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### ***Lake County Schools Nondiscrimination Notification and Contact Information***

Lake County Schools, Florida does not discriminate on the basis of race, religion, color, national origin, gender, genetic information, age, pregnancy, disability or marital status in its educational programs, services or activities, or in its hiring or employment practices. The district also provides access to its facilities to the Boy Scouts and other patriotic youth groups, as required by the Boy Scouts of America Equal Access Act, or any other youth group listed in Title 36 of the United States Code as a patriotic society. An employee, student, parent, or applicant alleging discrimination with respect to employment, or any educational program or activity may contact:





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# Advanced Studies & Dual Enrollment Program Descriptions

Program	Description
<p style="text-align: center;"><b>AICE</b> (Advanced International Certificate of Education)</p> <p style="text-align: center;"> Excellence in education</p> <p><b>Offered at:</b></p> <ul style="list-style-type: none"> <li>• Carver Middle</li> <li>• Leesburg High</li> <li>• Oak Park Middle</li> <li>• South Lake High</li> <li>• Umatilla High</li> <li>• Umatilla Middle</li> </ul>	<p>The Cambridge Advanced International Certificate of Education (AICE) Diploma is an international curriculum and examination system that emphasizes the value of broad and balanced study. Alongside in-depth understanding of a variety of subjects, students also need to master a broader range of skills critical for success in university study and employment. The Cambridge AICE Diploma was first awarded in 1997 and has since become popular with a range of schools in different parts of the world. It encompasses the ‘gold standard’ Cambridge International AS and A Level qualifications, and offers students the opportunity to tailor their studies to their individual interests, abilities and future plans within an international curriculum framework.</p> <p>Cambridge Lower Secondary (Middle School) develops skills in ten subjects including English, Mathematics and Science. It is designed to help schools deliver a broad and balanced curriculum that suits their context, culture and ethos. The curriculum sets clear learning objectives and focuses on developing knowledge and skills in all subjects, providing excellent foundations for the next stage of education.</p>
<p style="text-align: center;"> Advanced Placement Program</p> <p><b>Offered at:</b></p> <ul style="list-style-type: none"> <li>• All High Schools</li> </ul>	<p>Advanced Placement (AP) courses give students access to rigorous college-level work. AP students build confidence and learn the essential time management and study skills needed for college and career success. Students have the opportunity to dig deeper into subjects that interest them, develop advanced research and communication skills, and learn to tap their creative, problem-solving, and analytical potential. Research shows that students who take AP are much more likely than their peers to complete a college degree on time.</p>
<p style="text-align: center;"> Advanced Placement Program</p> <p><b>Pre-AP Offered at:</b></p> <ul style="list-style-type: none"> <li>• East Ridge High</li> <li>• Lake Minneola High</li> <li>• Tavares High</li> </ul>	<p>Pre-AP courses provide grade-level instruction through focused course frameworks. They are designed to assist all students across varying levels of abilities and may assist in preparation for Advanced Placement coursework that students may choose to pursue. Participating schools receive an official Pre-AP designation for each course and the opportunity to bring engaging, meaningful, foundational coursework to all their students across varying levels of abilities.</p>
<p style="text-align: center;"></p> <p><b>Offered at:</b></p> <ul style="list-style-type: none"> <li>• East Ridge High</li> <li>• Eustis High</li> <li>• Lake Minneola High</li> <li>• South Lake High</li> <li>• Tavares High</li> </ul>	<p>AP Capstone™ is a College Board program that equips students with the independent research, collaborative teamwork, and communication skills that are increasingly valued by colleges. It cultivates curious, independent, and collaborative scholars and prepares them to make logical, evidence-based decisions. AP Capstone is comprised of two AP courses — AP Seminar and AP Research — and is designed to complement and enhance the discipline-specific study in other AP courses. Participating schools can use the AP Capstone program to provide unique research opportunities for current AP students, or to expand access to AP by encouraging students to master the argument-based writing skills that the AP Capstone program develops.</p>

## Advanced Studies & Dual Enrollment Program Descriptions

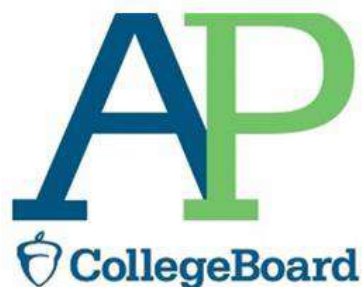
Program	Description
<p>AVID (Advancement Via Individual Determination)</p>  <p><b>Offered at:</b></p> <ul style="list-style-type: none"> <li>• All Middle &amp; High Schools</li> </ul>	<p>AVID Secondary (grades 6-12) develops learning, study and academic behavioral skills that are essential to success in rigorous coursework. It acts as a catalyst for schools to develop a culture of college readiness for all students across the campus. In the AVID elective class, students receive daily instruction and support to prepare them for college from a trained AVID Elective teacher. AVID impacts students school-wide as academic strategies like writing to learn, inquiry, collaboration, organizational skills, and critical reading (WICOR ) are taught in all classes by teachers who have been trained to use AVID strategies in their specific content areas.</p>
<p>Dual Enrollment</p>  <p><b>Offered at:</b></p> <ul style="list-style-type: none"> <li>• All High Schools</li> </ul> <p><b>Embry Riddle offered at</b></p> <ul style="list-style-type: none"> <li>• Eustis High School</li> <li>• South Lake High School</li> </ul> 	<p>Dual enrollment is an acceleration mechanism that allows students to pursue an advanced curriculum relevant to their individual postsecondary interests. Each year, more than 50,000 students participate in Florida's dual enrollment program, and the number is continuing to grow. According to the U.S. Department of Education, college credit earned prior to high school graduation reduces the average time-to-degree and increases the likelihood of graduation for the students who participate in these programs. There is also evidence that dual enrollment increases academic performance and educational attainment. Dual enrollment is one of a number of acceleration options available that enable students to pursue a rigorous curriculum for high school graduation, as well as earn credit toward a degree or industry certification.</p>
<p>HSCA (Health Sciences Collegiate Academy)</p>  <p><b>Four-Year Programs Offered at:</b></p> <ul style="list-style-type: none"> <li>• East Ridge High School</li> <li>• Lake Minneola High School</li> <li>• South Lake High School</li> </ul>	<p>The Health Sciences Collegiate Academy (HSCA) is an accelerated academic program offering students the opportunity to explore careers in the STEM and health sciences through hands-on activities and early exposure to college courses. HSCA is a unique partnership among Lake-Sumter State College, South Lake Hospital, Lake County Schools, Montverde Academy, and the University of Central Florida. Students can apply to the four-year program (9-12 grades) or the two-year program (11-12 grades). Two-year programs are offered at all high schools.</p>

# 2022-2023 HIGH SCHOOL Advanced Placement Courses

(subject to change based on enrollment)

PROGRAM	East Ridge	Eustis	Lake Minneola	Leesburg	Mount Dora	South Lake	Tavares	Umatilla	Lake Virtual
AP Art History	•		•			•			•
AP Biology	•	•	•		•	•	•		•
AP Calculus AB	•	•	•	•	•	•	•	•	•
AP Calculus BC	•		•		•		•		•
AP Chemistry	•	•				•			
AP Computer Science A	•								
AP Computer Science Principles	•	•				•	•		
AP English Language and Composition	•	•	•	•	•	•	•	•	•
AP English Literature and Composition	•	•	•		•	•	•	•	•
AP Environmental Science	•	•	•			•	•	•	•
AP European History	•	•	•						
AP Human Geography	•	•	•		•	•	•		
AP Macroeconomics	•	•	•			•			
AP Microeconomics					•				
AP Music Theory	•		•				•		
AP Physics 1	•	•				•			
AP Physics C: Mechanics	•								
AP Psychology	•	•	•		•	•	•	•	•
AP Research	•	•	•				•		
AP Seminar	•	•	•			•	•		
AP Spanish Language and Culture	•	•	•		•	•	•		
AP Statistics	•	•	•		•	•	•	•	•
AP Studio Art 2-D	•	•	•	•	•	•	•	•	
AP Studio Art 3-D				•			•		
AP Studio Art Drawing	•	•				•	•		
AP United States Government and Politics	•	•	•		•	•	•	•	•
AP United States History	•	•	•		•	•	•	•	•

## Advanced Placement Course Descriptions



The **AP Art History** course is equivalent to a two-semester college survey course exploring the nature of art, art making, and responses to art. By investigating specific course content of 250 works of art characterized by diverse artistic traditions from prehistory to the present, students develop in-depth, holistic understanding of the history of art from a global perspective. Students become active participants in the global art world, engaging with its forms and content. They experience, research, discuss, read, and write about art, artists, art making, responses to, and interpretations of art.

**AP Biology** is an introductory college-level biology course. Students cultivate their understanding of biology through inquiry-based investigations as they explore the following topics: evolution, cellular processes—energy and communication, genetics, information transfer, ecology, and interactions.



**AP Calculus AB** is roughly equivalent to a first semester college calculus course devoted to topics in differential and integral calculus. The AP course covers topics in these areas, including concepts and skills of limits, derivatives, definite integrals, and the Fundamental Theorem of Calculus. You'll learn how to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and how to make connections amongst these representations. You will learn how to use technology to help solve problems, experiment, interpret results, and support conclusions.



**AP Calculus BC** is roughly equivalent to both first and second semester college calculus courses and extends the content learned in AB to different types of equations and introduces the topic of sequences and series. This course covers topics in differential and integral calculus, including concepts and skills of limits, derivatives, definite integrals, the Fundamental Theorem of Calculus, and series. You will learn how to approach calculus concepts and problems when they are represented graphically, numerically, analytically, and verbally, and to make connections amongst these representations.

The **AP Chemistry** course is designed to be the equivalent of the general chemistry course usually taken during the first college year. The goal is that students will take the AP Exam to receive college credit or placement at the student's college of choice. Students may be able to undertake second-year work in the chemistry sequence at their institution or take courses for which general chemistry is a prerequisite. For other students, this course fulfills the laboratory science requirement and frees time for other courses.



# Advanced Placement Course Descriptions

**AP Computer Science A** is equivalent to a first-semester, college-level course in computer science. The course introduces students to computer science with fundamental topics that include problem solving, design strategies and methodologies, organization of data (data structures), approaches to processing data (algorithms), analysis of potential solutions, and the ethical and social implications of computing. The course emphasizes both object-oriented and imperative problem solving and design using Java language. These techniques represent proven approaches for developing solutions that can scale up from small simple problems to large complex problems. The AP Computer Science A course curriculum is compatible with many Computer Science 1 courses in colleges and universities.



**AP Computer Science Principles** offers a multidisciplinary approach to teaching the underlying principles of computation. The course will introduce students to the creative aspects of programming, abstractions, algorithms, large data sets, the Internet, cybersecurity concerns, and computing impacts. AP Computer Science Principles also gives students the opportunity to use current technologies to create computational artifacts for both self-expression and problem solving. Together, these aspects of the course make up a rigorous and rich curriculum that aims to broaden participation in computer science.

The **AP English Language and Composition** course aligns to an introductory college-level rhetoric and writing curriculum, which requires students to develop evidence-based analytic and argumentative essays that proceed through several stages or drafts. Students evaluate, synthesize, and cite research to support their arguments. Throughout the course, students develop a personal style by making appropriate grammatical choices. Additionally, students read and analyze the rhetorical elements and their effects in non-fiction texts, including graphic images as forms of text, from many disciplines and historical periods.

The **AP English Literature and Composition** course aligns to an introductory college-level literary analysis course. The course engages students in the close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning and pleasure. As they read, students consider a work's structure, style, and themes, as well as its use of figurative language, imagery, symbolism, and tone. Writing assignments include expository, analytical, and argumentative essays that require students to analyze and interpret literary works.






## Advanced Placement Course Descriptions



The **AP Environmental Science** course is the equivalent of a one-semester, introductory college course in environmental science, through which students engage with the scientific principles, concepts, and methodologies required to understand the interrelationships of the natural world. The course requires that students identify and analyze natural and human-made environmental problems, evaluate the relative risks associated with these problems, and examine alternative solutions for resolving or preventing them. Environmental science is interdisciplinary, embracing topics from geology, biology, environmental studies, environmental science, chemistry, and geography.

**AP European History** is designed to be the equivalent of a two-semester introductory college or university

European history course. In AP European History students investigate significant events, individuals, developments, and processes in four historical periods from approximately 1450 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing historical evidence; contextualization; comparison; causation; change and continuity over time; and argument development. The course also provides six themes that students explore in order to make connections among historical developments in different times and places: interaction of Europe and the world; poverty and prosperity; objective knowledge and subjective visions; states and other institutions of power; individual and society; and national and European identity.



The **AP Human Geography** course is equivalent to an introductory college-level course in human geography. The course introduces students to the systematic study of patterns and processes that have shaped human understanding, use, and alteration of Earth's surface. Students employ spatial concepts and landscape analysis to examine socioeconomic organization and its environmental consequences. They also learn about the methods and tools search and applications. The curriculum reflects the goals of the National Geography Standards (2012).

**AP Macroeconomics** is an introductory college-level course that focuses on the principles that apply to an economic system as a whole. The course places particular emphasis on the study of national income and price-level determination; it also develops students' familiarity with economic performance measures, the financial sector, stabilization policies, economic growth, and international economics. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts.





# Advanced Placement Course Descriptions



**AP Microeconomics** is an introductory college-level course that focuses on the principles of economics that apply to the functions of individual economic decision-makers. The course also develops students' familiarity with the operation of product and factor markets, distributions of income, market failure, and the role of government in promoting greater efficiency and equity in the economy. Students learn to use graphs, charts, and data to analyze, describe, and explain economic concepts.

**AP Music Theory** corresponds to two semesters of a typical introductory college music theory course covering topics such as musicianship, theory, musical materials, and procedures. Students develop the ability to recognize, understand, and describe basic materials and processes of music that are heard or presented in a score. Development of aural skills is a primary objective. Students understand basic concepts and terminology by listening to and performing a wide variety of music.



**AP Physics 1** is an algebra-based, introductory college-level physics course. Students cultivate their understanding of Physics through inquiry-based investigations as they explore topics such as Newtonian mechanics (including rotational motion); work, energy, and power; mechanical waves and sound; and introductory, simple circuits.

**AP Physics C: Mechanics** is a calculus-based, college-level physics course, suitable for students planning to specialize or major in one of the physical sciences or engineering. In the course, students cultivate their understanding of physics through classroom study and activities as well as hands-on laboratory work as they explore concepts like change, force interactions, fields, and conservation.

**AP Psychology** This course introduces students to the systematic and scientific study of human behavior and mental processes. While considering the psychologists and studies that have shaped the field, students explore and apply psychological theories, key concepts, and phenomena associated with such topics as the biological bases of behavior, sensation and perception, learning and cognition, motivation, developmental psychology, testing and individual differences, treatment of abnormal behavior, and social psychology. Throughout the course, students employ psychological research methods, including ethical considerations, as they use the scientific method, analyze bias, evaluate claims and evidence, and effectively communicate ideas.



