



## Course Catalog | 2024-25

### ENGLISH

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- English 095 - Comprehensive College Prep English
- Eng 099 – Cumulative College Prep English
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- COM 1250 Interpersonal Communication
- ENG 1021- English Composition I
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- Biology w/Lab B (Spring)
- Chemistry w/Lab A (Fall)
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- Intro to Health Sciences (HPR 1006, Fall)
- Anatomy & Physiology (Spring)
- Medical Terminology (HPR 1040, Fall)
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### SOCIAL SCIENCE

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- Geography
- Early US History (Fall)
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- 20<sup>th</sup> Century History (Fall)
- Western Civilization (Spring)
- ANT 1001 Cultural Anthropology
- ART 1110 - Art Appreciation
- CRJ 1010 – Introduction to Criminal Justice (Spring)
- HIS 1220 – US: Since the Civil War (Spring)
- HIS 2135 – Colorado History (Fall)
- HUM 1015 – World Mythology (Fall)
- POS 1025 – American State and Local Govt
- SOC 1001 – Introduction to Sociology I (Fall)
- SOC 1002 – Introduction to Sociology II (Spring)
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### ELECTIVES

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- Digital Literacy
- Entrepreneurship
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- BUS 1021/1017 Bsc Wrkplc Skills/Bus Writing (Fall)
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### POSTSECONDARY AND WORKFORCE READINESS

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## CAREER & TECHNICAL EDUCATION (CTE)

### Medical Pathway (CNA)

-Level 1: Intro to Health Sciences (HPR 1006, Fall)

-Level 2: Anatomy & Physiology (Spring)

-Level 3: Medical Terminology (HPR 1040, Fall)

-Level 4 Course(s)/Options:

\*On Campus at CECA: HPR 1008 – Law & Ethics for Health Professionals (Spring)

\*At CCA: HPR 112 - Phlebotomy and HPR 180 – Internship (Phlebotomy)

\*At CCA: NUA 101 – Nurse Aide Health Care Skills and NUA 170 – Nurse Aide Clinical Experience

*STEM/Engineering Certification (SOLIDWORKS)*

-Level 1: Introduction to Engineering (*satisfies MAT 090, Fall*)

-Level 2: Digital Electronics (*satisfies MAT 099, Spring*)

-Level 3: Robotics and Automated Systems (*satisfies MAT-1140, Fall*)

-Level 4: Work Based Learning: Engineering & Technology (Spring)

*Aviation and Aerospace (Commercial Drone License)*

-Level 1: Introduction to Aviation and Aerospace (*satisfies MAT 090, Fall*)

-Level 2: Aviation Weather (*satisfies MAT 099, Spring*)

-Level 3: Aviation of UAS and Drone Technology (*satisfies MAT-1140, Fall*)

-Level 4: Advanced Flight (*includes QuickBooks, Spring*)

# COURSE DESCRIPTIONS

## ENGLISH

### Foundational College Prep English I (ENG 090 I)

**Description:** English 090 I is designed to support students in building a strong foundation in reading and writing skills required to be successful in the next level of college preparatory courses. In addition to these content-related skills, this course will also support students in developing academic skills such as organization, accountability, and self-advocacy. The focus will be on communicating in a clear, structured way both verbally and through written work as well as understanding communication from others. We will practice these skills in many different ways including sentence, paragraph, and essay writing, close readings, whole class novels, annotating, Socratic seminars, presentations, and collaborative projects.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5 High School English

### Foundational College Prep English II (ENG 090 II)

**Description:** English 090 II is designed to continue building on the content covered in English 090 I. Students will continue mastering the academic standards and skills required to be successful in the next level of college preparatory courses.

**Prerequisites:** Eng 090 I

**Designation:** College Prep

**Credits:** 0.5 High School English

### Comprehensive College Prep English (ENG 095)

**Description:** The purpose of English 095 is to develop the skills required to be successful, independent readers and writers in all genres and subject matters. This course will provide students the opportunity to practice reading strategies to develop critical thinking skills, identify literary elements that contribute to the text's value, and improve vocabulary. In addition, the course will provide students the opportunity to practice each step of the writing process, including pre-writing, outlining, editing, and revision. We will practice these skills in many different ways including close readings, whole class novels, Socratic seminars, essay writing, presentations, and collaborative projects.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 1.0 High School English

### **Cumulative College Prep English (ENG 099)**

**Description:** English 099 is designed to help students develop the skills necessary for college reading and writing. Students will learn how to write critically, focus on writing and revision skills, and develop an academic vocabulary. Revision is the heart of writing. No one is born a good writer; instead, good writers work hard and revise, revise, revise. Students can expect to write an extensive amount in this class, as well as being asked to read both fiction and nonfiction texts. The course is also designed to help students develop the skills necessary for college reading. Students will develop college level reading skills and critical thinking skills. Students will read, appreciate and interpret literature including novels, plays, short stories, poetry and essays. Students will utilize speaking and listening skills to prepare for college and the workplace.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 1.0 High School English

### **Creative Writing I**

**Description:** Creative Writing Level 1 is designed to introduce students to the fundamental concepts and techniques of creative writing across various genres. Through a combination of lectures, discussions, and writing exercises, students will explore different forms of creative expression and develop their skills as writers.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5 High School English

### **Creative Writing II**

**Description:** Creative Writing Level 2 builds upon the foundational skills and knowledge acquired in Creative Writing Level 1, delving deeper into advanced techniques and strategies for crafting compelling and polished works of literature. Through a combination of workshops, readings, discussions, and critiques, students will refine their craft and develop a more sophisticated understanding of the creative writing process.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5 High School English

### **Interpersonal Communication (COM 1250| GT-SS3)**

**Description:** Examines the communication involved in interpersonal relationships occurring in family, social, and career situations. Relevant concepts include self-concept, perception, listening, nonverbal communication, and conflict. This is a statewide Guaranteed Transfer course in the GT-SS3 category.

**Prerequisites:** English 099 (preferred) and qualifying assessment score Next-Gen ACCUPLACER WR 246+.

**Designation:** College Bridge- Community College of Aurora

**Credits:** 3.0 College Communications/ 1.0 High School English

### **English Composition I (ENG 1021 | GT-CO1)**

**Description:** Emphasizes the planning, writing, and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress

analytical, evaluative, and persuasive/argumentative writing. This is a statewide Guaranteed Transfer course in the GT-CO1 category.

**Prerequisites:** English 099 (preferred) and qualifying assessment score Next-Gen ACCUPLACER WR 246+.

**Designation:** College Bridge- Community College of Aurora

**Credits:** 3.0 College English / 1.0 High School English

### **English Composition II ([ENG 1022](#) | GT-CO2)**

**Description:** Expands and refines the objectives of English Composition I. Emphasizes critical/logical thinking and reading, problem definition, research strategies, and writing analytical, evaluative, and argumentative compositions. This is a statewide Guaranteed Transfer course in the GT-CO2 category.

