis is on solving real world problems by means of computer programming (software engineering). Students will thoroughly learn the Java programming language and apply those skills in exploring how computers work. Some topics covered include object-oriented techniques, file management, data structures, classes, objects, graphics, debugging, hardware components, and social implications.

Course Length: Two semesters
Credit: 2.0 (1.0 Math, 1.0 LOTE)
Grade: 10-12
Prerequisite(s): Algebra 2 or concurrent enrollment in Algebra 2 and Computer Science I or AP Computer Science Principles

Level 4:

Practicum in Information Technology

In the Practicum in Information Technology course, students will gain advanced knowledge and skills in the application, design, production, implementation, maintenance, evaluation, and assessment of products, services, and systems. Knowledge and skills in the proper use of analytical skills and application of IT concepts and standards are essential to prepare students for success in a technology-driven society.

Course Length: Two semesters
Credit: 1.0
Grade: 11-12
Prerequisite(s): Completion of three courses in sequence of pathway.

College and Career Preparation Programs of Study

Public Service Endorsement

Family & Community Services

This pathway meets the college and career learning requirements of the Public Service endorsement. Students complete the pathway by completing the courses in sequence. The course pathways are intended to provide guidance to students seeking college and career readiness through course content and industry-based certifications.

Level 1:

Principles of Human Services (Family and Consumer Science)

In this course, students develop skills and knowledge to help them transition into adult roles within the family. They learn to make wise consumer choices, prepare nutritious meals, contribute effectively as part of a team, manage a household budget, and balance roles of work and family. They gain an appreciation for the responsibilities of family members throughout the life-span and the contributions to the well-being of the family and the community.

Course Length: Two semesters
Credit: 1.0
Grade: 8-12
Prerequisite(s): None

Level 2:

Professional Communications

Professional Communications blends written, oral, and graphic communication in a career-based environment. Careers in the global economy require individuals to be creative and have a strong background in computer and technology applications, a strong and solid academic foundation, and a proficiency in professional oral and written communication. Within this context, students will be expected to develop and expand the ability to write, read, edit, speak, listen, apply software applications, manipulate computer graphics, and conduct Internet research.

Course Length: One semester
Credit: .5
Grade: 9-12
Prerequisite(s): None

Lifetime Nutrition and Wellness

Lifetime Nutrition and Wellness is a laboratory course that allows students to use principles of lifetime wellness and nutrition to help them make informed choices that promote wellness as well as pursue careers related to hospitality and tourism, education and training, human services, and health sciences. Students will be expected to understand the role of nutrients in the body, understand the principles of digestion and metabolism, and understand the basics of a nutritionally balanced diet.

Course Length: One semester
Credit: 0.5
Grade: 9-12
Prerequisite(s): None

Level 3:

Child Development

Child Development is a technical laboratory course that addresses knowledge and skills related to child growth and development from prenatal through school-age children, equipping students with child development skills. Students use these skills to promote the well-being and healthy development of children and investigate careers related to the care and education of children.

Course Length: Two semesters
Credit: 1.0
Grade: 10-12
Prerequisite(s): None

Level 4:

Counseling and Mental Health

Counseling & Mental Health students model the knowledge and skills necessary to pursue a counseling and mental health career through simulated environments. Students are expected to apply knowledge of ethical and legal responsibilities, limitations, and the implications of their actions. Professional integrity in counseling and mental health care is dependent on acceptance of ethical and legal responsibilities.

Course Length: Two semesters
Credit: 1.0
Grade: 10-12
Prerequisite(s): None

Healthcare Therapeutic

This pathway meets the college and career learning requirements of the Public Service endorsement. Students complete the pathway by completing the courses in sequence. The course pathways are intended to provide guidance to students seeking college and career readiness through course content and industry-based certifications.

Level 1:

Principles of Health Science

The Principles of Health Science course is designed to provide an overview of the therapeutic, diagnostic, health informatics, support services, and biotechnology research and development systems of the health care industry.

Course Length: Two semesters
Credit: 1.0
Grade: 8-12
Prerequisite(s): None

Level 2:

Medical Terminology

The Medical Terminology course is designed to introduce students to the structure of medical terms, including prefixes, suffixes, word roots, singular and plural forms, and medical abbreviations. The course allows students to achieve comprehension of medical vocabulary appropriate to medical procedures, human anatomy and physiology, and pathophysiology.