# Advanced Placement Course Descriptions



**AP Research** allows students to deeply explore an academic topic, problem, or issue of individual interest. Through this exploration, students design, plan, and conduct a year-long research-based investigation to address a research question. In the AP Research course, students further their skills acquired in the AP Seminar course by understanding research methodology; employing ethical research practices; and accessing, analyzing, and synthesizing information as they address a research question. Students explore their skill development, document their processes, and curate the artifacts of the development of their scholarly work in a portfolio. The course culminates in an academic paper of 4000-5000 words (accompanied by a performance or exhibition of product where applicable) and a presentation with an oral defense.

**AP Seminar** is a year-long course that has students investigate real-world issues from multiple perspectives. Students learn to synthesize information from different sources, develop their own lines of reasoning in research-based written essays, and design and deliver oral and visual presentations, both individually and as part of a team.




The **AP Spanish Language and Culture** course emphasizes communication (understanding and being understood by others) by applying the interpersonal, interpretive, and presentational modes of communication in real-life situations. This includes vocabulary usage, language control, communication strategies, and cultural awareness. The AP Spanish Language and Culture course strives not to overemphasize grammatical accuracy at the expense of communication. To best facilitate the study of language and culture, the course is taught almost exclusively in Spanish.

The **AP Statistics** course is equivalent to a one-semester, introductory, non-calculus-based college course in statistics. The course introduces students to the major concepts and tools for collecting, analyzing, and drawing conclusions from data. There are four themes in the AP Statistics course: exploring data, sampling and experimentation, anticipating patterns, and statistical inference. Students use technology, investigations, problem solving, and writing as they build conceptual understanding.



## Advanced Placement Course Descriptions

A student with dark hair, wearing a white shirt, is seen from the back, working on a portrait painting on a canvas. The painting depicts a person with dark hair and glasses. The student is in an art studio setting with other canvases and easels visible in the background.

The **AP Studio Art: 2-D Design** program consists of three portfolio exams—2-D Design, 3-D Design, and Drawing—corresponding to the college foundation courses. Portfolios allow flexibility of coursework while guiding students to produce college-level quality, artistic investigation, and breadth of work. The 2-D Design portfolio addresses two-dimensional design issues and involves decision making about how to use the elements and principles of art in an integrative way. Students' portfolios demonstrate skills and ideas developed, refined, and applied throughout the course to produce visual compositions. Students may choose to submit any or all of the portfolios. Portfolios are evaluated based on standardized scoring descriptors aligned with skills and understanding developed in college foundation courses.

The **AP Studio Art: 3-D Design** program consists of three portfolio exams—2-D Design, 3-D Design, and Drawing—corresponding to the college foundation courses. Portfolios allow flexibility of coursework while guiding students to produce college-level quality, artistic investigation, and breadth of work. The 3-D Design portfolio involves decision making about how to use the elements and principles of art as they relate to the integration of depth, space, volume, and surface, either actual or virtual. Students' portfolios demonstrate skills and ideas developed, refined, and applied throughout the course to produce visual compositions. Students may choose to submit any or all of the portfolios. Portfolios are evaluated based on standardized scoring descriptors aligned with skills and understanding developed in college foundation courses.



The **AP Studio Art: Drawing** program consists of three portfolio exams—2-D Design, 3-D Design, and Drawing—corresponding to the college foundation courses. Portfolios allow flexibility of coursework while guiding students to produce college-level quality, artistic investigation, and breadth of work. The Drawing portfolio addresses issues such as line quality, light and shade, rendering of form, composition, surface manipulation, the illusion of depth, and mark-making. Students' portfolios demonstrate skills and ideas developed, refined, and applied throughout the course to produce visual arts may choose to submit any or all of the portfolios. Portfolios are evaluated based on standardized scoring descriptors and understanding developed in college foundation courses.

The **AP U.S. Government and Politics** course introduces students to key political ideas, institutions, policies, interactions, roles, and behaviors that characterize the political culture of the United States. The course examines politically significant concepts and themes, through which students learn to apply disciplinary reasoning, assess causes and consequences of political events, and interpret data to develop evidence-based arguments.



# Advanced Placement Course Descriptions



**AP U.S. History** is designed to be the equivalent of a two-semester introductory college or university U.S. history course. In AP U.S. History students investigate significant events, individuals, developments, and processes in nine historical periods from approximately 1491 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; making historical comparisons; utilizing reasoning about contextualization, causation, and continuity and change over time; and developing historical arguments. The course also provides seven themes that students explore in order to make connections among historical developments in different times and places: American and national identity; migration and settlement; politics and power; work, exchange, and technology; America in the world; geography and the environment; and culture and society.

**AP World History: Modern** is designed to be the equivalent of an introductory college or university survey of modern world history. In AP World History: Modern, students investigate significant events, individuals, developments, and processes from 1200 to the present. Students develop and use the same skills, practices, and methods employed by historians: analyzing primary and secondary sources; developing historical arguments; making historical connections; and utilizing reasoning about comparison, causation, and continuity and change over time. The course provides six themes that students explore in order to make connections among historical developments in different times and places: humans and the environment, cultural developments and interactions, governance, economic systems, social interactions and organization, and technology and innovation.



# Pre-Advanced Placement Course Descriptions

**Pre-AP English 1** focuses on reading, writing, and language skills. The course prepares students to observe the small details in a text to arrive at a deeper understanding of the whole. It also trains the writer to focus on crafting complex sentences, and building towards more sophisticated, longer-form analyses.

**Pre-AP English 2** requires students to apply practices gained in Pre-AP English 1 to nonfiction and literary texts. Students develop an awareness of how the poet, playwright, novelist, and writer of nonfiction masterfully use language to serve unique purposes. As writers, students will learn to compose greater analytical essays without losing sight of the importance of well-crafted sentences and cohesion.

**Pre-AP Algebra** deepens students' understanding of linear relationships by emphasizing patterns of change, multiple representations of functions and equations, modeling real-world scenarios with functions, and methods for finding and representing solutions of equations and inequalities.

**Pre-AP World History** focuses on concepts and skills that have value as high school students and as citizens. The course focuses on three enduring ideas including history as an interrelated story of the world, the idea that history and geography are inherently dynamic and that historians and geographers are investigators.

**Pre-AP Dance** Part of the Pre-AP Arts curriculum, each specific course shares one set of themes, underlying foundations and areas of focus and includes three discipline-specific instructional modules. These shared modules address the specific knowledge and skills needed for the specific arts course and share themes of artistic investigation related to structures, sources, and iteration while the frameworks, model lessons, and performance assessments are specific to each course.

**Pre-AP Music** Part of the Pre-AP Arts curriculum, each specific course shares one set of themes, underlying foundations and areas of focus and includes three discipline-specific instructional modules. These shared modules address the specific knowledge and skills needed for the specific arts course and share themes of artistic investigation related to structures, sources, and iteration while the frameworks, model lessons, and performance assessments are specific to each course.

**Pre-AP Theatre** Part of the Pre-AP Arts curriculum, each specific course shares one set of themes, underlying foundations and areas of focus and includes three discipline-specific instructional modules. These shared modules address the specific knowledge and skills needed for the specific arts course and share themes of artistic investigation related to structures, sources, and iteration while the frameworks, model lessons, and performance assessments are specific to each course.

**Pre-AP Visual Arts** Part of the Pre-AP Arts curriculum, each specific course shares one set of themes, underlying foundations and areas of focus and includes three discipline-specific instructional modules. These shared modules address the specific knowledge and skills needed for the specific arts course and share themes of artistic investigation related to structures, sources, and iteration while the frameworks, model lessons, and performance assessments are specific to each course.



# A.I.C.E. Course Descriptions



A.I.C.E.

AICE, which stands for Advanced International Certificate of Education is a set of challenging college-level classes for high school students. It was developed by Cambridge Assessment, a non-profit, non-teaching department of the University of Cambridge in England. Like the AP and IB programs, AICE was designed to give students the option to pursue a more rigorous and ambitious curriculum by teaching key skills needed to succeed in college-level work. At the same time, AICE classes and the diploma structure are flexible enough to let students tailor the coursework to their interests and strengths.

**Cambridge IGCSE— Biology** With an emphasis on human biology, the Cambridge IGCSE Biology syllabus helps learners to understand the technological world in which they live, and take an informed interest in science and scientific developments. Learners gain an understanding of the basic principles of biology through a mix of theoretical and practical studies. They also develop an understanding of the scientific skills essential for further study at Cambridge International A Level, which are useful in everyday life. As they progress, learners understand how science is studied and practiced, and become aware that the results of scientific research can have both good and bad effects on individuals, communities and the environment.



**Cambridge IGCSE— First Language English** Cambridge IGCSE First Language English is designed for learners whose first language is English. Cambridge IGCSE First Language English learners develop the ability to communicate clearly, accurately and effectively in both speech and writing. They learn how to employ a wide-ranging vocabulary, use correct grammar, spelling and punctuation, and develop a personal style and an awareness of the audience being addressed. Learners are also encouraged to read widely, both for their own enjoyment and to further their awareness of the ways in which English can be used. Cambridge IGCSE First Language English also develops more general analysis and communication skills such as synthesis, inference, and the ability to order facts and present opinions effectively.

**Cambridge IGCSE— English Literature** The syllabus enables learners to read, interpret and evaluate texts through the study of literature in English. Learners develop an understanding of literal meaning, relevant contexts and of the deeper themes or attitudes that may be expressed. Through their studies, they learn to recognize and appreciate the ways in which writers use English to achieve a range of effects, and will be able to present an informed, personal response to the material they have studied. The syllabus also encourages the exploration of wider and universal issues, promoting learners' better understanding of themselves and of the world around them.





## A.I.C.E. Course Descriptions

**Cambridge IGCSE— Global Perspective** Meeting government ministers, organizing a local river clean-up project and writing to the United Nations about climate change, are just some of the activities learners are pursuing through the Cambridge IGCSE Global Perspectives course. Cambridge IGCSE Global Perspectives is a groundbreaking and stimulating course that stretches across traditional subject boundaries and develops transferable skills. It is both cross-curricular and skills-based and taps into the way learners of today enjoy learning, including team work, presentations, projects, and working with other learners around the world. The emphasis is on developing the ability to think critically about a range of global issues where there is always more than one point of view.



**Cambridge IGCSE - History** The Cambridge IGCSE History syllabus looks at some of the major international issues of the nineteenth and twentieth centuries, as well as covering the history of particular regions in more depth. The emphasis is on both historical knowledge and on the skills required for historical research. Learners develop an understanding of the nature of cause and effect, continuity and change, similarity and difference and find out how to use and understand historical evidence as part of their studies. Cambridge IGCSE History will stimulate any learner already interested in the past, providing a basis for further study, and also encouraging a lifelong interest in the subject.



**Cambridge IGCSE— Mathematics** An essential subject for all learners, Cambridge IGCSE Mathematics encourages the development of mathematical knowledge as a key life skill, and as a strong basis for more advanced study. The syllabus aims to build learners' confidence by helping them develop competence and fluency with mathematical concepts, methods and skills, as well as a feel for numbers, patterns and relationships. The syllabus also places a strong emphasis on solving problems and presenting and interpreting results. Learners also gain an understanding of how to communicate and reason using mathematical concepts.

**Cambridge International AS Level Biology** Cambridge International AS Level Biology builds on the skills acquired at Cambridge IGCSE (or equivalent) level. The syllabus includes the main theoretical concepts which are fundamental to the subject, some current applications of biology, and a strong emphasis on advanced practical skills. Practical skills are assessed in a timetabled practical examination. The emphasis throughout is on the understanding of concepts and the application of biology ideas in novel contexts as well as on the acquisition of knowledge. The course encourages creative thinking and problem-solving skills which are transferable to any future career path. Cambridge International AS Level Biology is ideal for learners who want to study biology or a wide variety of related subjects at university or to follow a career in science.



## A.I.C.E. Course Descriptions

**Cambridge International AS Level English General Paper** The Cambridge International AS Level English General Paper encourages learners to engage with a variety of topics, including knowledge and understanding gained from study of other subjects. They learn to become confident in analyzing knowledge and opinion from a variety of sources, to build arguments and to communicate through written English.




**Cambridge International AS Level English Language** Cambridge International AS Level English Language provides learners with the opportunity to study English language and its use in communication. Learners will be encouraged to respond critically to a wide variety of texts in a range of forms, styles and contexts, and to promote skills of communication, reading, research and analysis. Through their study, learners will develop an ability to read and analyze material, gaining further knowledge and understanding of English language features and issues. Learners will also develop the skills of writing clearly, accurately, creatively and effectively for different purposes and audiences

**Cambridge International AS Level English – Literature** Learners following the Cambridge International AS Level English syllabus will study a range of texts in the three main forms: prose, poetry and drama. Set texts are offered from a wide range of different periods and cultures. Learners will develop skills of reading and analysis of texts, and are encouraged to undertake wider reading to aid understanding of the texts studied. They will learn skills of effective and appropriate communication including the ability to discuss the critical context of texts.

**Cambridge International AS Level Environmental Management (AS only)** This AS Level syllabus develops scientific knowledge and understanding of global environmental issues and theories, and of the policies and strategies for managing the environment. The course covers the sustainable use and management of resources, and strategies that aim to protect environments. Learners will interpret and analyze data and do investigative work. Case studies allow teachers to choose their own examples to investigate, which may be local, regional or global.

**Cambridge International AS Level European History** Cambridge International AS Level European History is a flexible and wide-ranging syllabus covering modern history in the nineteenth and twentieth centuries. The syllabus builds upon skills gained at Cambridge IGCSE and develops lifelong skills including understanding issues and themes within a historical period. The emphasis is again on both historical knowledge and on the skills required for historical research. Learners develop an understanding of cause and effect, continuity and change, similarity and difference, and use historical evidence as part of their studies. At AS level learners can select from topics on European history.



# A.I.C.E. Course Descriptions

**Cambridge International AS Level Global Perspectives and Research** Cambridge International AS Level Global Perspectives and Research prepares learners for positive engagement with our rapidly changing world. Learners broaden their outlook through the critical analysis of - and reflection on - issues of global significance. The Cambridge International AS Level Global Perspectives and Research syllabus is based on skills rather than on specific content. Learners develop research, thinking, reasoning and communication skills by following an approach to analyzing and evaluating arguments and perspectives called the Critical Path. Collaborative skills are enhanced through participation in a team project. The skills gained through study of Cambridge International AS Level Global Perspectives and Research enable students to meet the demands of twenty-first century learning and to make a successful transition to study in higher education.

**Cambridge International AS Level Spanish - Language** The Cambridge International AS Level Spanish syllabus enables learners to achieve greater fluency, accuracy and confidence in the language as it is spoken and written, and improve their communication skills. They will learn how to improve their use of Spanish in a variety of situations, understanding how to read texts and other source materials, extract information, initiate conversations and respond to questions both orally and in writing.



**Cambridge International AS Level Thinking Skills** Thinking Skills develops a set of transferable skills, including critical thinking, reasoning and problem solving, that students can apply across a wide range of subjects and complex real world issues. The syllabus enables students to develop their ability to analyze unfamiliar problems, devise problem solving strategies, and evaluate the diverse ways a problem may be solved. During a Thinking Skills course, students learn to put their personal views aside in favor of examining and evaluating the evidence. Students learn how to make informed and reasoned decisions and construct evidence-based arguments. These independent thinking skills build confidence and equip students with a toolkit for tackling complex and unfamiliar subjects.