**Prerequisites:** Successful completion of English Composition I (ENG 121).

**Designation:** College Bridge- Community College of Aurora

**Credits:** 3.0 College English / 1.0 High School English

### **Creative Writing I ([ENG 2021](#) | GT-AH1)**

**Description:** Emphasizes the planning, writing, and revising of compositions, including the development of critical and logical thinking skills. This course includes a minimum of five compositions that stress analytical, evaluative, and persuasive/argumentative writing. This is a statewide Guaranteed Transfer course in the GT-CO1 category.

**Prerequisites:** English 099 (preferred) and qualifying assessment score Next-Gen ACCUPLACER WR 246+.

**Designation:** College Bridge- Community College of Aurora

**Credits:** 3.0 College English / 1.0 High School English

### **Intro to Literature ([LIT 1015](#) | GT-AH2) (Spring Only)**

**Description:** Introduces fiction, poetry, and drama. This course emphasizes active and responsive reading. This is a statewide Guaranteed Transfer course in the GT-AH2 category.

**Prerequisites:** English 099 (preferred) and qualifying assessment score Next-Gen ACCUPLACER WR 246+.

**Designation:** College Bridge- Community College of Aurora

**Credits:** 3.0 College Art & Humanities / 1.0 High School English

### **Literature of Women ([LIT 2046](#) | GT-AH2) (Fall Only)**

**Description:** Examines the techniques and themes in literature of various genres by and about women by considering what it means for women to be in literature, as characters and also as authors. This is a statewide Guaranteed Transfer course in the GT-AH2 category.

**Prerequisites:** English 099 (preferred) and qualifying assessment score Next-Gen ACCUPLACER WR 246+.

**Designation:** College Bridge- Community College of Aurora

**Credits:** 3.0 College Art & Humanities / 1.0 High School English

### **LatinX Literature ([LIT 2058](#) | GT-AH2) (Fall Only)**

**Description:** Examines the cultural, historical, and social contexts impacting Latinx identities through critical reading and analysis. This course focuses on significant works, including poetry, drama, and/or fiction, by Latinx authors.

**Prerequisites:** English 099 (preferred) and qualifying assessment score Next-Gen ACCUPLACER WR 246+.

**Designation:** College Bridge- Community College of Aurora  
**Credits:** 3.0 College Art & Humanities / 1.0 High School English

## MATH

### **Algebra I a(MAT 090 A)**

**Description:** High School Algebra 1 (Part A) is the first part of a comprehensive course designed to introduce students to fundamental algebraic concepts and techniques. Through a combination of theoretical lessons, problem-solving exercises, and practical applications, students will develop a solid foundation in algebraic skills necessary for success in higher-level mathematics courses and real-world problem-solving scenarios.

**Prerequisites:** Successful completion of Geo/Stats OR qualifying assessment score Next-Gen ACCUPLACER AR 255, QAS 200 – 244.

**Designation:** College Prep

**Credits:** 0.5 High School Math

### **Algebra I b(MAT 090 B)**

**Description:** High School Algebra 1 (Part B) continues the exploration of fundamental algebraic concepts introduced in Part A, focusing on more advanced topics and applications. Through interactive lessons, problem-solving activities, and real-world examples, students will deepen their understanding of algebraic principles and further develop their mathematical reasoning and problem-solving skills.

**Prerequisites:** Successful completion of Geo/Stats OR qualifying assessment score Next-Gen ACCUPLACER AR 255, QAS 200 – 244.

**Designation:** College Prep

**Credits:** 0.5 High School Math

### **Algebra I (MAT 090)**

**Description:** Includes first-degree equations, inequalities, formulas, polynomials, factoring polynomials, solving quadratic equations by factoring, graphing linear equations, and applications. Algebraic fractions and systems of linear equations may be included.

**Prerequisites:** Successful completion of Geo/Stats OR qualifying assessment score Next-Gen ACCUPLACER AR 255, QAS 200 – 244.

**Designation:** College Prep

**Credits:** 1.0 High School Math

### **Geometry/Statistics (GEO/STATS)**

**Description:** Geo/Stats begins the exploration of math as an art; both from a visual perspective and an intellectual perspective. We will learn to identify various geometric figures and prove theorems associated with them. Principles of reasoning will be learned to aid in making conjectures and proving theorems. An important concept in Statistics is interpreting and extrapolating information from graphical representations of data. A large part of the course will introduce concepts by exploratory means, where the student will get a chance to create mathematics.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 1.0 High School Math

### **Algebra II (MAT 099)**

**Description:** Emphasizes problem solving with further study of equations, slope, inequalities, systems of equations, polynomials, quadratic equations, rational expressions, rational exponents, radical expressions, graphing, and applications.

**Prerequisites:** Successful completion of MAT 090 & Geo/Stats OR qualifying assessment score Next-Gen ACCUPLACER AR 265, QAS 245-254.

**Designation:** College Prep

**Credits:** 1.0 High School Math

### **Mathematics for Liberal Arts ([MAT-1240](#) | GT-MA1)**

**Description:** Highlights connections between mathematics and the society in which we live and is intended for liberal arts majors. Topics include set theory and logic, mathematical modeling, probability and statistical methods, and consumer mathematics. This is a statewide Guaranteed Transfer course in the GT-MA1 category.

**Prerequisites:** Successful completion of [MAT 0250](#) OR [MAT 0300](#) (grade C or better) or appropriate placement scores (ACTM 19+, S12 500+, Accuplacer Next Gen QA 240+, or other placement methods available at the time of registration).

**Designation:** College Bridge - Community College of Aurora

**Credits:** 4.0 College Math / 1.5 High School Math

### **College Algebra ([MAT-1340](#) | GT-MA1)**

**Description:** Includes a brief review of intermediate algebra, equations, and inequalities, functions and their graphs, exponential and logarithmic functions, linear and non-linear systems, selection of topics from among graphing of the conic sections, introduction to sequences and series permutations and combinations, the binomial theorem and theory of equations. This is a statewide Guaranteed Transfer course in the GT-MA1 category.

**Prerequisites:** Successful completion of Geometry and MAT 099/Algebra II and qualifying assessment score Next-Gen ACCUPLACER AAF 245+.