Course Length: Two semesters
Credit: 1.0
Grade: 9-12
Prerequisite(s): None

Level 3:

Anatomy and Physiology

This Career Learning course is part of the Healthcare Therapeutic pathway but also can be taken as a separate science course. The course is designed for students to conduct laboratory and field investigations, use scientific methods during investigations, and make informed decisions using critical thinking and scientific problem solving. Students in Anatomy and Physiology will study a variety of topics, including the structure and function of the human body and the interaction of body systems for maintaining homeostasis.

Course Length: Two semesters
Credit: 1.0
Grade: 10-12
Prerequisite(s): Biology and second science credit

Level 4:

Pharmacology

The Pharmacology course is designed to study how natural and synthetic chemical agents such as drugs affect biological systems. Knowledge of the properties of therapeutic agents is vital in providing quality health care. It is an ever-changing, growing body of information that continually demands greater amounts of time and education from health care workers. Students in this course take the Pharmacy Technician certification as their final exam.

Course Length: Two semesters
Credit: 1.0
Grade: 11-12
Prerequisite(s): Biology and Chemistry, completion of three courses in sequence of pathway

Health Science Theory

Health Science Theory provides students the opportunity to apply classroom learnings and experiences to real-world business problems and opportunities, while expanding their skill sets and professional relationships. This course is designed to provide for the development of advanced knowledge and skills related to a wide variety of health careers.

Course Length: Two semesters
Credit: 1.0
Grade: 10-12
Prerequisite(s): Biology, completion of three courses in sequence of pathway

Law Enforcement

This pathway meets the college and career learning requirements of the Public Service endorsement. Students complete the pathway by completing the courses in sequence. The course pathways are intended to provide guidance to students seeking college and career readiness through course content and industry-based certifications.

Level 1:

Principles of Law, Public Safety, Corrections & Security

Principles of Law, Public Safety, Corrections & Security introduces students to professions in law enforcement, protective services, corrections, firefighting, and emergency management services. Students will examine the roles and responsibilities of police, courts, corrections, private security, and protective agencies of fire and emergency services. The course provides students with an overview of the skills necessary for careers in law enforcement, fire service, protective services, and corrections.

Course Length: Two semesters
Credit: 1.0
Grade: 8-12
Prerequisite(s): None

Level 2:

Counseling and Mental Health

Counseling & Mental Health students model the knowledge and skills necessary to pursue a counseling and mental health career through simulated environments. Students are expected to apply knowledge of ethical and legal responsibilities, limitations, and the implications of their actions. Professional integrity in counseling and mental health care is dependent on acceptance of ethical and legal responsibilities.

Course Length: Two semesters
Credit: 1.0
Grade: 10-12
Prerequisite(s): None

Level 3:

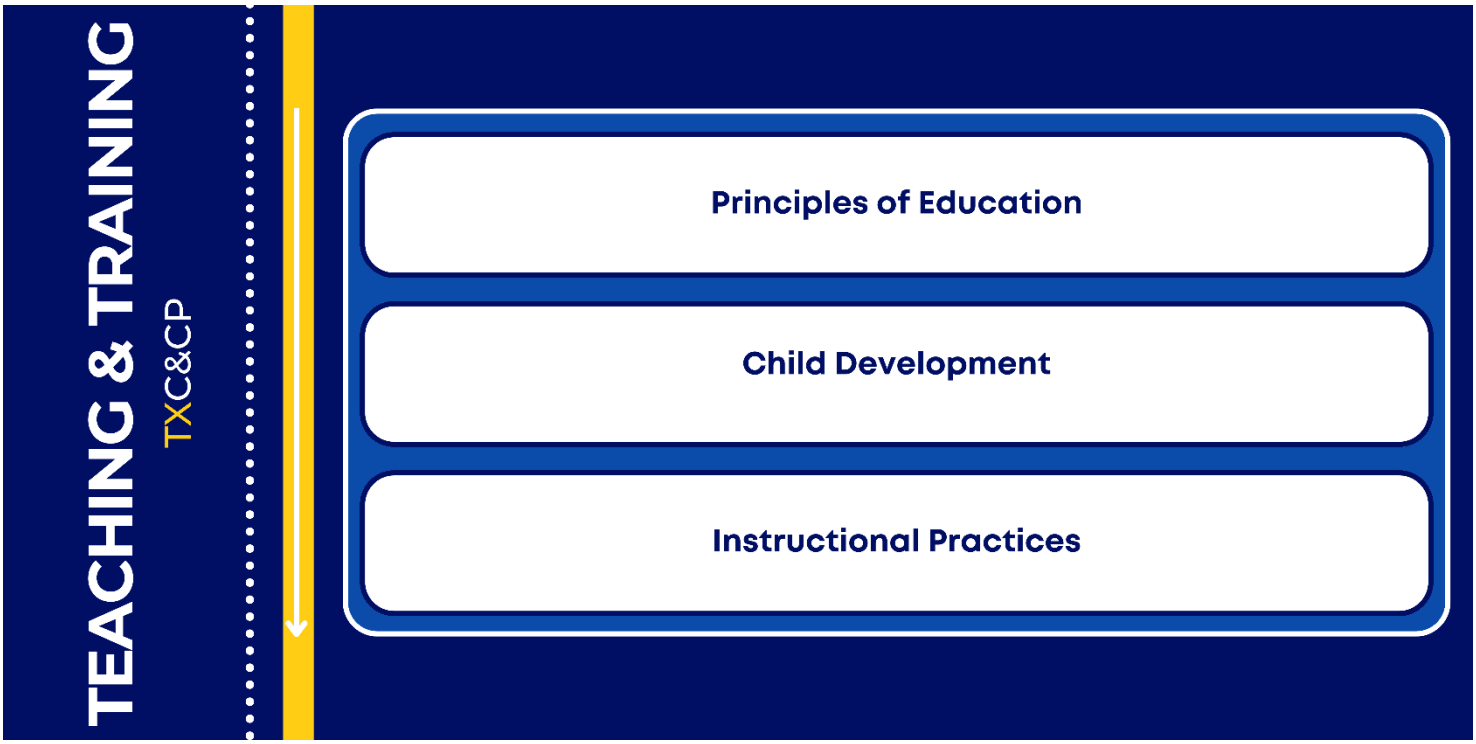
Forensic Science

This Career Learning course is part of the Law Enforcement pathway but also can be taken as a separate science course. The course surveys key topics in forensic science, including the application of the scientific process to forensic analysis, procedures and principles of crime scene investigation, physical and trace evidence, and the law and courtroom procedures from the perspective of the forensic scientist. Through online lessons, virtual and hands-on labs, and analysis of fictional crime scenarios, students learn about forensic tools, technical resources, forming and testing hypotheses, proper data collection, and responsible conclusions.

Course Length: Two semesters
Credit: 1.0
Grade: 11-12
Prerequisite(s): Biology and Chemistry

Teaching & Training

This pathway meets the college and career learning requirements of the Public Service endorsement. Students complete the pathway by completing the courses in sequence. The course pathways are intended to provide guidance to students seeking college and career readiness through course content and industry-based certifications.



Level 1:

Principles of Education & Training

Principles of Education and Training is designed to introduce learners to the various careers available within all levels of educational institutions. Students explore careers through shadowing, interviewing, career interest inventory, researching, and/or self-reflection to understand requirements for entering each field of work. Students will gain understanding to societal impacts within education and learn characteristics necessary for success as a teaching professional including job market analysis for the future.

Course Length: Two semesters
Credit: 1.0
Grade: 8-12
Prerequisite(s): None

Level 2:

Child Development

Child Development is a technical laboratory course that addresses knowledge and skills related to child growth and development from prenatal through school-age children, equipping students with child development skills. Students use these skills to promote the well-being and healthy development of children and investigate careers related to the care and education of children.

Course Length: Two semesters
Credit: 1.0
Grade: 10-12
Prerequisite(s): None

Level 3:

Instructional Practices

Instructional Practices provides students with background knowledge of child and adolescent development as well as principles of effective teaching and training practices. Students learn to plan and direct individualized instruction and group activities, prepare instructional materials, develop materials for educational environments, assist with record keeping, and complete other responsibilities of teachers, trainers, paraprofessionals, or other educational personnel.

Course Length: Two semesters
Credit: 2.0
Grade: 11-12
Prerequisite(s): Completion of two courses in sequence of pathway

Supplemental Courses

ORN015 Welcome to Online Career Learning

This orientation course explains how the Stride College and Career Preparation program works and provides successful tips for online career learning.

Course Length: 6–8 hours, at least 30 minutes in course required

Credit: This course is required but does not count towards requirements for graduation

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Dual Credit

The University of Texas Permian Basin (UTPB) is our online dual credit provider. Below are the dual credit course offerings that can be taken online.