**Cambridge International AS Level US History** Cambridge International AS Level US History is a flexible and wide-ranging syllabus covering modern history in the nineteenth and twentieth centuries. The syllabus builds upon skills gained at Cambridge IGCSE level and develops lifelong skills including understanding issues and themes within a historical period. The emphasis is again on both historical knowledge and on the skills required for historical research. Learners develop an understanding of cause and effect, continuity and change, similarity and difference, and use historical evidence as part of their studies. At AS level, learners can select from topics on American history.



# What is Career & Technical Education?

- **Career and Technical Education (CTE)** teaches students job skills and the relevance of academics in the real world.
- Lake County Schools offers **30 different programs** that engage students in high technology, hands-on courses designed to identify career interests and provide entry level job skills. In addition, many CTE courses are **honors-weighted**.
- Students are encouraged to complete at least **three sequential courses** in their chosen field of interest so that they can learn marketable skills that will last a lifetime. In doing so, they have the opportunity to:
  - Earn adult, nationally recognized industry certifications at no cost, which may qualify for a Bright Futures Scholarship.
  - Qualify for articulated college credits at no cost.



## 2022-2023 High School Career-Technical Education Programs

Program	East Ridge	Eustis	Lake Minneola	Leesburg	Mount Dora	South Lake	Tavares	Umatilla
Administrative Office Specialist	•	•						
Advanced Manufacturing Technology			•					
Aerospace Technologies		•						
Agriculture Biotechnology			•					
Agritechnology	•			•	•	•	•	•
Air-Conditioning, Refrigeration & Heating Technology (HVAC)								•
Allied Health Assisting	•		•	•		•	•	
Applied Cybersecurity	•							
Architectural Drafting					•			
Automotive Maintenance & Light Repair						•		
Building Trades & Construction Technology		•		•		•		
Criminal Justice					•			
Culinary Arts	•	•	•	•	•	•	•	•
Digital Design		•	•	•	•	•		
Diversified Career Technology (DCT)		•					•	
Early Childhood Education	•		•					
Electronic Business Enterprise (E-Commerce)						•		
Energy Technician				•				
Engineering Pathways	•	•		•				
Entrepreneurship		•						
Finance Academy			•					

## 2022-2023 High School Career-Technical Education Programs

Program	East Ridge	Eustis	Lake Minneola	Leesburg	Mount Dora	South Lake	Tavares	Umatilla
Game/Simulation/Animation Programming							•	
Horticulture Science and Services				•		•		•
Marketing Management & Entrepreneurial Principles	•				•			
Nursing Assistant (Acute & Long Term Care)	•		•	•		•	•	
Principles of Teaching							•	
Promotional Enterprise							•	
Television Production Technology	•	•	•					
Unmanned Aircraft Systems (UAS) Operations	•							
Web Development								•



## Career-Technical Education GPA Weighted Courses

High School CTE Course	East Ridge	Eustis	Lake Minneola	Leesburg	Mount Dora	South Lake	Tavares	Umatilla
Advanced Manufacturing Tech 2, 3, & 4			•					
Advanced Manufacturing Tech Capstone			•					
Aerospace Technologies 1, 2, 3		•						
Agriculture Biotechnology 2 & 3			•					
Agriscience Foundations	•		•	•	•	•	•	•
Animal Biotechnology			•					
Applied Cybersecurity Applications	•							
Architectural Drafting 5 & 6					•			
Auto Maintenance & Light Repair 1, 2, 3, 4, 5, 6						•		
Building Construction Technologies		•		•		•		
Business Management & Law		•						
Business Ownership	•	•			•			
Certified Legal Assistant					•			
Civil Engineering & Architecture	•	•		•				
Computer & Network Security Fundamentals	•							
Criminal Justice Operations 3					•			
Criminal Justice Operations 4					•			
Culinary Arts , Tracks 1, 2, 3	•	•	•	•	•	•	•	•
Cybersecurity Essentials	•							
Cybersecurity Planning & Analysis	•							

## Career-Technical Education GPA Weighted Courses

High School CTE Course	East Ridge	Eustis	Lake Minneola	Leesburg	Mount Dora	South Lake	Tavares	Umatilla
Database Security	•							
Digital Design 1, 2, 3, 4 & 5		•	•	•	•	•		
Digital Electronics	•	•		•				
Drafting 1, 2, 3 & 4					•			
Early Childhood Education 3 & 4	•		•					
Economics & Financial Services								
Energy Industry Fundamentals				•				
Engineering Design & Development	•	•		•				
Foundations of Curriculum & Instruction							•	
Foundations of Web Design								•
Health Science Anatomy & Physiology	•		•	•		•	•	
Game & Simulation Programming							•	
Health Science Foundations	•		•	•		•	•	
Horticulture Science 3				•		•		•
Introduction to Alternative Energy				•				
Introduction to Engineering Design	•	•		•				
Introductory Horticulture 2				•		•		•
Legal Aspects of Business							•	
Media Integration Essentials								•
Multi User Game & Simulation Programming							•	

## Career-Technical Education GPA Weighted Courses

High School CTE Course	East Ridge	Eustis	Lake Minneola	Leesburg	Mount Dora	South Lake	Tavares	Umatilla
Nursing Assistant 3	•		•	•		•	•	
Operational Cybersecurity	•							
Personal Finance			•					
Plant Biotechnology			•					
Principles of Engineering	•	•		•				
Private Pilot Ground School	•							
Public Service Officer					•			
Television Production Technology 3, 4, 5, 6	•	•	•					
Unmanned Aircraft Systems 1, 2, & 3	•							
User Interface Design								•
Web Scripting Fundamentals								•

## Career and Technical Education Practical Arts Credit Courses

High School CTE Courses	East Ridge	Eustis	Lake Minneola	Leesburg	Mount Dora	South Lake	Tavares	Umatilla
Architectural Drafting 5 & 6					•			
Avionics Fundamentals Capstone		•						
Business Management & Law		•						
Business Ownership	•	•			•			
Culinary Arts 2 & 3	•	•	•	•	•	•	•	•
Custom Promotional Layout Design							•	
Custom Promotional Sales & Distribution Management							•	
Digital Design 1, 2, 3, 4 & 5		•	•	•	•	•		
Digital Information Technology	•	•	•	•	•	•	•	•
Drafting 1, 2, 3, & 4					•			
Early Childhood Education 3	•		•					
Engineering Pathways (5 courses)	•	•		•				
Foundations of Web Design								•
Game & Simulations Design							•	
Game & Simulations Foundations							•	
Horticulture Science 3				•		•		•
Interactivity Essentials								•
Introduction to E-Commerce						•		
Introductory Horticulture 2				•		•		•

## Career and Technical Education Practical Arts Credit Courses

High School CTE Courses	East Ridge	Eustis	Lake Minneola	Leesburg	Mount Dora	South Lake	Tavares	Umatilla
Marketing Applications	•				•			
Marketing Essentials	•				•			
Marketing Management	•				•			
Media Integration Essentials								•
Multi-User Game & Simulation Programming							•	
Principles of Entrepreneurship		•						
Television Production 1, 2, 5, 6	•	•	•					
User Interface Design								•
Web Scripting Fundamentals								•

**PRACTICAL ARTS COURSES THAT MEET THE PRACTICAL ARTS HIGH SCHOOL GRADUATION REQUIREMENT:**

Section 1003.428(2) (a)5., F.S., requires that students earn one credit in fine or performing arts, speech and debate, or a practical arts course that incorporates artistic content and techniques of creativity, interpretation, and imagination. These CTE courses meet the State Statute.

<b>Career and Professional (CAPE) Academy</b>	<b>Industry Certification</b>	<b>Certifying Agency</b>
Administrative Office Specialist	QuickBooks Certified User	Intuit
Advanced Manufacturing Technology (Robotics)	Certified SolidWorks Associate – Academic (CSWA - Academic)	Dassault Systems SolidWorks Corporation
Aerospace	Small UAS (sUAS) Safety Certification: Level 1 Visual Line of Sight System Operator (VSO) Ground FFA Ground School	Unmanned Safety Institute Unmanned Safety Institute Federal Aviation Administration
Agriculture Biotechnology	Agritechnology Specialist Certification Agricultural Biotechnology Specialist Certification Agricultural Communications Specialist Certification Agricultural Mechanics Specialist Certification Animal Science Specialist Certification Agriculture Associate Certification Agriculture Systems Associate Certification	Agricultural Education Services and Technology Inc. Agricultural Education Services and Technology Inc. Agricultural Education Services and Technology Inc. Agricultural Education Services and Technology Inc. Agricultural Education Services and Technology Inc. Agricultural Education Services and Technology Inc. Agricultural Education Services and Technology Inc.
Agritechnology	Agritechnology Specialist Certification Agricultural Biotechnology Specialist Certification Agricultural Communications Specialist Certification Agricultural Mechanics Specialist Certification Animal Science Specialist Certification Agricultural Unmanned Aircraft Systems Specialist Certification Agriculture Associate Certification Agriculture Systems Associate Certification Certified Horticulture Professional	Agricultural Education Services and Technology Inc. Agricultural Education Services and Technology Inc. Agricultural Education Services and Technology Inc. Agricultural Education Services and Technology Inc. Agricultural Education Services and Technology Inc. Agricultural Education Services and Technology Inc. Agricultural Education Services and Technology Inc. Agricultural Education Services and Technology Inc. Agricultural Education Services and Technology Inc. Florida Nursery Growers and Landscape Association
Air-Conditioning, Refrigeration & Heating Technology (HVAC)	HBI Pre-Apprenticeship Certificate Training (PACT), Core HBI Pre-Apprenticeship Certificate Training (PACT), Core Green HBI Pre-Apprenticeship Certificate Training (PACT), Electrical HVAC Excellence EmploymentReady – Air Conditioning	Home Builder's Institute Home Builder's Institute Home Builder's Institute HVAC Excellence
Allied Health Assisting	Certified Medical Administrative Assistant (CMAA) Certified EKG Technician (CET)	National Healthcareer Association National Healthcareer Association
Applied Cybersecurity	Certified Internet Web (CIW) Web Security Associate CompTIA A+ CompTIA Security+ CompTIA ITF+	Certification Partners Computing Technology Industry Association (CompTIA) Computing Technology Industry Association (CompTIA) Computing Technology Industry Association (CompTIA)
Architectural Drafting	Autodesk Certified User – AutoCAD Autodesk Certified User – Inventor Autodesk Certified User – Revit Architecture Certified SolidWorks Associate-Academic (CSWA-Academic)	Autodesk Autodesk Autodesk Dassault Systems SolidWorks Corporation
Automotive Maintenance and Light Repair	ASE Auto Maintenance & Light Repair (G1) ASE Entry-level – Auto: Brakes (BR) ASE Entry-level – Auto: Electrical/Electronic Systems (EE) ASE Entry-level – Auto: Suspension and Steering (SS)	National Institute for Automotive Service Excellence National Institute for Automotive Service Excellence National Institute for Automotive Service Excellence National Institute for Automotive Service Excellence

<b>Career and Professional (CAPE) Academy</b>	<b>Industry Certification</b>	<b>Certifying Agency</b>
Building Construction Technologies	HBI Pre-Apprenticeship Certificate Training (PACT), Core HBI Pre-Apprenticeship Certificate Training (PACT), Core Green HBI Pre-Apprenticeship Certificate Training (PACT), Carpentry HBI Pre-Apprenticeship Certificate Training (PACT), Electrical	Home Builders Institute Home Builders Institute Home Builders Institute Home Builders Institute
Culinary Arts	Certified Food Safety Manager (NRFSP) Certified Food Protection Manager (ServSafe®)	National Registry of Food Safety Professionals National Restaurant Association Educational Foundation
Digital Design	Adobe Certified Professional in Video Design	Adobe Systems
Diversified Career Technology	Certified Food Protection Manager (ServSafe®)	National Restaurant Association Educational Foundation
Early Childhood Education	Certified Food Protection Manager (ServSafe®) Certified Food Safety Manager (NRFSP) Child Development Associate (CDA)	National Restaurant Association Educational Foundation National Registry of Food Safety Professionals Child Development Council
Electronic Business Enterprise (E-Commerce)	Entrepreneurship & Small Business (ESBv2)	Intuit
Energy Technician	HBI Pre-Apprenticeship Certificate Training (PACT), Core HBI Pre-Apprenticeship Certificate Training (PACT), Core Green HBI Pre-Apprenticeship Certificate Training (PACT), Electrical	Home Builders Institute Home Builders Institute Home Builders Institute
Engineering Pathways	Autodesk Certified User – Inventor Certified SolidWorks Associate – Academic (CSWA - Academic)	Autodesk Dassault Systems SolidWorks Corporation
Entrepreneurship	QuickBooks Certified User Entrepreneurship & Small Business (ESBV2)	Intuit Intuit
Finance Academy	QuickBooks Certified User	Intuit
Game/Simulation/Animation Programming	Autodesk Certified User - MAYA	Autodesk
Horticulture Science and Services	AgriTechnology Specialist Certification Agricultural Biotechnology Specialist Certification Agricultural Communications Specialist Certification Agricultural Mechanics Specialist Certification Animal Science Specialist Certification Agriculture Associate Certification Agriculture Systems Associate Certification Certified Horticulture Professional	Agricultural Education Services and Technology Inc. Agricultural Education Services and Technology Inc. Agricultural Education Services and Technology Inc. Agricultural Education Services and Technology Inc. Agricultural Education Services and Technology Inc. Agricultural Education Services and Technology Inc. Agricultural Education Services and Technology Inc. Florida Nursery Growers and Landscape Association
Marketing Management and Entrepreneurial Principals	Entrepreneurship & Small Business (ESBv2) Certified Internet Web (CIW) Social Media Strategist	Intuit Certification Partners
Nursing Assistant	Certified EKG Technician (CET) Certified Medical Administrative Assistant (CMAA) Certified Nursing Assistant (CNA)	National Healthcareer Association American Association of Medical Assistants Florida Dept. of Health
Principles of Teaching	Certified Internet Web (CIW) Social Media Strategist	Certification Partners
Promotional Enterprise	Adobe Certified Professional in Visual Design Entrepreneurship & Small Business (ESBV2)	Adobe Systems Intuit
Television Production	Adobe Certified Professional in Video Design	Adobe Systems
Unmanned Aircraft Systems (UAS) Operations	Small UAS (sUAS) Safety Certification: Level 1 Visual Line of Sight System Operator (VSO) Ground	Unmanned Safety Institute Unmanned Safety Institute
Web Development	Certified Internet Web (CIW) User Interface Design	Certification Partners