**Designation:** College Bridge - Community College of Aurora

**Credits:** 4.0 College Math / 1.5 High School Math

## **SCIENCE**

### **Biology w/ Lab A**

**Description:** Biology is the study of life. It includes an introduction to the scientific method, cytology, genetics, botany, zoology, ecology, taxonomy, evolution, chemistry, and microbiology. In this course, we strive to understand the complex ways in which living organisms grow, interact and survive. We will examine organisms at all levels, all the way from the biosphere to microorganisms with a focus on scientific discovery and investigation. We aim to understand linkages across biological systems, and how living things depend on each other and are tied together at all levels.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5 High School Science

### **Biology w/ Lab B**

**Description:** Biology w/ Lab B will continue building on the content and skills covered in Biology w/ Lab B. Students must successfully complete Biology w/ Lab A in order to enroll in this course.

**Prerequisites:** Biology w/ Lab A

**Designation:** College Prep

**Credits:** 0.5 High School Science

### **Chemistry w/ Lab A**

**Description:** Students in this course will examine the fundamental properties of elements, compounds, and mixtures. Chemical reactions and chemical processes are observed and explained at the atomic and molecular level using the scientific method. Students will integrate conceptual understandings, algebra skills, and an ongoing laboratory experience to develop the fundamentals of problem solving, laboratory work, and the practical application of Chemistry.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5 High School Science

### **Chemistry w/ Lab B**

**Description:** Chemistry w/ Lab B will continue building on the content and skills covered in Chemistry w/ Lab A. Students must successfully complete Chemistry w/ Lab A in order to enroll in this course.

**Prerequisites:** Chemistry w/ Lab A

**Designation:** College Prep

**Credits:** 0.5 High School Science

### **Introduction to Health Sciences ([HPR 1006](#) – Customer Service in Healthcare)**

**Description:** Introduction to Health Science provides the foundational knowledge and skills students need for careers in health care. Students begin by exploring the services, structure, and professions of the health care system. The remainder of the course focuses on day-to-day skills and expectations for health professionals, which include promoting wellness, maintaining a safe environment, creating medical records, and practicing good communication, collaboration, and leadership. Using real-life scenarios and application-driven activities, students learn the responsibilities and challenges of being health care professionals. In addition to building their understanding of technical concepts and skills, students evaluate the qualifications required for specific careers and develop personal career plans to pursue work in the health care industry. (Competencies from this course will be planned along with standards of Science, allowing students to earn dual credit).

**Prerequisites:**

**Designation:** College Prep

**Credits:** 2.0 College Elective / 1.0 High School Science

### **Anatomy & Physiology (A&B)**

**Description:** Focuses on basic knowledge of body structures and function and provides a foundation for understanding deviations from normal and disease conditions. This course is designed for individuals interested in health care and is directly applicable to the Practical Nursing Program, Paramedic Program, and the Medical Office Technology program.

**Prerequisites:** Successful completion of Biology OR achieved at least 80% on the Biology Preassessment. Successful completion or current enrollment in 090 Math OR qualifying assessment score Next-Gen ACCUPLACER QAS 200+. Next-Gen ACCUPLACER WR 236+.

**Designation:** College Prep; Level 3

**Credits:** 1.0 High School Science

### **Medical Terminology ([HPR 1040](#))**

**Description:** Provides an in-depth study of the structure of medical terms with emphasis on using and combining common prefixes, roots and suffixes. This course includes terms related to major body

systems, oncology, and psychiatry as well as clinical laboratory and diagnostic procedures, and imaging, and provides accepted pronunciation of terms and relative use in the healthcare setting.

**Prerequisites:** Successful completion of Biology OR achieved at least 80% on the Biology Preassessment. Successful completion or current enrollment in 090 Math OR qualifying assessment score Next-Gen ACCUPLACER QAS 200+. Next-Gen ACCUPLACER WR 236+.

**Designation:** College Prep; Level 3

**Credits:** 3.0 College Elective / 1.0 High School Elective

### **Astronomy**

**Description:** Introduces you to the composition and structure of the universe. Astronomy is the scientific study of the contents of the entire Universe. This course will provide the student with a study of the universe and the conditions, properties, and motions of bodies in space. The content includes, but is not limited to, historical astronomy, astronomical instruments, the celestial sphere, the solar system, the earth as a system in space, the earth/moon system, the sun as a star, and stars.

**Designation:** College Prep

**Credits:** .5 High School Science

### **Science of Biology w/ Lab (BIO 1005 GT-SC1)**

**Description:** Examines the basis of biology in the modern world and surveys the current knowledge and conceptual framework of the discipline. Explores biology as a science, a process of gaining new knowledge, and the impact of biological science on society. This course includes a laboratory experience. Designed for non-science majors. This is a statewide Guaranteed Transfer course in the GT-SC1 category.

**Prerequisites:** RECOMMENDED: College Readiness in English and Quantitative Literacy

**Designation:** College Bridge - Community College of Aurora

**Credits:** 4.0 College Science / 1.5 High School Science

### **SOCIAL SCIENCE**

**Graduation requirement: Completion of Civics or POS 125 AND Modern US, Moder World, HIS 1120 or HIS 1220**

#### **Civics *\*\*Graduation Requirement, unless taking POS 125\*\****

**Description:** Civics will include a review of the gears and elements of government in the United States and in Colorado and how it all works. Students will exercise critical thinking skills to research and develop their own positions on modern society, in order to be better prepared as voters and potential decision-makers in the future. In addition, students will analyze Supreme Court cases to gain a further understanding of how the highest court in the land makes decisions.

**Prerequisites:** 11<sup>th</sup>/12<sup>th</sup> Grade Standing OR a minimum of 1.5 Social Science credits earned Career Pathway OR 2.5 Social Science credits earned University Pathway.

**Designation:** College Prep

**Credits:** 0.5 High School Social Science

### **Geography**

**Description:** The purpose of this class is for students to gain the skills and insight of what makes up the various cultures all over the world. The study of each of these cultures will focus upon historical and present-day culture and geography, family life and structure, social organizations, attitude on education, religious beliefs and institutions, economic life, political trends, and the intellectual and artistic accomplishments of men and women within the culture. The study of the cultures will be supplemented



by the development of reading, writing, research, geography, critical thinking, notetaking, and presentation skills

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5 High School Social Science

### **Early US History (Fall Only)**

**Description:** U.S. Early History is a semester long survey of American history from Early Exploration (1492) through the Civil War (1865). An emphasis will be placed on vocabulary, critical thinking skills, historical writing, and interpretation of original documents. Besides listening to traditional lectures on important themes in U.S. History, students are expected to participate in class through discussions, debates of key issues, and simulations. Furthermore, students are expected to continually develop their writing skills through regular short writing assignments, maintaining a notebook of all class handouts/materials, and completing assigned homework.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5 High School Social Science

### **Modern US History (Spring Only)**

**Description:** U.S. Modern History is a semester long survey of American history from Reconstruction (1865) through the War on Terror (2001). An emphasis will be placed on vocabulary, critical thinking skills, historical writing, and interpretation of original documents. Besides listening to traditional lectures on important themes in U.S. History, students are expected to participate in class through discussions, debates of key issues, and simulations. Furthermore, students are expected to continually develop their writing skills through regular short writing assignments, maintaining a notebook of all class handouts/materials, and completing assigned homework.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5 High School Social Science