Fall				Spring			
UTPB Course Name	**HS Course Name**	**HS Credit**	**Recommended Grade Levels**	**UTPB Course Name**	**HS Course Name**	**HS Credit**	**Recommended Grade Levels**
1301 Intro to Psychology	Psychology	.5	9-12	1301 Intro to Psychology	Psychology	.5	9-12
1301 Intro to Sociology	Sociology	.5	9-12	1301 Intro to Sociology	Sociology	.5	9-12
Art 1301 Art Appreciation	Art 1 (same as TOPS Art)	1.0	9-12	Art 1301 Art Appreciation	Art 1 (same as TOPS Art)	1.0	9-12
Music 1301: Jazz, Pop, and Rock	Music Appreciation (different than TOPS music course)	1.0	9-12	Music 1301: Jazz, Pop, and Rock	Music Appreciation (different than TOPS music course)	1.0	9-12
HST 1301: US History to 1877	SPTSS	.5	9-12	HST 1302: US History since 1877	US History	1.0	10-11
1301 Composition 1	English 3A	.5	11	1302 Composition 2	English 3B	.5	11
2327 American Lit to 1865	English 4A	.5	12	2322 British Literature to 1800	English 4B	.5	12

Additional dual credit in-person partnerships will each have their own course listing. To take courses in person, there must be an established agreement called an MOU between TOPS and the college. Courses must be approved by dual credit coordinator before registration. The testing requirements for eligibility remain the same for all academic dual credit regardless of partnering school.
To be eligible for dual credit, students must complete one of the below testing requirements. TOPS offers online TSIA2 testing in both fall and spring semesters.

Extended Dual Credit

Students that want to participate in extended Dual Credit beyond what we offer online can take additional college courses in person at local colleges with whom we have an agreement called an MOU. Students must be willing to attend courses in-person, and these cannot be taken online. Courses must be approved by the Dual Credit Counselor prior to registration and must be on the MOU crosswalk to count for dual credit.

Dual Credit Eligibility

Testing Requirements

Texas Success Initiative Assessment 2.0 (TSIA2)

A state-required assessment to determine college readiness

English Language Arts & Reading (ELAR)	Writing	Mathematics
945	5 on Essay OR 944 on ELAR AND Diagnostic Level 5 AND Essay 5	950

College Entrance Exams

Test	Reading and Writing Exemption	Math Exemption
SAT	480 Evidence-Based Reading and Writing	530 Math
ACT	23 Composite with 19 English	23 Composite with 19 Math

PSAT Scores: UTPB does not accept PSAT. Some colleges accept 460 English/510 Math

EOC Scores: UTPB will accept a 4000 in both Algebra 1 and English 2 EOC tests for eligibility. With other college the student will need to verify if these are acceptable.

Foundation Graduation Plan
Arts & Humanities Endorsement
Social Studies Focus

Subject	Courses	Credits
English	English I, II, III, IV or equivalent	4
Math	Algebra I Geometry Algebra II Additional math course Additional math courses: Math Models, Pre-calculus, AP Statistics, AP Calculus AB, Bridge Math	4
Science	Biology IPC (Physical Science) or advanced science course Advanced science course #3 Advanced science course #4 Advanced science courses: Chemistry, Physics, Environmental Science, Forensic Science, AP Chemistry, AP Biology, AP Environmental, and Anatomy & Physiology	4
Social Studies	World Geography OR AP Human Geography World History US History Government or AP Government (.5 credit) 1.0 credits from additional social studies courses Additional social studies courses: Anthropology, Contemporary World Issues, Personal Financial Literacy, AP Psychology, Personal Finance and Economics	4 ½
Economics	Economics or AP Macro Economics or Personal Finance and Economics	½
Foreign Language	2 years of SAME language	2
Physical Education	PE Foundations	1
Fine Arts	Art 1 or Music Appreciation or equivalent	1
Electives	See current course listing for available TOPS electives *An additional 1.0 elective credit required for students that started 9th grade before 2022-2023.	4.0
Technology	Approved technology course *For 9th graders starting in 2022-2023 and after	1.0
Total Credits Required for Graduation		26