**NOTE: Available Certifications based on 2021-2022 CAPE Funding List. Subject to change.**



# College Credit Through Career Pathways College Credit Articulation/Assessment

## (Based on Articulation as of January 2022)

Program	Lake-Sumter State College	Lake Technical College	Pasco County (Marchman)	College of Central Florida	Orange County (Westside Technical Center)	Daytona State College	Seminole State College	Valencia College
Administrative Office Specialist	Up to 6 Credits	Up to 300 Hours		Up to 15 Credits		Up to 6 Credit Hours		Up to 9 Credits
Advanced Manufacturing	Up to 12 Credits	Up to 300 Hours		Up to 18 Credits		Up to 3 Credit Hours	Up to 5 Credits	
Agricultural Biotechnology				Up to 9 Credits				
Agritechnology				Up to 9 Credits				
Allied Health Assisting	Up to 12 Credits*	Up to 165 Hours						
Applied Cybersecurity	Up to 18 Credits	Up to 450 Hours				Up to 6 Credit Hours		Up to 12 Credits
Architectural Drafting						3 Credit Hours	Up to 6 Credits	Up to 9 Credits
Automotive Maintenance and Light Repair		300 Hours						
Building Construction Technologies					Up to 450 Hours		Up to 9 Credits	Up to 6 Credits
Culinary Arts		Up to 300 Hours						Up to 6 Credits
Digital Design	3 Credits	Up to 150 Hours		3 Credits			Up to 6 Credit Hours	
Diversified Education	Up to 6 Credits							
Early Childhood Education				Up to 12 Credits				
Electronic Business Enterprise (E Commerce)	Up to 6 Credits	Up to 150 Hours		Up to 15 Credits				
Energy Technician	Up to 6 Credits							
Engineering Pathways	Up to 12 Credits					Up to 7 Credit Hours	Up to 5 Credits	Up to 9 Credits
Entrepreneurship	Up to 6 Credits	Up to 150 Hours						
Game/Simulation/ Animation Programming	Up to 9 Credits	Up to 150 Hours						
Finance	3 Credits			3 Credits				
Horticulture Science and Services				Up to 9 Credits				Up to 6 Credits

# College Credit Through Career Pathways College Credit Articulation/Assessment

## (Based on Articulation as of January 2022)

Program	Lake-Sumter State College	Lake Technical College	Pasco County (Marchman)	College of Central Florida	Orange County (Westside Technical Center)	Daytona State College	Seminole State College	Valencia College
Legal Administrative Specialist	Up to 3 Credits	Up to 630 Hours						Up to 9 Credits
Marketing, Management and Entrepreneurial	Up to 6 Credits	Up to 150 Hours						
Nursing Assistant	*One Preferred Placement Point or Up to 12 Credits	Up to 165 Hours						
Promotional Enterprise				Up to 3 Credits				
Teaching Pathway				Up to 6 Credits				
Television Production			450 Hours					
Web Development Services	Up to 6 Credits	Up to 150 Hours		3 Credits		Up to 6 Credit Hours		

**For a current list of local agreements, visit:** [https://www.lake.k12.fl.us/College & Career Readiness/Local Articulations](https://www.lake.k12.fl.us/College%20&%20Career%20Readiness/Local%20Articulations)

# Career-Technical Student Organizations



## **Distributive Education Clubs of America (DECA)**

DECA is a youth organization for American and Canadian high school and college students interested in business, marketing, management and entrepreneurship. DECA works with high school and college marketing and business education programs.

## **Florida Public Service Association**

FPSCA is a public service driven career technical student organization (CTSO) that provides students with academic, general employability, problem-solving, technical and occupation-specific skills to meet the demands for a career in public service.

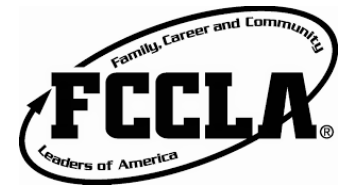


## **Future Business Leaders of America - Phi Beta Lambda (FBLA)**

FBLA is the high school division of Future Business Leaders of America-Phi Beta Lambda, Inc. FBLA helps high school students prepare for careers in business through academic competitions (FBLA Competitive Events), leadership development, and educational programs. Students will prepare for college and careers through a variety of leadership, community service, and academic activities.

## **Family, Career and Community Leaders of America (FCCLA)**

Since 1945, FCCLA members have been making a difference in their families, careers and communities by addressing important personal, work and societal issues through family and consumer sciences education. Involvement in FCCLA offers members the opportunity to expand their leadership potential and develop skills for life-planning, goal setting, problem solving, decision-making, and interpersonal communication-necessary in the home and workplace.



## **Future Farmers of America (FFA)**

FFA helps students develop their leadership skills by participating in public speaking, skill contests, chapter meetings, award and recognition programs, committees, and community projects. Moreover, FFA also motivates young people to make positive contributions to their schools, homes, communities, and ultimately, their country.

# Career-Technical Student Organizations

## **Florida Future Educators of America (FFEA)**

FFEA provides a forum for students to become aware of career opportunities in education and nurtures their interest in teaching as a career.



## **Health Occupations Students of America (HOSA)**

HOSA aims to develop skills through motivation, recognition, and awareness to increase the delivery of compassionate, quality health care to the community. The organization provides opportunities to increase knowledge, develop leadership skills, enhance character, gain friendships, build self-confidence, increase involvement with the local and nation community, and so much more.

## **SkillsUSA**

SkillsUSA is a national organization serving high school and college students who are preparing for careers in trade, technical, and skilled service occupations, including health occupations, and for further education. SkillsUSA is a partnership of students, teachers and industry working together to ensure America has a skilled workforce. Skills USA helps each student excel.



## **Technology Student Association (TSA)**

TSA is a national student organization created to develop skills in science, technology, engineering, and mathematics as well as business education. TSA aims to develop leadership, academic, and business management skills in the workplace among students and leaders within the community.

# Florida Bright Futures Scholarship Program

## Gold Seal Vocational (GSV) and Gold Seal CAPE Scholars (GSC)

Florida high school students who wish to qualify for the Florida Gold Seal Vocational Scholars (GSV) award must meet the following initial eligibility requirements:

- Fulfill the general requirements for Bright Futures Scholarship Program
- Achieve the required weighted minimum 3.0 GPA in the non-elective high school courses
- Take at least 3 full credits in a single Career and Technical Education program
- Achieve the required minimum 3.5 unweighted GPA in the career education courses
- Achieve the required minimum score on the ACT®, SAT®, or Florida Postsecondary Education Readiness Test (P.E.R.T.) exams (see table below) and
- Complete 30 service hours. Students must complete service hours during high school and by high school graduation

Exam Type	Sub-test	Required Score
ACT®	Reading	19
	English	17
	Mathematics	19
SAT®	Reading Test	24
	Writing and Language Test	25
	Math Test	24
P.E.R.T. (Only applies to the GSV Scholarship)	Reading	106
	Writing	103
	Mathematics	114

Required test scores follow those established by [State Board of Education Rule 6A-10.0315](#).

Beginning with 2017 graduates, Florida high school students who wish to qualify for the Florida Gold Seal CAPE Scholars (GSC) award must meet the following initial eligibility requirements:

- Fulfill the general requirements for Bright Futures Scholarship Program
- Earn a minimum of five postsecondary credit hours through CAPE industry certifications which articulate for college credit
- Complete 30 community service hours. Students must complete service hours during high school and by high school graduation

Similar to the Gold Seal Vocational (GSV) award, recipients can use the award toward an Associate of Applied Science (AAS) degree or Associate of Science (AS) degree. Unlike the GSV award, upon completion of an Associate of Applied Science (AAS) degree or Associate of Science (AS) degree that articulates to a Bachelor of Science degree, a GSC Scholar may also receive an award for a maximum of 60 credit hours toward a Bachelor of Science degree program or Bachelor of Applied Science degree program.

Bright Futures will evaluate students for the GSC award based on the cumulative industry certification information submitted for students via FASTER. Qualifying CAP industry certifications are those published on the “Gold Standard Career Pathways” list maintained by the Division of Career and Adult Education (CTE), Florida Department of Education. If you have questions concerning qualifying CAPE industry certifications and/or articulation, you may contact CTE through their website at:

[www.fldoe.org/academics/career-adult-edu](http://www.fldoe.org/academics/career-adult-edu).

For further information about **Florida Bright Futures Scholarship Program**, please visit <https://www.floridastudentfinancialaidsg.org/SAPBFMAIN/SAPBFMAIN>

# Career and Technical Education Program Descriptions

The **Administrative Office Specialist** program content includes Microsoft Office Suite software applications, office technology, office procedures, accounting, customer service strategies, workplace communications, problem-solving, job readiness, career exploration, human relation skills, employability, management and supervision, decision-making skills, professional ethics and legal responsibilities, teamwork, personal money management, digital design and employment portfolios. The **QuickBooks Certified User** certification may be offered for this program.



The **Advanced Manufacturing (Robotics) Technology** program content includes automation technology and its application in manufacturing, engineering, robotics and related occupations. Students learn basic engineering and programming skills as well as the use of instruments, materials, processes and systems in business. SolidWorks 3-D software is taught in this program and students have the opportunity to earn the adult, nationally recognized **Certified SolidWorks Associate** industry certification as well as **Autodesk Certified User —Inventor**.

The **Aerospace Technologies** program provides students with a foundation of knowledge and technically oriented experiences in the study of Aerospace Technologies, its effect upon our lives, and the choosing of an occupation. The content and activities will also include the study of safety and leadership skills. This program focuses on transferable skills and stresses understanding and demonstration of the technological tools, machines, instruments, materials, processes and systems in business and industry. The Unmanned Safety Institute's **Small UAS (sUAS) Safety Certification: Level 1** and **Visual Line of Sight System Operator (VSO) Ground**, as well as the Federal Aviation Administration's **FFA Ground School** are the industry certifications offered for this program.



The **Agriculture Biotechnology** content includes plant and animal science, agribusiness, environmental principles, cell culture techniques, total digestible nutrients (TDN), animal growth and reproduction, plant propagation, plant classification, employability/human relations, leadership, biotechnology, genetics, agriculture's influence on the economy, scientific investigation and regulatory guidelines. Students have the opportunity to earn the Florida Farm Bureau **Agricultural Biotechnology Certification** industry certification.



# Career and Technical Education Program Descriptions



The **Agritechnology** program content includes animal science, animal health/nutrition, animal production and reproduction, plant science, plant production systems, fertilizers, pest control, marketing, agribusiness finance, agriculture's impact on the economy, environmental management, regulatory compliance, use of tools and equipment, agribusiness, leadership, oral and written communication, entrepreneurship, ethics, legal responsibilities and personal money management. The Florida Farm Bureau via Agricultural Education Services and Technology Inc. offers numerous certifications for this program, as well as the Florida Nursery, Growers and Landscape Association which offers the *Certified Horticulture Professional (FCHP)*.

The **Air Conditioning, Refrigeration and Heating Technology** program provides coherent and rigorous content aligned with challenging academic standards for further education and careers in the Architecture & Construction career cluster. This includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Architecture & Construction career cluster. The industry certifications for this program, issued by the Home Builder's Institute are *HBI PACT CORE, HBI CORE Green, and HBI Electrical*. Additionally, *HVAC Excellence EmploymentReady – Air Conditioning* is offered by the National Center for Construction Education and Research.



The **Allied Health Assisting** content includes the structure and functions of the human body, medical terminology, wellness and disease, healthcare, legal and ethical responsibilities, safety and security procedures, emergency response, infection control procedures, geriatric and housekeeping, medical office records and procedures, and effective interpersonal skills. The National Healthcareer Association *Certified Medical Administrative Assistant*, and the *Certified EKG Technician (CET)* are certifications students may pursue in this program.

The **Applied Cybersecurity** program content includes foundational knowledge and skills in computer and network security, security vulnerabilities, attack mechanisms and techniques, intrusion detection and prevention, cryptographic systems, system hardening, risk identification, incidence response, penetration testing, key management, access control, and recovery. Specialized courses focus on database and web security. The Computing Technology Industry Association *CompTIA A+, CompTIA Security+, CompTIA ITF+, and Certified Internet Web – Web Security Associate* certifications are offered in this program.





# Career and Technical Education Program Descriptions



The **Architectural Drafting** program utilizes AutoCAD and other Autodesk software in teaching content and includes instruction on multi-view and sectional drawings, auxiliary and pictorial drawings, dimensioning, surface development, architectural drawings, civil drawings, electrical drawings, drafting functions, entrepreneurship, employability skills and human relations skills. Autodesk Certified User — AutoCAD, Autodesk Certified User — Inventor, Autodesk Certified User — Revit Architecture and Certified SolidWorks Associated are industry certifications offered in this program.

The **Automotive Maintenance & Light Repair** program content includes safety regulations, routine maintenance, transmission and transaxle, brakes, electrical system, fuel systems, chassis, engine performance, cooling systems, lubrication, mechanical systems, tires, vehicle diagnostics, preventative maintenance, human relations, and employability skills. The National Institute for Automotive Service Excellence (ASE) offers various certifications for this program including ASE Auto Maintenance, ASE Entry-Level Auto Brakes, ASE Entry-Level Electrical, and ASE Entry-Level Suspension Steering.



The **Building Construction Technologies** is a comprehensive program that covers construction industry skills including basic hand tools, power tools, blueprints, masonry, carpentry, cabinet installation, roofing, plumbing, HVAC systems, employability, and human relations. This program of study naturally integrates mathematics and science as used in industry. The industry certifications for this program, issued by the Home Builder's Institute are HBI PACT CORE, HBI CORE Green, HBI Carpentry, and HBI Electrical

**Criminal Justice** program content includes the fundamental study of Criminal Justice and career options within law enforcement, the court system, and the correctional system. This pathway will familiarize students with both the theoretical and practical issues, the practical skills related to law enforcement operations, the courts and correctional systems receiving hands-on skills, and career training. Students will have the opportunity to learn from guest speakers and take trips to various local, state, and federal agencies. Ethics, problem solving skills, analysis, teambuilding, and communication skills are incorporated in every lesson. In addition, police work, court procedure, corrections and the history of the criminal justice field are also covered.

# Career and Technical Education Program Descriptions

The **Culinary Arts** program provides instruction in basic food and bakeshop production, nutrition, menu development, front and back of the house management, dining room operations, sanitation and safety, equipment operations and menu development. Industry certifications for this program include the National Restaurant Association Educational Foundation's Certified Food Protection Manager (ServSafe®) and National Registry of Food Safety Professionals Certified Food Safety Manager (NRFSP).



The **Digital Design** program is designed to develop foundational entry-level skills required for careers in the digital publishing industry. The content includes computer skills, digital publishing concepts and operations, digital layout, design and illustrations, specialized skills in multimedia presentations and measurement activities, decision-making activities, and digital imaging. CompTIA ITF+ certification is offered in the foundations course. The graphics software used is Adobe Creative Cloud and Adobe Certified Professional in Visual Design certification is offered in the upper level courses.

**Diversified Career Technology** prepares students for a variety of career opportunities in a diversity of occupations. Diversified Career Technology is a method of enabling students to develop a variety of workplace competencies and transferable skills as well as developing caring, responsible, life-long learners. Most of the occupations for which the Diversified Career Technology programs prepare students to set educational and training goals for high skill/high wage positions. Students can pursue Certified Food Protection Manager (ServSafe®) from the National Restaurant Association.



**Early Childhood Education** students prepare to be primary providers of child care services by focusing on planning, organizing, and conducting meaningful play and learning activities, child monitoring and supervision, record-keeping, and referral procedures. Entrepreneurship and teaching opportunities within the field of early childhood education are emphasized. Practical experiences under the supervision of the instructor prepares



students for continuing education leading to a career in the early childhood field. The industry certifications offered in this program include the Council for Professional Recognition's Child Development Associate (CDA), the National Registry of Food Safety Professionals Certified Food Safety Manager (NRFSP), and the National Restaurant Association Educational Foundation's Certified Food Protection Manager (ServSafe®).