### **Early World History (Fall Only)**

**Description:** Early World History is a semester long survey of the beginning of ancient civilizations to the Renaissance (1500). An emphasis will be placed on vocabulary, critical thinking skills, historical writing, and interpretation of original documents (DBQ's). Besides listening to traditional lectures on important themes in World History, students are expected to participate in class through discussions, small group interactions, and partner work. Furthermore, students are expected to continually develop their writing skills through regular short writing assignments and maintain a notebook of all class handouts and materials, and complete assigned homework

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5 High School Social Science

### **Modern World History (Spring Only)**

**Description:** Modern World History is a semester long survey of World History the Renaissance (1500) through World War II (1945). An emphasis will be placed on vocabulary, critical thinking skills, historical writing, and interpretation of original documents (DBQ's). Besides listening to traditional lectures on important themes in World History, students are expected to participate in class through discussions, small group interactions, and partner work. Furthermore, students are

expected to continually develop their writing skills through regular short writing assignments and maintain a notebook of all class handouts and materials, and complete assigned homework.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5 High School Social Science

### **20<sup>th</sup> Century History (Fall Only)**

**Description:** The 20th Century History course aims to provide high school students with a comprehensive understanding of the significant events, movements, and figures that shaped the world in the past century. This course explores the political, social, economic, and cultural developments that defined the 20th century, with a focus on global perspectives and their implications for contemporary society. Through a combination of lectures, discussions, readings, multimedia resources, and interactive activities, students will analyze key historical events and their impact on various regions and populations.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5 High School Social Science

### **Western Civilization (Spring Only)**

**Description:** The Western Civilization course offers high school students an in-depth exploration of the history, culture, and contributions of Western societies from ancient times to the modern era. Through a chronological approach, students will examine the major events, movements, and ideas that have shaped Western civilization, focusing on key developments in politics, religion, philosophy, art, and science. By engaging with primary sources, scholarly readings, and multimedia materials, students will develop critical thinking skills and a nuanced understanding of the complexities of Western history.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5 High School Social Science

### **Cultural Anthropology ([ANT 1001](#) | GT-SS3)**

**Description:** Examines the study of human cultural patterns, including communication, economic systems, social and political organizations, religion, healing systems, and cultural change. This is a statewide Guaranteed Transfer course in the GT-SS3 category.

**Prerequisites:** English 099 (preferred) and qualifying assessment score Next-Gen ACCUPLACER WR 236+.

**Designation:** College Bridge- Community College of Aurora

**Credits:** 3.0 College Social Sciences / 1.0 High School Social Science

### **Art Appreciation ([ART 1110](#) | GT-AH1)**

**Description:** Introduces the cultural significance of the visual arts, including media, processes, techniques, traditions, and terminology. This is a statewide Guaranteed Transfer course in the GT-AH1 category.

**Prerequisites:** English 099 (preferred) and qualifying assessment score Next-Gen ACCUPLACER WR 236+.

**Designation:** College Bridge- Community College of Aurora

**Credits:** 3.0 College Art & Humanities / 1.0 High School Social Science

### **Introduction to Criminal Justice ([CRI 1010](#) | GT-SS3)**

**Description:** Introduces students to the basic components of the criminal justice system in the United States. Concepts of crime, crime data, victimization, perspectives and views of crime, theory, and law are discussed. Particular attention to the criminal justice process, interaction and conflict between criminal justice agencies, and current criminal justice issues are examined. This is a statewide Guaranteed Transfer course in the GT-SS3 category.

**Prerequisites:** English 099 (preferred) and qualifying assessment score Next-Gen ACCUPLACER WR 236+.

**Designation:** College Bridge- Community College of Aurora

**Credits:** 3.0 College Social Science / 1.0 High School Social Science

### **US History Since Civil War ([HIS 1220](#) | GT-HI1) (Fall Only)**

**Description:** Explores trends within events, peoples, groups, ideas, and institutions in World History since 1500 as well as on common cultural trends. This course focuses on developing, practicing, and strengthening skills historians use while constructing knowledge and studying a diverse set of narratives through the perspectives such as gender, class, religion, and ethnicity. This is a statewide Guaranteed Transfer course in the GT-HI1 category.

**Prerequisites:** English 099 (preferred) and qualifying assessment score Next-Gen ACCUPLACER WR 236+.

**Designation:** College Bridge- Community College of Aurora

**Credits:** 3.0 College History / 1.0 High School Social Science

### **Colorado History ([HIS 2135](#) | GT-HI1)**

**Description:** Presents the story of the people, society, and cultures of Colorado from its earliest Native Americans, through the Spanish influx, the explorers, the fur traders, mountain men, the gold rush, railroad builders, the cattlemen and farmers, the silver boom, the tourists, and the modern state. This course focuses on developing, practicing, and strengthening skills historians use while constructing knowledge and studying a diverse set of narratives through perspectives such as gender, class, religion, and ethnicity. This is a statewide Guaranteed Transfer course in the GT-HI1 category.

**Prerequisites:** English 099 (preferred) and qualifying assessment score Next-Gen ACCUPLACER WR 236+.

**Designation:** College Bridge- Community College of Aurora

**Credits:** 3.0 College History / 1.0 High School Social Science

### **World Mythology ([HUM 1015](#) | GT-AH2) (Fall Only)**

**Description:** Introduces students to a multidisciplinary approach to world mythology. Common themes are illustrated and connected to religion, philosophy, art, literature, music, and contemporary culture. In addition, students will study various ways of interpreting myth. This is a statewide Guaranteed Transfer course in the GT-AH2 category.

**Prerequisites:** English 099 (preferred) and qualifying assessment score Next-Gen ACCUPLACER WR 236+.

**Designation:** College Bridge- Community College of Aurora

**Credits:** 3.0 College Art & Humanities / 1.0 High School Social Science

### **American State and Local Government ([PSC 1025](#) | GT-SS1)**

**Description:** Emphasizes the structure and function of state, county, and municipal governments, including their relations with each other and with national government. Includes a study of Colorado

government and politics. This is a statewide Guaranteed Transfer course in the GT-SS1 category and satisfies the Civics graduation requirement.

**Prerequisites:** English 099 (preferred) and qualifying assessment score Next-Gen ACCUPLACER WR 236+.

**Designation:** College Bridge- Community College of Aurora

**Credits:** 3.0 College Social Science / 1.0 High School Social Science

### **Introduction to Sociology I (SOC 1001 | GT-SS3)**

**Description:** This course examines the basic concepts, theories, and principles of sociology, including topics of culture, race, class, gender, sexuality, social groups, and deviance through a local and global lens. Analyzes and interprets socio-historic as well as contemporary issues by using critical thinking skills and linking individual experiences to social structures. This is a statewide Guaranteed Transfer course in the GT-SS3 category.