A student may earn an arts and humanities endorsement by completing foundation and general endorsement requirements and: (A) A total of five social studies courses (B) Four levels of the same language in a language other than English (C)Two levels of the same language in a language other than English and two levels of a different language in a language other than English
***The local technology requirement may be waived if the student has college-ready scores on both parts of either the TSIA2, SAT, or ACT.**

Foundation Graduation Plan
Business & Industry Endorsement

Subject	Course	Credits
English	English I, II, III, IV or equivalent	4
Math	Algebra I Geometry Algebra II Additional math course Additional math courses: Math Models, Pre-calculus, AP Statistics, AP Calculus AB, Bridge Math	4
Science	Biology IPC (Physical Science) or advanced science course Advanced science course #3 Advanced science course #4 Advanced science courses: Chemistry, Physics, Environmental Science, Forensic Science, AP Chemistry, AP Biology, AP Environmental, and Anatomy & Physiology	4
Social Studies	World Geography OR AP Human Geography OR World History US History Government or AP Government (.5 credit)	2.5
Economics	Economics, AP Macro Economics, or Personal Finance and Economics	.5
Foreign Language	2 years of SAME language	2
Physical Education	PE Foundations	1
Fine Arts	Art 1 or Music Appreciation or equivalent	1
CTE	A coherent sequence of courses for four or more credits in CTE that consists of at least two courses in the same career cluster and at least one advanced CTE course. See the College and Career Preparation Pathways section of Catalog.	4
Electives	See current course listing for available TOPS electives *An additional 1.0 elective credit required for students that started 9th grade before 2022-2023.	2
Technology	Approved technology course *For 9th graders starting in 2022-2023 and after	1
Total Credits Required for Graduation		26

***A student may earn a business and industry endorsement by completing the requirements specified in subsection (e) of this section and a coherent sequence of courses for four or more credits in CTE that consists of at least two courses in the same career cluster and at least one advanced CTE course.**

***The local technology requirement may be waived if the student has college-ready scores on both parts of either the TSIA2, SAT, or ACT.**

Foundations Graduation Plan
Multidisciplinary Endorsement
AP/DC Focus

Subject	Course	Credits
English	English I, II, III, IV or equivalent	4
Math	Algebra I Geometry Algebra II Additional math course Additional math courses: Math Models, Precalculus, AP Statistics, AP Calculus AB, Bridge Math	4
Science	Biology IPC (Physical Science) or advanced science course Chemistry or Physics Additional advanced science courses Advanced science courses: Chemistry, Physics, Environmental Science, Forensic Science, AP Chemistry, AP Biology, AP Environmental, and Anatomy & Physiology	4
Social Studies	World Geography OR AP Human Geography OR World History US History Government or AP US Government (.5 credit)	2.5
Economics	Economics or AP Macro or Personal Finance and Economics	.5
Foreign Language	2 years of SAME language	2
Physical Education	PE Foundations	1
Fine Arts	Art 1 or Music Appreciation or equivalent	1
Electives	See current course listing for available TOPS electives *An additional 1.0 elective credit required for students that started 9th grade before 2022-2023.	6
Technology	Approved technology course *For 9th graders starting in 2022-2023 and after	1
Endorsement Requirements	Four credits from AP and/or dual credit	
Total Credits Required for Graduation		26

***A student may earn a multidisciplinary studies endorsement with the AP/DC focus by completing foundation and general endorsement requirements and:**

(C) four credits in advanced placement, International Baccalaureate, or dual credit selected from English, mathematics, science, social studies, economics, languages other than English, or fine arts

***The local technology requirement may be waived if the student has previously earned college-ready scores on both parts of either the TSIA2, SAT, or ACT.**

Foundations Graduation Plan
Multidisciplinary Endorsement
Core Focus

Subject	Course	Credits
English	English I, II, III, IV or equivalent	4
Math	Algebra I Geometry Algebra II 1 additional math course Additional math courses: Math Models, Precalculus, AP Statistics, AP Calculus, Bridge Math	4
Science	Biology IPC or advanced science course Chemistry or Physics Advanced Science Course Advanced science courses: Chemistry, Physics, Environmental Science, Forensic Science, AP Chemistry, AP Biology, AP Environmental, and Anatomy & Physiology	4
Social Studies	World Geography OR AP Human Geography OR World History US History Government OR AP US Government (.5 credit) Additional Social Studies courses: World Geography, World History, Contemporary World Issues, Anthropology, AP Psychology, Personal Financial Literacy, and Personal Finance and Economics	3.5
Economics	Economics OR AP Macro Economics OR Personal Finance and Economics	.5
Foreign Language	2 years of SAME language	2
Physical Education	PE Foundations	1
Fine Arts	Art 1 or Music Appreciation or equivalent	1
Electives	See current course listing for available TOPS electives *An additional 1.0 elective credit required for students that started 9th grade before 2022-2023.	5
Technology	Approved technology course *For 9th graders starting in 2022-2023 and after	1
Total Credits Required for Graduation		26