# Career and Technical Education Program Descriptions

The **Electronic Business Enterprise (E-Commerce)** program offers a sequence of courses that provide coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers in the Business Management and Administration career cluster. The program provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Business Management and Administration career cluster. The content includes but is not limited to planning and development, retail and Internet marketing, ethics, laws and regulations, web design, entrepreneurship, and systems and design of e-commerce enterprises. The **Entrepreneurship and Small Business** by Intuit is the industry certification earned in this program.



The **Energy Technician** program allows students to gain hands-on experience working with alternate energy technologies such as fuel cells, photovoltaic systems, wind turbines and more. Students work on wiring connector boxes, service panels, light fixtures, and alarm systems as well as residential, industrial and commercial wiring in labs and shop classes. The industry certifications for this program, issued by the Home Builder's Institute, are **HBI PACT CORE**, **HBI PACT CORE Green**, and **HBI PACT Electrical**.

Students in the **Engineering Pathways** program learn basic engineering concepts and practices, engineering design, research and development, invention and innovation, technological products/processes/systems, and professional practices through practical applications. Students also learn to apply technology and skills to solve engineering problems and create innovative designs as well as research, develop, test, and analyze designs using varied criteria. SolidWorks 3D software is taught in this program and students have the opportunity to earn the **Autodesk Certified User—Inventor**, **Certified SolidWorks Associate (CSWA)**, and **Certified SolidWorks Professional Academic** nationally recognized industry certifications.



In the **Entrepreneurship** program, students learn the core skills needed to plan and launch a successful business. Program content includes the characteristics of successful entrepreneurs, self-employment, basic economic concepts related to small businesses, competition, production, mission and vision, developing a business plan and budget, attracting investors, government regulations, and marketing. The **Entrepreneurship and Small Business** and **QuickBooks Certified User** by Intuit are industry certifications that may be earned in this program.

# Career and Technical Education Program Descriptions

The purpose of the **Finance Academy** is to prepare students for an examination of the nature and functions of money, financial institutions within the larger economic system, and central banks. Course emphasizes the role of financial instruments, financial markets and financial institutions as well as the function of the Federal Reserve System by examining monetary policy and its roots in macroeconomics and monetary theory. Special focus is on structure and evolution of the banking industry, depository institutions, and regulation of financial intermediaries within the context of the global financial system and international monetary system. The **CompTIA ITF+** Certification is offered in the foundations course and the Intuit **QuickBooks Certified User** certification is offered in the upper level finance courses.



The **Game/Simulation/Animation Programming** content includes practical experiences in game/simulation conceptualization, design, and story implementation. Specialized programming skills involving advanced mathematical calculations are integrated into the curriculum, development methodologies, essential programming techniques, animation and game engine development. The **Autodesk Certified User – MAYA** is offered in this program.

The **Horticulture Science and Services** program provides students with the essential knowledge and skills necessary for a solid orientation in the horticulture field. Areas of study include climate and plant growth, botanical nomenclature, propagation, plant nutrition, pest control, entrepreneurship and an introduction to the diverse career field involved with the horticulture industry. The industry certification that may be earned in this program is the Florida Nursery, Growers and Landscape Association **Certified Horticulture Professional**.



The **Marketing Management & Entrepreneurial Principles** program content includes marketing and business fundamentals, economics, sales techniques, distribution, finance, product and service planning, management, safety and risk management, applied communication, technology, marketing mathematics, human relations and employability skills. This program of study has an academic focus of how mathematics and language arts are used in the workplace. The **Entrepreneurship and Small Business** by Intuit and **Certified Internet Web (CIW) – Social Media Strategist** by Certification Partners may be earned in this program.



# Career and Technical Education Program Descriptions



The **Nursing Assistant** program delivers content through lectures, demonstrations, hands-on activities and student exposure to actual nursing procedures and techniques in a clinical setting. Students learn a variety of skills such as taking blood pressure, temperature, pulse rate and respirations, assisting with the activities of daily living such as feeding, bathing and hygiene, and charting. Students accepted into the program may earn the Florida Board of Nursing **Certified Nursing Assistant (CNA)** certification and the National Healthcareer Association **Certified EKG Technician (CET)** certification.

The **Principles of Teaching** program offers a sequence of courses that provide coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge. Students develop skills needed to prepare for further education and careers in the Education & Training career cluster. Students learn to develop technical skill proficiency, and competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, along with knowledge of all aspects of the Education & Training career cluster. The industry certification in this program is **Certified Internet Web (CIW) – Social Media Strategist**.



The **Promotional Enterprise** program offers a sequence of courses that provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge and skills needed to prepare for further education and careers such as an Information Technology Assistant, Custom Promotional Design Manager, First Line Supervisor, Small Business Manager, and General Operations Manager/Owner in the Business Management and Administration career cluster; provides technical skill proficiency, and includes competency-based applied learning that contributes to the academic knowledge, higher-order reasoning and problem-solving skills, work attitudes, general employability skills, technical skills, and occupation-specific skills, and knowledge of all aspects of the Business Management and Administration career cluster. The industry certifications in this program include **Adobe Certified Professional in Visual Design** and **Entrepreneurship and Small Business** by Intuit.

# Career and Technical Education Program Descriptions

**Television Production** includes broadcast style, scripts, studio equipment operation, character generators, special effects, video recording both in-studio and on scene, audio, writing, directing, editing using a variety of software applications, communication skills, leadership, employability skills, and preparation to assume responsibility for overall production of studio activities. Adobe Certified Professional in Video Design certification is offered in this program.



The **Unmanned Aircraft Systems (UAS) Operations** focuses on broad, transferable skills, stresses understanding of all aspects of the UAS growing industry, and demonstrates elements of the industry such as planning, management, finance, technical and production skills, underlying principles of technology, labor issues, community issues, and health, safety, and environmental issues. The purpose of this program is to prepare students for employment and advanced educational training in the emerging unmanned aircraft systems (UAS) industry. Instruction is designed to prepare students for Federal Aviation Administration (FAA) ground school examinations for Private Pilot rating. Federal Aviation Regulation (FAR) Part 61 identifies minimum requirements for completing this examination, which is required to complete the FAR Part 107 examination to achieve a Remote Pilot License. This program prepares students for employment in the field of UAS both as a Pilot, Operations Technician, and a Line-of-Sight Observer. Small UAS (sUAS) Safety Certification: Level 1 and Visual Line of Sight Systems Operations VSO Ground are the industry certifications for students to earn in this program.

The **Web Development** curriculum begins with learning basic HTML coding practices for creating basic webpages that includes lists, links, images, tables, forms, while also learning to create and use Cascading Style Sheets (CSS) for webpage formatting and appearance. Students will use Adobe Dreamweaver software and also learn planning, technologies, publishing, performance, and the use of GUI software for creating websites. The industry certification offered in this program is Certified Internet Web (CIW)—User Interface Designer certification.



# **Career and Technical Education**




## **Programs of Study**









Career Cluster: Business, Management & Administration				CTE Secondary Program: Administrative Office Specialist Middle School Program: Business Education Technology				
Offered at: East Ridge High School, Eustis High School				Industry Certification: CompTIA ITF+; QuickBooks Certified User				
	16 CORE CURRICULUM CREDITS					8 ADDITIONAL CREDITS		
	ENGLISH 4 credits	MATH 4 credits	SCIENCE 3 credits, 2 with lab	SOCIAL STUDIES 3 credits	OTHER REQUIRED COURSES FINE ARTS (1 credit) HOPE (1 credit)	CAREER AND TECHNICAL EDUCATION COURSES	RECOMMENDED ELECTIVES (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
HIGH SCHOOL	<ul style="list-style-type: none"><li>SIXTEEN CORE CURRICULUM CREDITS - One course within the 24 credit program must be an online course.</li><li>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="http://mycareershines.org">mycareershines.org</a></li><li>Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.</li><li>Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	9 <sup>th</sup>	English I	Algebra I	Biology	Social Studies Elective	HOPE	Digital Information Technology	Foreign Language for SUS admission or other elective appropriate for student's career and education plan.
	10 <sup>th</sup>	English II	Geometry	Chemistry	World History		Administrative Office Technology 1	Foreign Language for SUS admission or other electives appropriate for student's career and education plan.
	11 <sup>th</sup>	English III	Algebra II	Anatomy & Physiology or Environ. Sciences	United States History	Practical Arts or Fine Arts course (1 credit)	Business Software Applications 1	Other elective course appropriate for student's career and education plan.
	12 <sup>th</sup>	English IV	Probability & Statistics or Pre-Calculus	Physics	United States Government. & Economics w/Financial Literacy		Digital Design 1	Other elective courses appropriate for student's career and education plan.


POST-SECONDARY	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.		
	TECHNICAL CENTER/COLLEGE PROGRAM(S)	COMMUNITY/STATE COLLEGE PROGRAM(S)	UNIVERSITY PROGRAM(S)
	<b>Certificates:</b> Accounting Operations; Administrative Office Specialist	<b>A.S. Degrees:</b> Business Administration; Office Administration- Legal Office Specialization; Office Management Specialization  <b>A.S. to B.A.S. Career Path:</b> Strategic Leadership  <b>Certificates:</b> Business Mgmt.; Business Operations; Business Specialist	<b>B.S. Degrees:</b> Accounting; Economics; Finance; Integrated Business; Management; Marketing; Real Estate  <b>M.B.A. Degree:</b> Business Administration; Accounting; Economics; Management; Real Estate; Sport Business Management
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on approved articulations for school year 2021-22)		
	<b>Secondary to Lake Technical College:</b> Administrative Office Specialist (Digital Information Technology, Administrative Office Technology 1, Business Software Applications 1) to Accounting = up to 150 Hours: Information Technology Assistant up to 150 Hours: Front Desk Specialist or Administrative Office Specialist = up to 300 Hours  <i>For a current list of local agreements, visit</i> <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a>	<b>Secondary to Lake-Sumter State College:</b> Option A (Credit by Exam) Business Administration (Digital Information Technology, Administrative Office Technology 1, Business Software Applications 1)  <b>Secondary to College of Central Florida</b> Option A (Credit by Exam) Administrative Office Specialist (Digital Information Technology, Administrative Office Technology 1, Business Software Applications 1)	A.A./A.S. to B.A./B.S. Degree
		<b>Statewide Articulation:</b> 3 credits for MOS Bundle (3 of 6) Certification (MICRO069) toward Office Administration program; 3 Credits for CompTIA ITF+ Certification (COMPT018) toward Computer Information Technology program; 3 Credits for CompTIA ITF+ Certification (COMPT018) toward Computer Programming and Analysis program; 3 Credits for CompTIA ITF+ Certification (COMPT018) toward Network Systems Technology program; 3 credits for QuickBooks Certified User (INTUT001) toward Accounting Technology program  <i>For a current list of statewide agreements, visit</i> <a href="http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml</a> , and keywords: Gold Standard statewide articulation agreements	
Career and Technical Student Association			
Future Business Leaders of America (FBLA)			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			

Career Cluster: Manufacturing				CTE Secondary Program: Advanced Manufacturing Technology Middle School Program: Integrated Technology Studies				
Offered at: Lake Minneola High School				Industry Certification: Autodesk Certified User – Inventor; Certified SolidWorks Associate (CSWA); RECF Robotics Certification				
	16 CORE CURRICULUM CREDITS					8 ADDITIONAL CREDITS		
	ENGLISH 4 credits	MATH 4 credits	SCIENCE 3 credits, 2 with lab	SOCIAL STUDIES 3 credits	OTHER REQUIRED COURSES FINE ARTS (1 credit) HOPE (1 credit)	CAREER AND TECHNICAL EDUCATION COURSES	RECOMMENDED ELECTIVES (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
HIGH SCHOOL	<ul style="list-style-type: none"><li>SIXTEEN CORE CURRICULUM CREDITS - One course within the 24 credit program must be an online course.</li><li>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="http://mycareershines.org">mycareershines.org</a></li><li>Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.</li><li>Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	9 <sup>th</sup>	English I	Algebra I	Biology	Social Studies Elective	HOPE	Advanced Manufacturing Technology 1	Foreign Language for SUS admission or other elective appropriate for student’s career and education plan.
	10 <sup>th</sup>	English II	Geometry	Chemistry	World History		Advanced Manufacturing Technology 2	Foreign Language for SUS admission or other electives appropriate for student’s career and education plan.
	11 <sup>th</sup>	English III	Algebra II	Anatomy & Physiology or Environ. Sciences	United States History	Practical Arts or Fine Arts course (1 credit)	Advanced Manufacturing Technology 3	Other elective course appropriate for student’s career and education plan.
	12 <sup>th</sup>	English IV	Probability & Statistics or Pre-Calculus	Physics	United States Government. & Economics w/Financial Literacy		Advanced Manufacturing Technology 4	Other elective courses appropriate for student’s career and education plan.

POST-SECONDARY	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.		
	TECHNICAL CENTER/COLLEGE PROGRAM(S)	COMMUNITY/STATE COLLEGE PROGRAM(S)	UNIVERSITY PROGRAM(S)
	<b>Certificates:</b> Certified Production Technology; CNC Production Specialist ; Electrical and Instrumentation Technology; Industrial Machinery and Controls Technician; Millwright; Welding Technology	<b>Certificate:</b> Engineering Technology Support Specialist  <b>A.S. Degree:</b> Aerospace Technology; Biomedical Equipment Technician; Computer Engineering Technology; Engineering Technology; Industrial Management Technology; Manufacturing Technology; Simulation Technology;	<b>B.S. Degrees:</b> Aerospace Engineering; Civil Engineering; Computer Engineering; Electrical Engineering; Environmental Engineering; Industrial Engineering; Mechanical Engineering  <b>M.B.A. Degree:</b> Aerospace Engineering; Civil Engineering; Computer Engineering; Electrical Engineering; Engineering Management; Environmental Engineering; Industrial Engineering; Mechanical Engineering; Modeling & Simulation
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on approved articulations for school year 2021-22)		
	<b>Secondary to Lake Technical College:</b>  Advanced Manufacturing Technology 1, 2, 3, and 4 = CNC Production Specialist up to 300 Hours for CNC Production Technician I  <i>For a current list of local agreements, visit</i> <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a>	<b>Secondary to Lake-Sumter State College:</b> Option A (Credit by Exam) Advanced Manufacturing Technology (Advanced Manufacturing 1, Advanced Manufacturing 2, Advanced Manufacturing 3)  <b>Secondary to College of Central Florida:</b> Option A (Credit by Exam) Advanced Manufacturing Technology (Advanced Manufacturing 1, Advanced Manufacturing 2, Advanced Manufacturing 3)	A.A./A.S. to B.A./B.S. Degree
		<b>Statewide Articulation:</b> 9 credits for MSSC Production Technician; 3 credits for CNC Milling Programming Set-Up & Operation towards Manufacturing Technology; 3 credits for Autodesk Certified User Inventor toward Engineering Technology; 3 Credits for Certified SolidWorks Associate – Academic for Engineering Technology  <i>For a current list of statewide agreements, visit</i> <a href="http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml</a> <i>and keywords: Gold Standard statewide articulation agreements</i>	
Career and Technical Student Association			
SkillsUSA and Technology Student Association (TSA)			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			


Career Cluster: Engineering & Technology Education				CTE Secondary Program: Aerospace Technologies Middle School Program: Integrated Technology Studies				
Offered at: Eustis High School				Industry Certification: Small UAS (sUAS) Safety Certification: Level 1; Visual Line of Sight System Operator (VSO) Ground				
	16 CORE CURRICULUM CREDITS					8 ADDITIONAL CREDITS		
	ENGLISH 4 credits	MATH 4 credits	SCIENCE 3 credits, 2 with lab	SOCIAL STUDIES 3 credits	OTHER REQUIRED COURSES FINE ARTS (1 credit) HOPE (1 credit)	CAREER AND TECHNICAL EDUCATION COURSES	RECOMMENDED ELECTIVES (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
HIGH SCHOOL	<ul style="list-style-type: none"><li>SIXTEEN CORE CURRICULUM CREDITS - One course within the 24 credit program must be an online course.</li><li>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="http://mycareershines.org">mycareershines.org</a></li><li>Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.</li><li>Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	9 <sup>th</sup>	English I	Algebra I	Biology	Social Studies Elective	HOPE	Aerospace Technologies I	Foreign Language for SUS admission or other elective appropriate for student's career and education plan.
	10 <sup>th</sup>	English II	Geometry	Chemistry	World History		Aerospace Technologies II	Foreign Language for SUS admission or other electives appropriate for student's career and education plan.
	11 <sup>th</sup>	English III	Algebra II	Anatomy & Physiology or Environ. Sciences	United States History	Practical Arts or Fine Arts course (1 credit)	Aerospace Technologies III	Other elective course appropriate for student's career and education plan.
	12 <sup>th</sup>	English IV	Probability & Statistics or Pre-Calculus	Physics	United States Government. & Economics w/Financial Literacy		Advanced Technology Applications	Other elective courses appropriate for student's career and education plan.