**Prerequisites:** English 099 (preferred) and qualifying assessment score Next-Gen ACCUPLACER WR 246+.

**Designation:** College Bridge- Community College of Aurora

**Credits:** 3.0 College Social Science / 1.0 High School Social Science

### **Introduction to Sociology II (SOC 1002 | GT-SS3)**

**Description:** Examines the basic concepts, theories, and principles of sociology, including topics of family, religion, education, politics, the economy, health, demography, the environment and social movements through a local and global lens. Analyzes and interprets socio-historical as well as contemporary issues by using critical thinking skills and linking individual experiences to social structures. This is a statewide Guaranteed Transfer course in the GT-SS3 category.

**Prerequisites:** English 099 (preferred) and qualifying assessment score Next-Gen ACCUPLACER WR 246+.

**Designation:** College Bridge- Community College of Aurora

**Credits:** 3.0 College Social Science / 1.0 High School Social Science

### **Sociology of Family Dynamics (SOC 2005 | GT-SS3)**

**Description:** Offers a critical exploration of marriage, family and kinship. It examines the family as an institution and how social, cultural and personal factors influence family relations locally and globally. Explores the stability and evolution of the family, along with current trends and a range of family forms. This is a statewide Guaranteed Transfer course in the GT-SS3 category.

**Prerequisites:** English 099 (preferred) and qualifying assessment score Next-Gen ACCUPLACER WR 246+.

**Designation:** College Bridge- Community College of Aurora

**Credits:** 3.0 College Social Science / 1.0 High School Social Science

### **Contemporary Social Problems (SOC 2015 | GT-SS3)**

**Description:** Investigates current social issues that result in societal problems. Focuses on numerous areas including, but not limited to, the loss of civil liberties, concentration of media ownership, gender discrimination, hate crimes, poverty, hunger, environmental degradation, racism and prejudice, as well as social change. Addresses ways to ameliorate these social ills. This is a statewide Guaranteed Transfer course in the GT-SS3 category.

**Prerequisites:** English 099 (preferred) and qualifying assessment score Next-Gen ACCUPLACER WR 246+.

**Designation:** College Bridge- Community College of Aurora

**Credits:** 3.0 College Social Science / 1.0 High School Social Science

## **LANGUAGE**

### **Spanish I**

**Description:** Spanish I is an entry-level high school foreign language course that explores the Spanish language through communication, culture, connections, comparisons, and communities. Course materials are designed to support students as they work to gain basic proficiency in speaking, listening, reading, writing, and cultural competency.

**Prerequisites**

**Designation:** College Prep

**Credits:** 1.0 High School Language

### **Spanish II**

**Description:** Spanish 2 furthers the study of grammar, vocabulary and cultures of Spanish-speaking countries. Students improve listening, speaking, reading and writing skills. Students begin to develop reading comprehension skills through literature.

**Prerequisites:** Spanish I

**Designation:** College Prep

**Credits:** 1.0 High School Language

### **Spanish for Heritage Speakers I**

**Description:** The purpose of this course is to enable students whose heritage language is Spanish to develop, maintain, and enhance proficiency in Spanish by providing them the opportunity to listen, speak, read, and write in a variety of contexts and for a variety of audiences including the family, school, and the community.

**Prerequisites:**

**Designation:** College Prep

**Credits:** 1.0 High School Language

### **Spanish for Heritage Speakers II**

**Description:** This course focuses on the development of advanced communicative competence in reading, writing, speaking and listening and viewing, as well as on understanding Hispanic cultures and issues of identity of heritage speakers of Spanish in the United States. Students will also continue to develop awareness and understanding of Hispanic cultures, including language variation, customs, geography, history, and current events.

**Prerequisites:** Spanish for Heritage Speakers I

**Designation:** College Prep

**Credits:** 1.0 High School Language

### **Spanish for Heritage Speakers III**

**Description:** High School Spanish for Heritage Speakers Level 3 is designed to further develop the language proficiency of students who have a background in Spanish but may have limited formal instruction. This course aims to strengthen students' reading, writing, speaking, and listening skills in Spanish while deepening their understanding of Hispanic cultures and heritage. Through a variety of authentic materials, literary texts, and cultural activities, students will engage with the language in meaningful contexts and explore their linguistic and cultural identities.

**Prerequisites:** Spanish for Heritage Speakers II

**Designation:** College Prep

**Credits:** 1.0 High School Language

### **Spanish for Heritage Speakers IV**

**Description:** High School Spanish for Heritage Speakers Level 4 is an advanced course designed to refine and expand the language skills of heritage speakers of Spanish. Building upon the foundation established in previous levels, this course emphasizes advanced linguistic proficiency, cultural exploration, and critical analysis of Spanish-language texts. Through authentic materials, literary works, multimedia resources, and interactive activities, students will deepen their understanding of Hispanic cultures and strengthen their language abilities for academic, professional, and personal purposes.

**Prerequisites:** Spanish for Heritage Speakers II

**Designation:** College Prep

**Credits:** 1.0 High School Language

### **Spanish Literature I**

**Description:** High School Spanish Literature 1 is an introductory course that explores the rich literary traditions of the Spanish-speaking world. Through the study of representative works of literature from various genres, periods, and regions, students will develop an appreciation for the diversity and complexity of Hispanic literary expression. This course will emphasize critical reading, literary analysis, cultural context, and the exploration of universal themes and human experiences.

**Prerequisites:** Spanish for Heritage Speakers II

**Designation:** College Prep

**Credits:** 1.0 High School Language

### **Spanish Literature II**

**Description:** High School Spanish Literature 2 is an advanced course that builds upon the foundation established in Spanish Literature 1, delving deeper into the exploration of literary works from the Spanish-speaking world. Through the study of masterpieces of literature, students will engage with complex themes, styles, and literary techniques while developing critical thinking, analytical, and interpretive skills. This course will foster a deeper understanding and appreciation of Hispanic literary traditions and their cultural significance.