***A student may earn a multidisciplinary studies endorsement by completing the requirements specified in subsection (e) of this section and:**

(A) four advanced courses that prepare a student to enter the workforce successfully or postsecondary education without remediation from within one endorsement area or among endorsement areas that are not in a coherent sequence; or

(B) four credits in each of the four foundation subject areas to include chemistry and/or physics and English IV or a comparable AP or IB English course; or

(C) four credits in Advanced Placement, International Baccalaureate, or dual credit selected from English, mathematics, science, social studies, economics, languages other than English, or fine arts.

***The local technology requirement may be waived if the student has college-ready scores on both parts of either the TSIA2, SAT, or ACT.**

Foundation Graduation Plan
Public Service Endorsement

Subject	Course	Credits
English	English I, II, III, IV or equivalent	4
Math	Algebra I Geometry Algebra II 1 additional math course Additional math courses: Math Models, Pre-calculus, AP Statistics, AP Calc AB, Bridge Math	4
Science	Biology IPC (Physical Science) or advanced science course Advanced science course #3 Advanced science course #4 Advanced science courses: Chemistry, Physics, Environmental Science, Forensic Science, AP Chemistry, AP Biology, AP Environmental, and Anatomy & Physiology	4
Social Studies	World Geography OR AP Human Geography OR World History US History Government OR AP US Government (.5 credit)	2.5
Economics	Economics OR AP Macro Economics OR Personal Finance and Economics	.5
Foreign Language	2 years of SAME language	2
Physical Education	PE Foundations	1
Fine Arts	Art 1 or Music Appreciation or equivalent	1
CTE	A coherent sequence of courses for four or more credits in CTE that consists of at least two courses in the same career cluster and at least one advanced CTE course. See course catalog for course sequence options.	4
Electives	See current course listing for available TOPS electives *An additional 1.0 elective credit required for students that started 9th grade before 2022-2023.	2
Technology	Approved technology course *For 9th graders starting in 2022-2023 and after	1
Total Credits Required for Graduation		26

***A student may earn the Public Service endorsement by completing the requirements specified in subsection (e) of this section and a coherent sequence of courses for four or more credits in CTE that consists of at least two courses in the same career cluster and at least one advanced CTE course.**

***The local technology requirement may be waived if the student has college-ready scores on both parts of either the TSIA2, SAT, or ACT.**

Foundations Graduation Plan
STEM Endorsement
Math Focus

Subject	Course	Credits
English	English I, II, III, IV or equivalent	4
Math	Algebra I Geometry Algebra II Advanced math Advanced math Advanced math courses: Pre-calculus, AP Statistics, AP Calc AB, Bridge Math	5
Science	Biology Chemistry Physics Advanced science course Advanced science courses: Environmental Science, Forensic Science AP Chemistry, AP Biology, AP Environmental, and Anatomy & Physiology	4
Social Studies	World Geography OR AP Human Geography OR World History US History Government OR AP Government (.5 credit)	2.5
Economics	Economics OR AP Macro Economics OR Personal Finance and Economics	.5
Foreign Language	2 years of SAME language	2
Physical Education	PE Foundations	1
Fine Arts	Art 1 or Music Appreciation or equivalent	1
Electives	See current course listing for available TOPS electives *An additional 1.0 elective credit required for students that started 9th grade before 2022-2023.	5
Technology	Approved technology course *For 9th graders starting in 2022-2023 and after	1
Total Credits Required for Graduation		26

A student may earn a STEM endorsement by completing foundation and general endorsement requirements including Algebra II, chemistry, and physics and: (A) a coherent sequence courses for four or more credits in CTE that consists of at least two courses in the same career cluster including at least one advanced CTE course which includes any course that is the third or higher course in a sequence. The courses may be selected from courses in all CTE career clusters or CTE innovative courses approved by the commissioner of education. The final course in the sequence must be selected from the STEM career cluster.