POST-SECONDARY	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.		
	TECHNICAL CENTER/COLLEGE PROGRAM(S)	COMMUNITY/STATE COLLEGE PROGRAM(S)	UNIVERSITY PROGRAM(S)
	This program leads to a broad range of postsecondary career pathways in all sector of the engineering and related industries.	<b>A.S. Degrees:</b> Aviation Administration; Aviation Maintenance Management; Unmanned Vehicle Systems Operations  <b>Certificates:</b> Air Cargo Management; Airline Maintenance Procedures Records Management; Aviation Airframe Mechanics; Logistics & Transportation Specialist, C.C.C.	<b>B.S. Degrees:</b> Unmanned Aircraft Systems; Unmanned Aircraft Systems Science; Unmanned Systems Applications  <b>M.B.A. Degree:</b> Unmanned & Autonomous Systems Engineering; Unmanned Systems
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on approved articulations for school year 2021-22)		
	For a current list of local agreements, visit <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a>	At the time of publication, there was no local articulation agreement for this program. For a current list of local agreements visit <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a>	A.A./A.S. to B.A./B.S. Degree
		<b>Statewide Articulation:</b>  1 credit for Small UAS (sUAS) Safety Certification (USINS001) toward Professional Pilot Technology; 3 credits for FAA Ground School (FEDAA013) toward Unmanned Vehicle Systems Operations program  For a current list of statewide agreements, visit <a href="http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml</a> , and keywords: Gold Standard statewide articulation agreements	
Career and Technical Student Association			
SkillsUSA and Technology Student Association (TSA)			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			


Career Cluster: Agriculture, Food & Natural Resources				CTE Secondary Program: Agriculture Biotechnology Middle School Program: Introduction to Agriscience				
Offered at: Lake Minneola High School				Industry Certification: Agritechnology Specialist; Agricultural Biotechnology Specialist; Agricultural Communications Specialist; Agriculture Associate; Agriculture Mechanics Specialist; Animal Science Specialist				
	16 CORE CURRICULUM CREDITS					8 ADDITIONAL CREDITS		
	ENGLISH 4 credits	MATH 4 credits	SCIENCE 3 credits, 2 with lab	SOCIAL STUDIES 3 credits	OTHER REQUIRED COURSES FINE ARTS (1 credit) HOPE (1 credit)	CAREER AND TECHNICAL EDUCATION COURSES	RECOMMENDED ELECTIVES (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
HIGH SCHOOL	<ul style="list-style-type: none"><li>SIXTEEN CORE CURRICULUM CREDITS - One course within the 24 credit program must be an online course.</li><li>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="http://mycareershines.org">mycareershines.org</a></li><li>Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.</li><li>Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	9 <sup>th</sup>	English I	Algebra I	Biology	Social Studies Elective	HOPE	Agriscience Foundations 1	Foreign Language for SUS admission or other elective appropriate for student's career and education plan.
	10 <sup>th</sup>	English II	Geometry	Chemistry	World History		Agricultural Biotechnology 2	Foreign Language for SUS admission or other electives appropriate for student's career and education plan.
	11 <sup>th</sup>	English III	Algebra II	Anatomy & Physiology or Environ. Sciences	United States History	Practical Arts or Fine Arts course (1 credit)	Agricultural Biotechnology 3	Other elective course appropriate for student's career and education plan.
	12 <sup>th</sup>	English IV	Probability & Statistics or Pre-Calculus	Physics	United States Government. & Economics w/Financial Literacy		Animal Biotechnology and/or Plant Biotechnology	Other elective courses appropriate for student's career and education plan.




POST-SECONDARY	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.		
	TECHNICAL CENTER/COLLEGE PROGRAM(S)	COMMUNITY/STATE COLLEGE PROGRAM(S)	UNIVERSITY PROGRAM(S)
	This program leads to a broad range of postsecondary career pathways in all sectors of the agriculture and related industries.	<b>A.S. Degree:</b> Biomedical Equipment Technician; Biotechnology lab Technology, Agribusiness Management, A.S.  <b>B.A.S. Degrees:</b> Clinical Laboratory Science; Industrial Biotechnology  <b>Certificates:</b> Chemical Laboratory Specialist	<b>B.S. Degree:</b> Biotechnology  <b>B.S. Degrees:</b> Agriculture Education & Communication; Agriculture Operations Management; Animal Sciences; Biology; Biological Engineering  <b>M.S. Degrees:</b> Agricultural & Biological Engineering; Animal Sciences; Food Science; Genetics & Genomics; Horticultural Sciences
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on approved articulations for school year 2021-22)		
	<i>For a current list of local agreements, visit <a href="https://www.lake.k12.fl.us/College&amp;CareerReadiness/LocalArticulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a></i>	<b>Secondary to College of Central Florida</b> Option A (Credit by Exam) Agritechnology (Digital Information Technology, Agriscience Foundations, Agriculture Sales & Services 2, Agriculture Sales & Services 3)	A.A./A.S to B.A./BS Degree
		<b>Statewide Articulation:</b> 6 credits for Certified Horticulture Professional Certification (FNGLA001) toward Landscape & Horticulture Technology program; 3 credits for Agriculture Associate Certification (FLFBR007) towards Agricultural Production Technology program; 2 credits for Agritechnology Specialist Certification (FLFBR001) toward the AS degree in Agricultural Production Technology  <i>For a current list of statewide agreements, visit <a href="http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml</a> and keywords: Gold Standard statewide articulation agreements.</i>	
Career and Technical Student Association			
Future Farmers of America (FFA)			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			

Career Cluster: Agriculture, Food & Natural Resources				CTE Secondary Program: Agritechnology Middle School Program: Introduction to Agriscience				
Offered at: East Ridge High School, Lake Minneola High School, Leesburg High School, Mt Dora High School, Tavares High School, South Lake High School, Umatilla High School				Industry Certification: Agritechnology Specialist; Agricultural Biotechnology Specialist; Agricultural Communications Specialist; Agriculture Mechanics Specialist; Animal Science Specialist; Agriculture Associate; Agriculture Systems Associate				
	16 CORE CURRICULUM CREDITS					8 ADDITIONAL CREDITS		
	ENGLISH 4 credits	MATH 4 credits	SCIENCE 3 credits, 2 with lab	SOCIAL STUDIES 3 credits	OTHER REQUIRED COURSES FINE ARTS (1 credit) HOPE (1 credit)	CAREER AND TECHNICAL EDUCATION COURSES	RECOMMENDED ELECTIVES (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
HIGH SCHOOL	<ul style="list-style-type: none"><li>SIXTEEN CORE CURRICULUM CREDITS - One course within the 24 credit program must be an online course.</li><li>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="http://mycareershines.org">mycareershines.org</a></li><li>Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.</li><li>Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	9 <sup>th</sup>	English I	Algebra I	Biology	Social Studies Elective	HOPE	Agriscience Foundations 1	Foreign Language for SUS admission or other elective appropriate for student's career and education plan.
	10 <sup>th</sup>	English II	Geometry	Chemistry	World History		Agritechnology 1	Foreign Language for SUS admission or other electives appropriate for student's career and education plan.
	11 <sup>th</sup>	English III	Algebra II	Anatomy & Physiology or Environ. Sciences	United States History	Practical Arts or Fine Arts course (1 credit)	Agritechnology 2	Other elective course appropriate for student's career and education plan.
	12 <sup>th</sup>	English IV	Probability & Statistics or Pre-Calculus	Physics	United States Government. & Economics w/Financial Literacy		Ag Ed Directed Study or Ag Coop	Other elective courses appropriate for student's career and education plan.


POST-SECONDARY	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.		
	TECHNICAL CENTER/ COLLEGE PROGRAM(S)	COMMUNITY/STATE COLLEGE PROGRAM(S)	UNIVERSITY PROGRAM(S)
	<b>Certificates:</b> Welding Technology; Welding Technology Advanced	<b>A.S. Degrees:</b> Agribusiness Management; Equine Studies  <b>Certificates:</b> Welding Technology	<b>B.S. Degrees:</b> Agriculture Education & Communication; Agriculture Operations Management; Animal Sciences; Biological Engineering; Biology  <b>M.S. Degrees:</b> Agricultural & Biological Engineering; Animal Sciences; Food Science; Genetics & Genomics; Horticultural Sciences
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on approved articulations for school year 2021-22)		
	For a current list of local agreements, visit <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a>	Secondary to College of Central Florida: Option A (Credit by Exam) Agritechnology (Digital Information Technology, Agriscience Foundations, Agriculture Sales & Services 2, Agriculture Sales & Services 3)	A.A./A.S to B.A./BS Degree
		Statewide Articulation: 6 credits for Certified Horticulture Professional Certification (FNGLA001) toward Landscape & Horticulture Technology program; 3 credits for Animal Science Specialist Certification (FLFBR005) toward Agribusiness Management program; 3 credits for Agriculture Associate Certification (FLFBR007) toward Agricultural Production Technology program  For a current list of statewide agreements, visit <a href="http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml</a> , and keywords: Gold Standard statewide articulation agreements	
Career and Technical Student Association			
Future Farmers of America (FFA)			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			

Career Cluster: Architecture & Construction				CTE Secondary Program: Air Conditioning, Refrigeration & Heating Technology (HVAC) Middle School Program: Integrated Technology Studies				
Offered at: Umatilla High School				Industry Certification: HBI PACT Core; HBI PACT Core Green; HVAC Excellence EmploymentReady – Air Conditioning				
	16 CORE CURRICULUM CREDITS					8 ADDITIONAL CREDITS		
	ENGLISH 4 credits	MATH 4 credits	SCIENCE 3 credits, 2 with lab	SOCIAL STUDIES 3 credits	OTHER REQUIRED COURSES FINE ARTS (1 credit) HOPE (1 credit)	CAREER AND TECHNICAL EDUCATION COURSES	RECOMMENDED ELECTIVES (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
HIGH SCHOOL	<ul style="list-style-type: none"><li>SIXTEEN CORE CURRICULUM CREDITS - One course within the 24 credit program must be an online course.</li><li>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="http://mycareershines.org">mycareershines.org</a></li><li>Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.</li><li>Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	9 <sup>th</sup>	English I	Algebra I	Biology	Social Studies Elective	HOPE	Air Conditioning, Refrigeration & Heating Technology 1	Foreign Language for SUS admission or other elective appropriate for student's career and education plan.
	10 <sup>th</sup>	English II	Geometry	Chemistry	World History		Air Conditioning, Refrigeration & Heating Technology 2	Foreign Language for SUS admission or other electives appropriate for student's career and education plan.
	11 <sup>th</sup>	English III	Algebra II	Anatomy & Physiology or Environ. Sciences	United States History	Practical Arts or Fine Arts course (1 credit)	Air Conditioning, Refrigeration & Heating Technology 3	Other elective course appropriate for student's career and education plan.
	12 <sup>th</sup>	English IV	Probability & Statistics or Pre-Calculus	Physics	United States Government. & Economics w/Financial Literacy		Air Conditioning, Refrigeration & Heating Technology	Other elective courses appropriate for student's career and education plan.

POST-SECONDARY	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.		
	TECHNICAL CENTER/COLLEGE PROGRAM(S)	COMMUNITY/STATE COLLEGE PROGRAM(S)	UNIVERSITY PROGRAM(S)
	<b>Certificate:</b> Heating, Ventilation, Air-Conditioning/Refrigeration	<b>A.A.S. Degree:</b> Electrical Distribution Technology  <b>Certificate:</b> Electrical Distribution Technology; Engineering Technology Support Specialist	<b>B.S. Degrees:</b> Construction Engineering; Electrical Engineering; Environmental Engineering; Industrial Engineering; & Mechanical Engineering  <b>B.S. Degrees:</b> Electrical Engineering; & Engineering Management
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on approved articulations for school year 2021-22)		
	<i>For a current list of local agreements, visit</i> <a href="https://www.lake.k12.fl.us/College%20&amp;%20Career%20Readiness/Local%20Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a>	<b>Statewide Articulation:</b> 3 credits HVAC Excellence EmploymentReady - Air Conditioning (HVACE002) to Air Conditioning, Refrigeration and Heating Systems Technology Program  <i>For a current list of statewide agreements, visit</i> <a href="http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml</a> , <i>and keywords: Gold Standard statewide articulation agreements</i>	
Career and Technical Student Association			
SkillsUSA			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			


Career Cluster: Health Science				CTE Secondary Program: Allied Health Assisting Middle School Program: Health Science				
Offered at: East Ridge High School, Lake Mineola High School, Leesburg High School, South Lake High School, Tavares High School				Industry Certification: CMAA; Certified EKG Technician (CET)				
	16 CORE CURRICULUM CREDITS					8 ADDITIONAL CREDITS		
	ENGLISH 4 credits	MATH 4 credits	SCIENCE 3 credits, 2 with lab	SOCIAL STUDIES 3 credits	OTHER REQUIRED COURSES FINE ARTS (1 credit) HOPE (1 credit)	CAREER AND TECHNICAL EDUCATION COURSES	RECOMMENDED ELECTIVES (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
HIGH SCHOOL	<ul style="list-style-type: none"><li>SIXTEEN CORE CURRICULUM CREDITS - One course within the 24 credit program must be an online course.</li><li>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="http://mycareershines.org">mycareershines.org</a></li><li>Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.</li><li>Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	9 <sup>th</sup>	English I	Algebra I	Biology	Social Studies Elective	HOPE	Health Science Anatomy & Physiology	Foreign Language for SUS admission or other elective appropriate for student's career and education plan.
	10 <sup>th</sup>	English II	Geometry	Chemistry	World History		Health Science Foundations	Foreign Language for SUS admission or other electives appropriate for student's career and education plan.
	11 <sup>th</sup>	English III	Algebra II	Anatomy & Physiology or Environ. Sciences	United States History	Practical Arts or Fine Arts course (1 credit)	Allied Health Assisting 3	Other elective course appropriate for student's career and education plan.
	12 <sup>th</sup>	English IV	Probability & Statistics or Pre-Calculus	Physics	United States Government. & Economics w/Financial Literacy		Health Science Education Directed Study	Other elective courses appropriate for student's career and education plan.