**Prerequisites:** Spanish for Heritage Speakers II

**Designation:** College Prep

**Credits:** 1.0 High School Language

## **ELECTIVES**

### **2D Art**

**Description:** Students learn about color, layout, perspective, and balance: all techniques that are necessary in presentations (both visual and digital) of academic work. Art has the ability to reach students who might not be engaged in classwork as well as providing challenges for learners at all levels. This class introduces the hands-on experience with the visual arts, including media, processes, techniques, traditions, and terminology. Drawing, painting, sculpture and media will all be explored. Students will use the design cycle (developing ideas, creating the solution, evaluating, and inquiring & analyzing) to shape their art. Guest lecturers (artists specializing in a specific technique or medium) will be scheduled, as will field trips to galleries and the Denver Art Museum.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5 High School Elective

### **3D Art**

**Description:** As a 3D Design class students will be learning about and creating sculptural art works. Students will utilize drawing, individual and group inquiry and discussion, media experimentation and application in the planning, construction and self-evaluation stages of their sculptures.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5 High School Elective

### **Drawing I ([ART 1201](#))**

**Description:** Investigates the various approaches and media that students need to develop drawing skills and visual perception.

**Prerequisites:** None

**Designation:** College Bridge- Community College of Aurora

**Credits:** 3.0 College Elective / 1.0 High School Elective

### **Drawing II ([ART 1202](#))**

**Description:** Explores expressive drawing techniques with an emphasis on formal composition, color media and content or thematic development.

**Prerequisites:** ART 1201 (C or higher)

**Designation:** College Bridge- Community College of Aurora

**Credits:** 3.0 College Elective / 1.0 High School Elective

### **Painting I ([ART 1301](#))**

**Description:** Explores basic techniques, materials, and concepts used in opaque painting processes in oil or acrylic painting to depict form and space on a two-dimensional surface.

**Prerequisites:** Successful completion of ART 1201 (grade C or higher).

**Designation:** College Bridge- Community College of Aurora

**Credits:** 3.0 College Elective / 1.0 High School Elective

### **Painting II ([ART 1302](#))**

**Description:** Further explores basic techniques, materials, and concepts used in opaque painting processes in oil or acrylic painting, with emphasis on composition and content development.

**Prerequisites:** Successful completion of ART 1301 (grade C or higher).

**Designation:** College Bridge- Community College of Aurora

**Credits:** 3.0 College Elective / 1.0 High School Elective

### **Ceramics I ([ART 1703](#))**

**Description:** Introduces traditional and contemporary ceramic forms and processes including hand building and throwing on the potter's wheel.

**Prerequisites:** None

**Designation:** College Bridge- Community College of Aurora

**Credits:** 3.0 College Elective / 1.0 High School Elective

### **Digital Literacy**

**Description:** High School Digital Literacy is a comprehensive course designed to equip students with the essential skills and knowledge necessary to navigate the digital world effectively, critically, and ethically.

In an increasingly interconnected and technology-driven society, digital literacy is essential for success in academic, professional, and personal contexts. Through a combination of theoretical concepts, hands-on activities, and practical applications, students will learn to harness the power of technology responsibly, evaluate digital information critically, and engage in ethical digital practices.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5 High School Elective

### **MS Applications (Microsoft Office Specialist)**

**Description:** Students will identify the fundamentals of business creation, the personal attributes needed to be a successful entrepreneur, and will research various business opportunities. Topics covered include the characteristics of an entrepreneur, discovering entrepreneurial opportunities, and researching and analyzing domestic, global and market trends. The course culminates with the student developing a hypothetical business plan to implement their unique venture that conforms to all applicable governmental laws and regulations.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5 High School Elective

### **Certification Lab**

**Description:** Students will identify the fundamentals of business creation, the personal attributes needed to be a successful entrepreneur, and will research various business opportunities. Topics covered include the characteristics of an entrepreneur, discovering entrepreneurial opportunities, and researching and analyzing domestic, global and market trends. The course culminates with the student developing a hypothetical business plan to implement their unique venture that conforms to all applicable governmental laws and regulations.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5 High School Elective

### **Entrepreneurship**

**Description:** Students will identify the fundamentals of business creation, the personal attributes needed to be a successful entrepreneur, and will research various business opportunities. Topics covered include the characteristics of an entrepreneur, discovering entrepreneurial opportunities, and researching and analyzing domestic, global and market trends. The course culminates with the student developing a hypothetical business plan to implement their unique venture that conforms to all applicable governmental laws and regulations.

**Prerequisites:** None

**Designation:** College Prep

**Credits:** 0.5 High School Elective

### **Business Writing (BUS 1017 )**

**Description:** This course examines the basic concepts, theories, and principles of sociology, including topics of culture, race, class, gender, sexuality, social groups, and deviance through a local and global lens. Analyzes and interprets socio-historic as well as contemporary issues by using critical thinking skills and linking individual experiences to social structures.

**Co-requisites:** BUS 1021

**Designation:** College Bridge- Community College of Aurora



**Credits:** 1.0 College Elective / 0.5 High School Elective

### **Basic Workplace Skills (BUS 1021)**

**Description:** This course examines the basic concepts, theories, and principles of sociology, including topics of culture, race, class, gender, sexuality, social groups, and deviance through a local and global lens. Analyzes and interprets socio-historic as well as contemporary issues by using critical thinking skills and linking individual experiences to social structures.

**Co-requisites:** BUS 1017

**Designation:** College Bridge- Community College of Aurora

**Credits:** 1.0 College Elective / 0.5 High School Elective

### **Introduction to Business (BUS 1015 | GT-SS3)**

**Description:** Introduces the application of fundamental business principles to local, national, and international forums. This course examines the relationship of economic systems, governance, regulations, and law upon business operations. It surveys the concepts of career development, business ownership, finance and accounting, economics, marketing, management, operations, human resources, regulations, and business ethics.

**Prerequisites:** English 099 (preferred) and qualifying assessment score Next-Gen ACCUPLACER WR 246+.

**Designation:** College Bridge- Community College of Aurora

**Credits:** 3.0 College Elective / 1.0 High School Elective

### **Legal Environment of Business (BUS 2016 | GT-SS3)**

**Description:** Emphasizes public law, regulation of business, ethical considerations, and various relationships existing within society, government, and business. Specific attention is given to economic regulation, social regulation, labor-management issues, environmental issues, and contract fundamentals. This course analyzes the role of law in social, political, and economic change business environments.

**Designation:** College Bridge- Community College of Aurora

**Credits:** 3.0 College Social Science / 1.0 High School Elective

### **Business Communication and Report Writing (BUS 2017 | GT-SS3)**

**Description:** Emphasizes effective business writing and covers letters, memoranda, reports, application letters, and resumes. Includes the fundamentals of business communication and an introduction to international communication.

**Designation:** College Bridge- Community College of Aurora

**Credits:** 3.0 College Social Science / 1.0 High School Elective

### **Business Statistics (BUS 2026 | GT-SS3)**

**Description:** Focuses on statistical study, descriptive statistics, probability, the binominal distribution, index numbers, time series, decision theory, confidence intervals, linear regression, and correlation. Intended for business majors.