(B) A total of five credits in mathematics by successfully completing Algebra I, geometry, Algebra II and two additional mathematics courses for which Algebra II is a prerequisite

(C) A total of five credits in science by successfully completing biology, chemistry, physics, and two additional science courses

***The local BIM requirement may be waived if the student has college-ready scores on both parts of either the TSIA2, SAT, or ACT.**

Foundations Graduation Plan
STEM Endorsement
Science Focus

Subject	Course	Credits
English	English I, II, III, IV or equivalent	4
Math	Algebra I Geometry Algebra II Advanced math course Advanced math courses: Precalculus, AP Statistics, AP Calculus AB, Bridge Math	4
Science	Biology Chemistry Physics Advanced science course Advanced science course Advanced science courses: Environmental Science, Forensic Science AP Chemistry, AP Biology, AP Environmental, and Anatomy & Physiology	5
Social Studies	World Geography OR AP Human Geography OR World History US History Government or AP US Government (.5 credit)	2.5
Economics	Economics OR AP Macro Economics OR Personal Finance and Economics	.5
Foreign Language	2 years of SAME language	2
Physical Education	PE Foundations	1
Fine Arts	Art 1 or Music Appreciation or equivalent	1
Electives	See current course listing for available TOPS electives *An additional 1.0 elective credit required for students that started 9th grade before 2022-2023.	5
Technology	Approved technology course *For 9th graders starting in 2022-2023 and after	1
Total Credits Required for Graduation		26

A student may earn a STEM endorsement by completing foundation and general endorsement requirements including Algebra II, chemistry, and physics and: (A) a coherent sequence courses for four or more credits in CTE that consists of at least two courses in the same career cluster including at least one advanced CTE course which includes any course that is the third or higher course in a sequence. The courses may be selected from courses in all CTE career clusters or CTE innovative courses approved by the commissioner of education. The final course in the sequence must be selected from the STEM career cluster.

(B) A total of five credits in mathematics by successfully completing Algebra I, Geometry, Algebra II and two additional mathematics courses for which Algebra II is a prerequisite

(C) A total of five credits in science by successfully completing biology, chemistry, physics, and two additional science courses

***The local technology requirement may be waived if the student has college-ready scores on both parts of either the TSIA2, SAT, or ACT.**

Foundations Graduation Plan
STEM Endorsement
Career and Technical Education (CTE) Focus

Subject	Course	Credits
English	English I, II, III, IV or equivalent	4
Math	Algebra I Geometry Algebra II Advanced math course Advanced math courses: Precalculus, AP Statistics, AP Calculus AB, Bridge Math	4
Science	Biology Chemistry Physics Advanced science courses Advanced science courses: Environmental Science, Forensic Science AP Chemistry, AP Biology, AP Environmental, and Anatomy & Physiology	4
Social Studies	World Geography OR AP Human Geography OR World History US History Government or AP US Government (.5 credit)	2.5
Economics	Economics OR AP Macro Economics OR Personal Finance and Economics	.5
Foreign Language	2 years of SAME language	2
Physical Education	PE Foundations	1
Fine Arts	Art 1 or Music Appreciation or equivalent	1
CTE	A coherent sequence of courses for four or more credits in CTE that consists of at least two courses in the same career cluster and at least one advanced CTE course. Current pathways offered that meet STEM requirements: Advanced Manufacturing, Cybersecurity, Programming & Software Development	4
Electives	See current course listing for available TOPS electives *An additional 1.0 elective credit required for students that started 9th grade before 2022-2023.	2
Technology	Approved technology course *For 9th graders starting in 2022-2023 and after	1
Total Credits Required for Graduation		26

A student may earn a STEM endorsement by completing foundation and general endorsement requirements including Algebra II, chemistry, and physics and: (A) a coherent sequence courses for four or more credits in CTE that consists of at least two courses in the same career cluster including at least one advanced CTE course which includes any course that is the third or higher course in a sequence. The courses may be selected from courses in all CTE career clusters or CTE innovative courses approved by the commissioner of education. The final course in the sequence must be selected from the STEM career cluster.

(B) A total of five credits in mathematics by successfully completing Algebra I, Geometry, Algebra II and two additional mathematics courses for which Algebra II is a prerequisite

(C) A total of five credits in science by successfully completing biology, chemistry, physics, and two additional science courses

***The local technology requirement may be waived if the student has college-ready scores on both parts of either the TSIA2, SAT, or ACT**