<b>POST-SECONDARY</b>	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.		
	<b>TECHNICAL CENTER/COLLEGE PROGRAM(S)</b>	<b>COMMUNITY/STATE COLLEGE PROGRAM(S)</b>	<b>UNIVERSITY PROGRAM(S)</b>
	<b>Certificates:</b> Emergency Medical Technician; Medical Assisting; Paramedic; Pharmacy Technician; Phlebotomy; Practical Nursing; Patient Care Technician	<b>A.S. Degree:</b> Nursing  <b>A.S. to B.S. Career Path:</b> Nursing  <b>Certificate Programs:</b> Medical Information Coder/Biller; Medical Office Management	<b>B.A./B.S. Degrees:</b> Nursing  <b>B.S.N Degrees:</b> Nursing (Accelerated Second Degree); Nursing RN (Concurrent ASN to BSN – Valencia College Track; RN-BSN; Concurrent ASN to BSN – Seminole State Track; AS to BS)  <b>M.S. Degrees:</b> Nursing; Biomedical; Biotechnology  <b>M.S.N Degrees:</b> Nursing (Nursing & Health Care Simulation; Nurse Educator; Nursing Leadership & Management)
<b>CREDIT</b>	Articulation and CTE Dual Enrollment Opportunities (Based on approved articulations for school year 2021-22)		
	<b>Secondary to Lake Technical College:</b> Health Science 1, Health Science 2, and Allied Health Assisting 3 to Medical Assisting=90 hours; Pharmacy Technician=90 hours; Patient Care Technician to Basic Health Care Worker= 90 hours or Nurse Aide Orderly = 75 hours  <i>For a current list of local agreements, visit <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a></i>	<b>Secondary to Lake Sumter State College:</b> Option A (Credit by Exam) Allied Health Assisting (Health Science Anatomy & Physiology, Health Science Foundations, Allied Health Assisting 3); Nursing RN (AS Degree) – 1 preferred placement point or AS Health Services Management, or CCC Medical Information Coder/Biller, or CCC Medical Office Management (up to 12 credits); AA Degree up to 6 credits	A.A./A.S. to B.A./B.S. Degree
<i>For a current list of statewide agreements, visit <a href="http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml</a>, and keywords: Gold Standard statewide articulation agreements</i>			
<b>Career and Technical Student Association</b>			
Health Occupations Students of America (HOSA)			
<b>Internship/Work Experience Recommendations</b>			
Job shadowing, on-the-job training, and professional organization experiences.			


Career Cluster: Information Technology				CTE Secondary Program: Applied Cybersecurity Middle School Program: Integrated Technology Studies				
Offered at: East Ridge High School				Industry Certification: CompTIA ITF+; CompTIA A+; CompTIA Security+; CIW-Web Security Associate				
	16 CORE CURRICULUM CREDITS					8 ADDITIONAL CREDITS		
	ENGLISH 4 credits	MATH 4 credits	SCIENCE 3 credits, 2 with lab	SOCIAL STUDIES 3 credits	OTHER REQUIRED COURSES FINE ARTS (1 credit) HOPE (1 credit)	CAREER AND TECHNICAL EDUCATION COURSES	RECOMMENDED ELECTIVES (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
HIGH SCHOOL	<ul style="list-style-type: none"><li>SIXTEEN CORE CURRICULUM CREDITS - One course within the 24 credit program must be an online course.</li><li>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="http://mycareershines.org">mycareershines.org</a></li><li>Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.</li><li>Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	9 <sup>th</sup>	English I	Algebra I	Biology	Social Studies Elective	HOPE	Digital Information Technology	Foreign Language for SUS admission or other elective appropriate for student's career and education plan.
	10 <sup>th</sup>	English II	Geometry	Chemistry	World History		Computer and Network Security Fundamentals	Foreign Language for SUS admission or other electives appropriate for student's career and education plan.
	11 <sup>th</sup>	English III	Algebra II	Anatomy & Physiology or Environ. Sciences	United States History	Practical Arts or Fine Arts course (1 credit)	Cybersecurity Essentials	Other elective course appropriate for student's career and education plan.
	12 <sup>th</sup>	English IV	Probability & Statistics or Pre-Calculus	Physics	United States Government. & Economics w/Financial Literacy		Operational Cybersecurity	Other elective courses appropriate for student's career and education plan.




POST-SECONDARY	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.		
	TECHNICAL CENTER/COLLEGE PROGRAM(S)	COMMUNITY/STATE COLLEGE PROGRAM(S)	UNIVERSITY PROGRAM(S)
	<b>Certificates:</b> Accounting Operations; Administrative Office Specialist	<b>A.S. Degree:</b> Computer Information Technology  <b>A.S. to B.A.S. Career Path</b> Strategic Leadership  <b>Certificate:</b> Digital Forensics, Help Desk Support Technician, Information Tech. Support Specialist, Information Tech. Analysis	<b>B.S. Degree:</b> Computer Engineering; Computer Science  <b>M.S. Degrees:</b> Computer Engineering; Computer Science
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on approved articulations for school year 2021-22)		
	<b>Secondary to Lake Technical College:</b> Digital Information Technology, Computer & Network Security Fundamentals, & Cybersecurity Essentials to Accounting= up to 150 hours Information Technology Assistant; or Administrative Office Specialist= up to 150 hours Information Technology Assistant; up to 150 hours Front Desk Specialist  <i>For a current list of local agreements, visit</i> <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a>	<b>Secondary to Lake-Sumter State College</b> Option A (Credit by Exam) Applied Cybersecurity (Introduction to Information Technology, Computer and Network Security Fundamentals, Cybersecurity Essentials)	A.A./A.S. to B.A./B.S. Degree
		<b>Statewide Articulation:</b>  3 Credits for CompTIA Network+ Certification (COMPT006) toward Computer Engineering Technology program; 3 Credits for CompTIA Security+ Certification (COMPT008) toward E-Business Technology program; 3 Credits for CompTIA ITF+ Certification (COMPT018) toward Computer Information Technology program; 3 Credits for CompTIA ITF+ Certification (COMPT018) toward Computer Programming and Analysis program; 3 Credits for CompTIA ITF+ Certification (COMPT018) toward Network Systems Technology program  <i>For a current list of statewide agreements, visit</i> <a href="http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml</a> , and keywords: Gold Standard statewide articulation agreements.	
Career and Technical Student Association			
Future Business Leaders of America (FBLA)			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			

Career Cluster: Architecture & Construction				CTE Secondary Program: Architectural Drafting Middle School Program: Integrated Technology Studies				
Offered at: Mount Dora High School				Industry Certification: ACU-Inventor; ACU-Revit; ACU-AutoCAD; CIW-Web Security Associate				
	16 CORE CURRICULUM CREDITS					8 ADDITIONAL CREDITS		
	ENGLISH 4 credits	MATH 4 credits	SCIENCE 3 credits, 2 with lab	SOCIAL STUDIES 3 credits	OTHER REQUIRED COURSES FINE ARTS (1 credit) HOPE (1 credit)	CAREER AND TECHNICAL EDUCATION COURSES	RECOMMENDED ELECTIVES (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
HIGH SCHOOL	<ul style="list-style-type: none"><li>SIXTEEN CORE CURRICULUM CREDITS - One course within the 24 credit program must be an online course.</li><li>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="http://mycareershines.org">mycareershines.org</a></li><li>Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.</li><li>Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	9 <sup>th</sup>	English I	Algebra I	Biology	Social Studies Elective	HOPE	Drafting 1	Foreign Language for SUS admission or other elective appropriate for student's career and education plan.
	10 <sup>th</sup>	English II	Geometry	Chemistry	World History		Drafting 2	Foreign Language for SUS admission or other electives appropriate for student's career and education plan.
	11 <sup>th</sup>	English III	Algebra II	Anatomy & Physiology or Environ. Sciences	United States History	Practical Arts or Fine Arts course (1 credit)	Drafting 3 Drafting 4	Other elective course appropriate for student's career and education plan.
	12 <sup>th</sup>	English IV	Probability & Statistics or Pre-Calculus	Physics	United States Government. & Economics w/Financial Literacy		Architectural Drafting 5 Architectural Drafting 6	Other elective courses appropriate for student's career and education plan.


POST-SECONDARY	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.		
	TECHNICAL CENTER/COLLEGE PROGRAM(S)	COMMUNITY/STATE COLLEGE PROGRAM(S)	UNIVERSITY PROGRAM(S)
	<b>Certificates:</b> CNC Production Specialist; Building Construction Technologies; Computer-Aided Drawing & Modeling	<b>A.S. Degree:</b> Computer Aided Drafting and Design Technology  <b>Certificates:</b> Advanced Computer Aided Design with Specialization in Architectural Drafting, Mechanical Drafting, & Surveying Drafting	<b>B.S. Degrees:</b> Construction Engineering; Electrical Engineering; Environmental Engineering; Industrial Engineering; & Mechanical Engineering  <b>M.S. Degrees:</b> Electrical Engineering; & Engineering Management
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on approved articulations for school year 2021-22)		
	For a current list of local agreements, visit <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a>	<b>Secondary to Valencia State College:</b> Up to 9 credits in Construction and Civil Engineering Technology A.S. Degree or Drafting and Design Technology A.S. Degree	A.A./A.S. to B.A./B.S. Degree
		<b>Statewide Articulation:</b> 3 credits for Autodesk Certified User - Revit Architecture (ADESK008) to Architectural Design & Construction Technology A.S. Degree; 3 credits for Autodesk Certified User - AutoCAD (ADESK002) to Computer-Aided Drafting & Design A.S. Degree; 3 credits for Autodesk Certified User – Inventor (ADESK011) to Engineering Technology A.S. Degree  For a current list of statewide agreements, visit <a href="http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml</a> , and keywords: Gold Standard statewide articulation agreements	
Career and Technical Student Association			
SkillsUSA			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			

Career Cluster: Transportation, Distribution & Logistics				CTE Secondary Program: Automotive Maintenance and Light Repair Middle School Program: Integrated Technology Studies				
Offered at: South Lake High School				Industry Certification: ASE Auto Maintenance; ASE Entry Level Auto Brakes; ASE Entry Level Electrical; ASE Entry Level Suspension Steering				
	16 CORE CURRICULUM CREDITS					8 ADDITIONAL CREDITS		
	ENGLISH 4 credits	MATH 4 credits	SCIENCE 3 credits, 2 with lab	SOCIAL STUDIES 3 credits	OTHER REQUIRED COURSES FINE ARTS (1 credit) HOPE (1 credit)	CAREER AND TECHNICAL EDUCATION COURSES	RECOMMENDED ELECTIVES (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
HIGH SCHOOL	<ul style="list-style-type: none"><li>SIXTEEN CORE CURRICULUM CREDITS - One course within the 24 credit program must be an online course.</li><li>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="http://mycareershines.org">mycareershines.org</a></li><li>Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.</li><li>Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	9 <sup>th</sup>	English I	Algebra I	Biology	Social Studies Elective	HOPE	Automotive Maintenance and Light Repair 1	Foreign Language for SUS admission or other elective appropriate for student's career and education plan.
	10 <sup>th</sup>	English II	Geometry	Chemistry	World History		Automotive Maintenance and Light Repair 2	Foreign Language for SUS admission or other electives appropriate for student's career and education plan.
	11 <sup>th</sup>	English III	Algebra II	Anatomy & Physiology or Environ. Sciences	United States History	Practical Arts or Fine Arts course (1 credit)	Automotive Maintenance and Light Repair 3 & 4	Other elective course appropriate for student's career and education plan.
	12 <sup>th</sup>	English IV	Probability & Statistics or Pre-Calculus	Physics	United States Government. & Economics w/Financial Literacy		Automotive Maintenance and Light Repair 5 & 6	Other elective courses appropriate for student's career and education plan.

POST-SECONDARY	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.		
	TECHNICAL CENTER/COLLEGE PROGRAM(S)	COMMUNITY/STATE COLLEGE PROGRAM(S)	UNIVERSITY PROGRAM(S)
	<b>Certificates:</b> Automotive Service Technology; Diesel Systems Technician	<b>A.A.S. Degree:</b> Automotive Service Management Technology; Aviation Maintenance Management; Marine Engineering, Management, and Seamanship; Supply Chain Management; Transportation and Logistics  : Automotive Maintenance & Light Repair; Automotive Technician; Commercial Vehicle Driving, Diesel Systems Technician	<b>B.S. Degrees:</b> Mechanical Engineering  <b>M.S. Degrees:</b> Mechanical Engineering; & Engineering Management
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on approved articulations for school year 2021-22)		
	<b>Secondary to Lake Technical College:</b>  Automotive Maintenance & Light Repair 1, Automotive Maintenance & Light Repair 2 & Automotive Maintenance & Light Repair 3 to Automotive Services Assistor = 300 hours  For a current list of local agreements, visit <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a>	<i>At the time of publication, there was no local articulation agreement for this program. For a current list of local agreements visit <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a></i>	A.A./A.S. to B.A./B.S. Degree
		<b>Statewide Articulation:</b>  3 credits for ASE Auto Maintenance and Light Repair (G1) (NIASE076) toward Automotive Service Management  For a current list of statewide agreements, visit <a href="http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml</a> , and keywords: Gold Standard statewide articulation agreements	
Career and Technical Student Association			
SkillsUSA			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			


Career Cluster: Architecture & Construction				CTE Secondary Program: Building Construction Technologies Middle School Program: Integrated Technology Studies				
Offered at: Eustis High School, Leesburg High School, and South Lake High School				Industry Certification: HBI PACT Core; HBI PACT Core Green; HBI PACT Carpentry				
	16 CORE CURRICULUM CREDITS					8 ADDITIONAL CREDITS		
	ENGLISH 4 credits	MATH 4 credits	SCIENCE 3 credits, 2 with lab	SOCIAL STUDIES 3 credits	OTHER REQUIRED COURSES FINE ARTS (1 credit) HOPE (1 credit)	CAREER AND TECHNICAL EDUCATION COURSES	RECOMMENDED ELECTIVES (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
HIGH SCHOOL	<ul style="list-style-type: none"><li>SIXTEEN CORE CURRICULUM CREDITS - One course within the 24 credit program must be an online course.</li><li>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="http://mycareershines.org">mycareershines.org</a></li><li>Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.</li><li>Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	9 <sup>th</sup>	English I	Algebra I	Biology	Social Studies Elective	HOPE	Building Construction Technologies 1	Foreign Language for SUS admission or other elective appropriate for student's career and education plan.
	10 <sup>th</sup>	English II	Geometry	Chemistry	World History		Building Construction Technologies 2	Foreign Language for SUS admission or other electives appropriate for student's career and education plan.
	11 <sup>th</sup>	English III	Algebra II	Anatomy & Physiology or Environ. Sciences	United States History	Practical Arts or Fine Arts course (1 credit)	Building Construction Technologies 3	Other elective course appropriate for student's career and education plan.
	12 <sup>th</sup>	English IV	Probability & Statistics or Pre-Calculus	Physics	United States Government. & Economics w/Financial Literacy		Building Construction Technologies 4	Other elective courses appropriate for student's career and education plan.