**Designation:** College Bridge- Community College of Aurora

**Credits:** 3.0 College Social Science / 1.0 High School Elective

## **POSTSECONDARY AND WORKFORCE READINESS**

### **Career Exploration**

**Description:** Career exploration aims to expose students to a broad range of career fields ultimately increasing the student's knowledge of career options. The class will take field trips, do job shadowing, and meet with industry leaders to gain real world perspective on careers identified by students. In this class students are empowered to uncover their skills, talents and interests to develop their own individualized post-secondary pathways. Throughout this class, school counselors will work closely with students to select future courses that align with their desired career goals.

**Prerequisites:** 9<sup>th</sup> or 10<sup>th</sup> grade standing (preferred).

**Designation:** College Prep

**Credits:** 0.5 High School Elective

### **College and Career Readiness *\*\*Graduation Requirement\*\****

**Description:** This course will emphasize and study character as an avenue for success in post-secondary education or the workforce, equipping students with the necessary executive skills critical in decision making and appropriate behavior, improving relationships through an immersive social environment, motivating students to define their future and their place in society through goal setting and visualization and to be a positive role model and provide a catalyst for student success and achievement.

**Prerequisites:** 11<sup>th</sup> or 12<sup>th</sup> grade standing (preferred).

**Designation:** College Prep

**Credits:** 1.0 High School Elective

### **BUS 1017&1021 – will also fulfill the College and Career Readiness *\*\*Graduation Requirement\*\****

**Description:** See above BUS course descriptions

## **ACADEMIC ACHIEVEMENT COURSES**

### **English Language Development (ELD)**

**Description:** English Language Development is a rigorous class that aims to develop student's English proficiency levels in all four domains of language (reading, writing, speaking, and listening). It is also meant to support students in their other general education classes through development of critical thinking skills, academic vocabulary, and writing skills. Each lesson is designed to teach students content and oral/written language skills. The curriculum is developed with WIDA standards, Common Core standards, and College Readiness Standards.

**Prerequisites:** EL Status of NEP or LEP.

**Designation:** College Prep

**Credits:** 0.5 High School Elective

### **Resource Room (ESS)**

**Description:** This course is designed to support students who have an Individualized Education Program (IEP). This class will help support core content areas, build academic language, organizational skills, and literacy skills in order to access the general education curriculum.

**Prerequisites:** Current IEP or 504 Plan.

**Designation:** College Prep

**Credits:** 0.5 High School Elective

## **CAREER & TECHNICAL EDUCATION (CTE)**

### **Medical Pathway**

### **Level 1 - Introduction to Health Sciences ([HPR 1006](#) – Customer Service in Healthcare)**

**Description:** Introduction to Health Science provides the foundational knowledge and skills students need for careers in health care. Students begin by exploring the services, structure, and professions of the health care system. The remainder of the course focuses on day-to-day skills and expectations for health professionals, which include promoting wellness, maintaining a safe environment, creating medical records, and practicing good communication, collaboration, and leadership. Using real-life scenarios and application-driven activities, students learn the responsibilities and challenges of being health care professionals. In addition to building their understanding of technical concepts and skills, students evaluate the qualifications required for specific careers and develop personal career plans to pursue work in the health care industry. (Competencies from this course will be planned along with standards of Science, allowing students to earn dual credit).

**Prerequisites:**

**Designation:** College Prep

**Credits:** 2.0 College Elective / 1.0 High School Science

### **Level 2 - Anatomy & Physiology (A&B)**

**Description:** Focuses on basic knowledge of body structures and function and provides a foundation for understanding deviations from normal and disease conditions. This course is designed for individuals interested in health care and is directly applicable to the Practical Nursing Program, Paramedic Program, and the Medical Office Technology program.

**Prerequisites:** Successful completion of Biology OR achieved at least 80% on the Biology Preassessment. Successful completion or current enrollment in 090 Math OR qualifying assessment score Next-Gen ACCUPLACER QAS 200+. Next-Gen ACCUPLACER WR 236+.

**Designation:** College Prep; Level 3

**Credits:** 1.0 High School Science

### **Level 3 - Medical Terminology ([HPR 1040](#))**

**Description:** Provides an in-depth study of the structure of medical terms with emphasis on using and combining common prefixes, roots and suffixes. This course includes terms related to major body systems, oncology, and psychiatry as well as clinical laboratory and diagnostic procedures, and imaging, and provides accepted pronunciation of terms and relative use in the healthcare setting.

**Prerequisites:** Successful completion of Biology OR achieved at least 80% on the Biology Preassessment. Successful completion or current enrollment in 090 Math OR qualifying assessment score Next-Gen ACCUPLACER QAS 200+. Next-Gen ACCUPLACER WR 236+.

**Designation:** College Prep; Level 3

**Credits:** 3.0 College Elective / 1.0 High School Elective

### **Level 4 – Course(s)/Options**

\*On CECA Campus (Bridge) – **Law & Ethics for Health Professionals ([HPR 1008](#))** (Spring)

**Description:** Introduces student to the study and application medico-legal concepts in medical careers. This course seeks to establish a foundation for ethical behavior and decision making in health professions.

**Designation:** College Prep/CTE

**Credits:** 2.0 College Elective / 1.0 High School Elective

\*On CCA Campus (Select) - **Phlebotomy ([HPR 1020](#) & [HPR 1080](#)) or Nurse Aide ([NUA 1001](#) & [NUA 1070](#))**

**Description:** Phlebotomy

**HPR 1020:** Covers the duties associated with the practice of venipuncture, capillary puncture, and special collection procedures. This course provides experience with quality control, infection control, safety procedures, as well as laboratory computer systems. Successful completion of this course, with an adequate number of blood draws, will constitute eligibility for application for a National Phlebotomy Registry Examination.

**HPR 1080:** Provides students with the opportunity to supplement coursework with practical work experience related to their educational program. Students work under the immediate supervision of experienced personnel at the business location and with the direct guidance of the instructor.

**Designation:** College Select @ CCA/CTE

**Credits:**

**HPR 1020** 4.0 College Elective / 1.5 High School Elective

**HPR 1080** 3.0 College Elective / 1.0 High School CTE Elective

### **Description: Nurse Aide**

**NUA 1001:** Prepares the student to perform the fundamental skills of the nurse aide. Basic nursing skills, communication skills, restorative services, personal care skills, safety and emergency care issues are covered. Includes knowledge and/or principles of asepsis, OSHA and HIPAA regulations. Ethical behaviors, cultural sensitivity and principles of mental health will be addressed, as well as patient/resident rights.

**NUA 1070:** Applies knowledge and skill gained in [NUA 1001](#) to patient care.

**Credits:**

**NUA 1001** 4.0 College Elective / 1.5 High School Elective

**NUA 1070** 1.0 College Elective / 0.5 High School CTE Elective

### **STEM/Engineering Certification (SOLIDWORKS)**

#### **Level 1 - Introduction to Engineering (Applied Math I)**

**Description:** Through both individual and collaborative team activities, projects, and problems, students will solve problems as they practice common engineering design and development protocols such as project management and peer review. Students will develop skill in technical representation and documentation of design solutions according to accepted technical standards, and they will use current 3D design and modeling software to represent and communicate solutions. In addition, the development of computational methods that are commonly used in engineering problem solving, including statistical analysis and mathematical modeling, are emphasized. Ethical issues related to professional practice and product development are also presented. (Competencies from this course will be planned along with standards of Math 090, allowing students to earn dual credit).

**Prerequisites:** 10<sup>th</sup>-12<sup>th</sup> grade standing. Successful completion of Geo/Stats.

**Designation:** College Prep

**Credits:** 1.0 High School Math / 1.0 High School CTE Elective

#### **Level 2 - Digital Electronics (Applied Math II)**

**Description:** Digital Electronics is intended to provide students with an introduction to the basic components of digital electronic systems and equip them with the ability to use these components to design more complex digital systems. Proficient students will be able to (1) describe basic functions of digital components (including gates, flip flops, counters, and other devices upon which larger systems are designed), (2) use these devices as building blocks to design larger, more complex circuits, (3) implement these circuits using programmable devices, and (4) effectively communicate designs and systems. Students develop additional skill in technical documentation when operating and troubleshooting

circuits. Upon completion of the Digital Electronics course, students will be able to design a complex digital system and communicate their designs. (Competencies from this course will be planned along with standards of Math 099, allowing students to earn dual credit).

**Prerequisites:** Successful completion of Introduction to Engineering (preferred). Successful completion of a Level 3 science class. Successful completion or current enrollment in 090 Math.

**Designation:** College Prep

**Credits:** 1.0 High School Math / 1.0 High School CTE Elective

### **Level 3 - Robotics & Automated Systems (MAT 1140 – Career Mathematics)**

**Description:** Robotics & Automated Systems is an applied course for students who wish to explore how robots and automated systems are used in the industry. Upon completion of this course, students will have an understanding of the historical and current uses of robots and automated systems; programmable circuits, interfacing both inputs and outputs; ethical standards for engineering and technology professions; and testing and maintenance of robots and automated systems. This class also covers material designed for career and technical students who need to study mathematical topics. Topics include measurement, algebra, geometry, statistics, and graphs. These are presented at an introductory level and the emphasis is on applications. (Competencies from this course EGG-106 will be planned along with standards of MAT-107, allowing students to earn dual credit).

**Prerequisites:** Successful completion of Math 099 AND qualifying assessment scores Next-Gen ACCUPLACER AR 200+, QAS 200+, or AAF 200+, SAT Math 200+.

**Designation:** College Bridge- Community College of Aurora

**Credits:** 3.0 College Elective / 1.0 High School Math / 1.0 High School CTE Elective

### **Level 4 - Work Based Learning: Engineering & Technology**

**Description:** Students will employ engineering and scientific concepts in the solution of engineering design problems. In addition, students will use SOLIDWORKS to help them design solutions to solve proposed problems. Students will develop problem-solving skills and apply their knowledge of research and design to create solutions to various challenges that increase in difficulty throughout the course. Students will also learn how to document their work and communicate their solutions to their peers and members of the professional community.

**Prerequisites:** Successful completion of Robotics & Automated Systems.

**Designation:** College Prep

**Credits:** 2.0 High School CTE Elective

### **Aviation and Aerospace (Commercial Drone License)**

#### **Level 1 - Introduction to Aviation and Aerospace A (Applied Math I)**

**Description:** This course will introduce the aviation and aerospace industry and provide an entry level examination of Aviation career opportunities. Students will explore the concepts and principles of Aviation and delve into general practices of the aerospace field. Areas of study are aviation history, pilot training, airplane structure, engines, basic aerodynamics, flight environment, airports, aviation weather, and navigation. In addition, the course exposes the student to the history of manned space flight. (Competencies from this course will be planned along with standards of Math 090, allowing students to earn dual credit).

**Prerequisites:** 10<sup>th</sup>-12<sup>th</sup> grade standing. Successful completion of Geo/Stats.

**Designation:** College Prep

**Credits:** 1.0 High School Math / 1.0 High School CTE Elective

### **Level 2 - Introduction to Aviation and Aerospace B (Applied Math II)**

**Description:** This course continues to develop the concepts from Introduction to Aviation and Aerospace A. Successful completion of Introduction to Aviation and Aerospace A is a prerequisite. (Competencies from this course will be planned along with standards of Math 099, allowing students to earn dual credit).

**Prerequisites:** Successful completion of Introduction to Aviation and Aerospace A (preferred).

**Designation:** College Prep

**Credits:** 1.0 High School Math / 1.0 High School CTE Elective

### **Level 3 - Aviation of UAS and Drone Technology (MAT 1140 – Career Mathematics)**

**Description:** This course will cover advanced flight topics from area Aviation experts. Students will be exposed to new concepts in UAS and drone technology as well as expanding topics covered in Aviation I to an advanced level. This course will also cover material designed for career and technical students who need to study mathematical topics. Topics include measurement, algebra, geometry, statistics, and graphs. These are presented at an introductory level and the emphasis is on applications. (Competencies from this course will be planned along with standards of MAT-107, allowing students to earn dual credit).

**Prerequisites:** Successful completion of Math 099 AND qualifying assessment scores Next-Gen ACCUPLACER AR 200+, QAS 200+, or AAF 200+, SAT Math 200+.

**Designation:** College Bridge- Community College of Aurora

**Credits:** 3.0 College Elective / 1.0 High School Math / 1.0 High School CTE Elective

### **Level 4 - Advanced Flight**

**Description:** This course continues to develop the concepts from Aviation of UAS and Drone Technology A. In addition to that students will be preparing to pass the Federal Aviation Administration (FAA) Commercial Drone License and a certification in QuickBooks to Assist with beginning their own business.

**Prerequisites:** Successful completion of Aviation and UAS and Drone Technology A.

**Designation:** College Prep

**Credits:** 2.0 High School CTE Elective

### **Additional CTE Course Offerings**

#### **Certification Lab (CTE Certification)**

**Description:** Provides industry-leading assessments of skills and knowledge through project-based testing, giving students real-world exercises to appraise their understanding of various programs and skillsets in the areas of Adobe Design Apps, QuickBooks, Small Business Cert, and various of other options each semester. This guarantees that every student has demonstrated ability to understand the needs of the certification they chose to complete, preparing them for future workforce opportunities. Students will work in a variety of industries with a wide range of duties that these certifications will cover.

**Prerequisites:**

**Designation:** College Prep

**Credits:** 0.5 High School CTE Elective