POST-SECONDARY	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.		
	TECHNICAL CENTER/COLLEGE PROGRAM(S)	COMMUNITY/STATE COLLEGE PROGRAM(S)	UNIVERSITY PROGRAM(S)
	<b>Certificate:</b> Heating, Ventilation, Air-Conditioning/Refrigeration	<b>A.S. Degrees:</b> Construction & Civil Engineering Technology	<b>B.S. Degrees:</b> Construction Engineering; Electrical Engineering; Environmental Engineering; Industrial Engineering; & Mechanical Engineering  <b>M.S. Degrees:</b> Electrical Engineering; & Engineering Management
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on approved articulations for school year 2021-22)		
	<b>Secondary to Orange Technical College:</b> Up to 450 hours towards Building and Construction Technologies Program  <i>For a current list of local agreements, visit</i> <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a>	<b>Secondary to Seminole State College:</b> Up to 9 credits toward Construction Management A.S. Degree	A.A./A.S. to B.A./B.S. Degree
<p style="text-align: center;"> <i>At the time of publication, there was no local articulation agreement for this program.</i>  <i>For a current list of local agreements visit</i> <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a> </p> <p style="text-align: center;"> <i>For a current list of statewide agreements, visit</i>  <a href="http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml</a>,  <i>and keywords: Gold Standard statewide articulation agreements</i> </p>			
Career and Technical Student Association			
SkillsUSA			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			


Career Cluster: Law, Public Safety & Security				CTE Secondary Program: Criminal Justice Middle School Program: Integrated Technology Studies				
Offered at: Mount Dora High School				Industry Certification: TBA				
	16 CORE CURRICULUM CREDITS					8 ADDITIONAL CREDITS		
	ENGLISH 4 credits	MATH 4 credits	SCIENCE 3 credits, 2 with lab	SOCIAL STUDIES 3 credits	OTHER REQUIRED COURSES FINE ARTS (1 credit) HOPE (1 credit)	CAREER AND TECHNICAL EDUCATION COURSES	RECOMMENDED ELECTIVES (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
HIGH SCHOOL	<ul style="list-style-type: none"><li>SIXTEEN CORE CURRICULUM CREDITS - One course within the 24 credit program must be an online course.</li><li>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="http://mycareershines.org">mycareershines.org</a></li><li>Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.</li><li>Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	9 <sup>th</sup>	English I	Algebra I	Biology	Social Studies Elective	HOPE	Criminal Justice Operations 1	Foreign Language for SUS admission or other elective appropriate for student's career and education plan.
	10 <sup>th</sup>	English II	Geometry	Chemistry	World History		Criminal Justice Operations 2	Foreign Language for SUS admission or other electives appropriate for student's career and education plan.
	11 <sup>th</sup>	English III	Algebra II	Anatomy & Physiology or Environ. Sciences	United States History	Practical Arts or Fine Arts course (1 credit)	Criminal Justice Operations 3	Other elective course appropriate for student's career and education plan.
	12 <sup>th</sup>	English IV	Probability & Statistics or Pre-Calculus	Physics	United States Government. & Economics w/Financial Literacy		Criminal Justice Operations 3 (Track 1 or 2)	Other elective courses appropriate for student's career and education plan.




POST-SECONDARY	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.		
	TECHNICAL CENTER/COLLEGE PROGRAM(S)	COMMUNITY/STATE COLLEGE PROGRAM(S)	UNIVERSITY PROGRAM(S)
	<b>Certificates:</b> Firefighter/Emergency Medical Technician; Law Enforcement; Public Safety Telecommunication	<b>A.S. Degree:</b> Criminal Justice Technology  <b>Certificate:</b> Criminal Justice Specialist	<b>B.S. Degree:</b> Criminal Justice  <b>M.S. Degrees:</b> Criminal Justice; Criminal Justice Public Administration Dual Degree
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on approved articulations for school year 2021-22)		
	<p>At the time of publication, there was no local articulation agreement for this program. For a current list of local agreements visit <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a></p> <p>For a current list of statewide agreements, visit <a href="http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml</a> and keywords: Gold Standard statewide articulation agreements</p>		
Career and Technical Student Association			
SkillsUSA and Future Business Leaders of America (FPSA)			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			

Career Cluster: Hospitality & Tourism				CTE Secondary Program: Culinary Arts Middle School Program: Family and Consumer Science				
Offered at: East Ridge High School, Eustis High School, Lake Mineola High School, Leesburg High School, Mount Dora High School, South Lake High School, Tavares High School, Umatilla High School				Industry Certification: NRFSP; ServSafe®				
	16 CORE CURRICULUM CREDITS					8 ADDITIONAL CREDITS		
	ENGLISH 4 credits	MATH 4 credits	SCIENCE 3 credits, 2 with lab	SOCIAL STUDIES 3 credits	OTHER REQUIRED COURSES FINE ARTS (1 credit) HOPE (1 credit)	CAREER AND TECHNICAL EDUCATION COURSES	RECOMMENDED ELECTIVES (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
HIGH SCHOOL	<ul style="list-style-type: none"><li>SIXTEEN CORE CURRICULUM CREDITS - One course within the 24 credit program must be an online course.</li><li>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="http://mycareershines.org">mycareershines.org</a></li><li>Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.</li><li>Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	9 <sup>th</sup>	English I	Algebra I	Biology	Social Studies Elective	HOPE	Culinary Arts 1	Foreign Language for SUS admission or other elective appropriate for student's career and education plan.
	10 <sup>th</sup>	English II	Geometry	Chemistry	World History		Culinary Arts 2	Foreign Language for SUS admission or other electives appropriate for student's career and education plan.
	11 <sup>th</sup>	English III	Algebra II	Anatomy & Physiology or Environ. Sciences	United States History	Practical Arts or Fine Arts course (1 credit)	Culinary Arts 3	Other elective course appropriate for student's career and education plan.
	12 <sup>th</sup>	English IV	Probability & Statistics or Pre-Calculus	Physics	United States Government. & Economics w/Financial Literacy		Culinary Arts 4 (Track 1, 2, & 3)	Other elective courses appropriate for student's career and education plan.


POST-SECONDARY	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.		
	TECHNICAL CENTER/COLLEGE PROGRAM(S)	COMMUNITY/STATE COLLEGE PROGRAM(S)	UNIVERSITY PROGRAM(S)
	<b>Certificates:</b> Professional Culinary Arts & Hospitality; Baking & Pastry Arts	<b>A.S. Degrees:</b> Baking & Pastry Management; Culinary Management; Hospitality & Tourism Management; Restaurant & Food Service Management  <b>Certificate:</b> Baking & Pastry Arts; Baking & Pastry Specialist; Chef's Apprentice; Culinary Arts Management; Culinary Arts; Hospitality – Event Planning Management; Hospitality – Guest Service Specialist; Hospitality – Rooms Division Management; Restaurant & Food Service Management	<b>B.S. Degrees:</b> Restaurant & Foodservice Management; Event Management; Hospitality Management; Entertainment Management  <b>M.S. Degree:</b> Hospitality & Tourism Management  <b>Ph.D.:</b> Hospitality Management
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on approved articulations for school year 2021-22)		
	<b>Secondary to Lake Technical College:</b> Culinary Arts 1, Culinary Arts 2, Culinary Arts 3, and Culinary Arts 4 Tracks 1, 2, o3 3 to Professional Culinary Arts & Hospitality=150 hours Food Preparation; 150 hours Cook, Restaurant or 150 hours Culinary Arts  For a current list of local agreements, visit <a href="https://www.lake.k12.fl.us/College&amp;CareerReadiness/LocalArticulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a>	<b>Secondary to Valencia State College:</b> Up to 6 credits for Baking and Pastry Management A.S. Degree; Restaurant and Food Service Management A.S. Degree  <b>Statewide Articulation:</b> 3 credits for Certified Food Protection Manager (ServSafe®) (NRAEF003) toward Culinary Management or Restaurant Management, or Baking & Pastry Management toward Culinary program  For a current list of statewide agreements, visit <a href="http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml</a> and keywords: Gold Standard statewide articulation agreements	A.A./A.S. to B.A./B.S. Degree
<b>Career and Technical Student Association</b>			
Family, Career & Community Leaders of America (FCCLA) and SkillsUSA			
<b>Internship/Work Experience Recommendations</b>			
Job shadowing, on-the-job training, and professional organization experiences.			

Career Cluster: Arts, A/V Technology & Communication				CTE Secondary Program: Digital Design Middle School Program: Business Technology Education				
Offered at: Eustis High School, Lake Minneola High School, Leesburg High School, Mount Dora High, South Lake High School				Industry Certification: CompTIA ITF+; Adobe Certified Professional in Visual Design				
	16 CORE CURRICULUM CREDITS					8 ADDITIONAL CREDITS		
	ENGLISH 4 credits	MATH 4 credits	SCIENCE 3 credits, 2 with lab	SOCIAL STUDIES 3 credits	OTHER REQUIRED COURSES FINE ARTS (1 credit) HOPE (1 credit)	CAREER AND TECHNICAL EDUCATION COURSES	RECOMMENDED ELECTIVES (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
HIGH SCHOOL	<ul style="list-style-type: none"><li>SIXTEEN CORE CURRICULUM CREDITS - One course within the 24 credit program must be an online course.</li><li>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="http://mycareershines.org">mycareershines.org</a></li><li>Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.</li><li>Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	9 <sup>th</sup>	English I	Algebra I	Biology	Social Studies Elective	HOPE	Digital Information Technology	Foreign Language for SUS admission or other elective appropriate for student's career and education plan.
	10 <sup>th</sup>	English II	Geometry	Chemistry	World History		Digital Design 1	Foreign Language for SUS admission or other electives appropriate for student's career and education plan.
	11 <sup>th</sup>	English III	Algebra II	Anatomy & Physiology or Environ. Sciences	United States History	Practical Arts or Fine Arts course (1 credit)	Digital Design 2 & 3	Other elective course appropriate for student's career and education plan.
	12 <sup>th</sup>	English IV	Probability & Statistics or Pre-Calculus	Physics	United States Government. & Economics w/Financial Literacy		Digital Design 4 & 5	Other elective courses appropriate for student's career and education plan.

POST-SECONDARY	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.		
	TECHNICAL CENTER/COLLEGE PROGRAM(S)	COMMUNITY/STATE COLLEGE PROGRAM(S)	UNIVERSITY PROGRAM(S)
	<b>Certificate:</b> Accounting; Administrative Office Specialist	<b>A.S. Degrees:</b> Business Administration  <b>A.S. to B.S. Career Path:</b> Strategic Leadership  <b>Certificates:</b> Business Management, Business Operations, Business Specialist	<b>B.A. Degree:</b> Art - Emerging Media; Visual Arts & Emerging Media Management; Digital Media
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on approved articulations for school year 2021-22)		
	<b>Secondary to Lake Technical College:</b> Digital Information Technology, Computer, Digital Design 1, and Digital Design 2 to Accounting= up to 150 hours Information Technology Assistant, or Administrative Office Specialist= up to 150 hours Information Technology Assistant.  <i>For a current list of local agreements, visit</i> <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a>	<b>Secondary to Lake-Sumter State College</b> Option A (Credit by Exam) Digital Design (Introduction to Information Technology or Digital Information Technology, Digital Design 1, Digital Design 2, Digital Design 3)  <b>Statewide Articulation:</b> 3 Credits for CompTIA ITF+ Certification (COMPT018) toward Computer Information Technology program; 3 Credits for CompTIA ITF+ Certification (COMPT018) toward Computer Programming and Analysis program; 3 Credits for CompTIA ITF+ Certification (COMPT018) toward Network Systems Technology program; 3 credits for Adobe Certified Professional in Visual Design (ADOBE024) toward Graphics Technology program  <i>For a current list of statewide agreements, visit</i> <a href="http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.shtml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.shtml</a> , <i>and keywords: Gold Standard statewide articulation agreements</i>	A.A./A.S. to B.A./B.S. Degree
Career and Technical Student Association			
SkillsUSA			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			


Career Cluster: Diversified Education				CTE Secondary Program: Diversified Career Technology Middle School Program: Integrated Technology Studies				
Offered at: Eustis High School, Tavares High School				Industry Certification: ServSafe®				
	16 CORE CURRICULUM CREDITS					8 ADDITIONAL CREDITS		
	ENGLISH 4 credits	MATH 4 credits	SCIENCE 3 credits, 2 with lab	SOCIAL STUDIES 3 credits	OTHER REQUIRED COURSES FINE ARTS (1 credit) HOPE (1 credit)	CAREER AND TECHNICAL EDUCATION COURSES	RECOMMENDED ELECTIVES (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
HIGH SCHOOL	<ul style="list-style-type: none"><li>SIXTEEN CORE CURRICULUM CREDITS - One course within the 24 credit program must be an online course.</li><li>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="http://mycareershines.org">mycareershines.org</a></li><li>Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.</li><li>Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	9 <sup>th</sup>	English I	Algebra I	Biology	Social Studies Elective	HOPE	Diversified Career Technology Principles	Foreign Language for SUS admission or other elective appropriate for student's career and education plan.
	10 <sup>th</sup>	English II	Geometry	Chemistry	World History		Diversified Career Technology Applications	Foreign Language for SUS admission or other electives appropriate for student's career and education plan.
	11 <sup>th</sup>	English III	Algebra II	Anatomy & Physiology or Environ. Sciences	United States History	Practical Arts or Fine Arts course (1 credit)	Diversified Career Technology Management	Other elective course appropriate for student's career and education plan.
	12 <sup>th</sup>	English IV	Probability & Statistics or Pre-Calculus	Physics	United States Government. & Economics w/Financial Literacy		Diversified Career Technology – On the Job Training	Other elective courses appropriate for student's career and education plan.

POST-SECONDARY	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.		
	TECHNICAL CENTER/COLLEGE PROGRAM(S)	COMMUNITY/STATE COLLEGE PROGRAM(S)	UNIVERSITY PROGRAM(S)
	<b>Certificates:</b> Accounting Operations, Administrative Office Specialist	<b>A.S. Degrees:</b> Business Administration  <b>A.S. to B.A.S. Career Path</b> Strategic Leadership  <b>Certificates:</b> Business Management.; Business Operations; Business Specialist	<b>B.S. Degrees:</b> Accounting; Economics; Finance; Integrated Business; Management; Marketing; Real Estate <b>M.B.A. Degree:</b> Business Administration; Accounting; Economics; Management; Real Estate; Sport Business Management
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on approved articulations for school year 2021-22)		
	For a current list of local agreements, visit <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a>	<b>Secondary to Lake-Sumter State College:</b> Option A (Credit by Exam) Diversified Career Technology (Diversified Career Technology Principles, Diversified Career Technology – OJT, Diversified Career Technology Applications, Diversified Career Technology Management)	A.A. /A.S. to B.A. /B.S. Degree.
		<b>Statewide Articulation:</b> 3 credits for MOS Bundle (3 of 6) Certification (MICRO069) toward Office Administration program; 3 credits for Certified Food Protection Manager (ServSafe®) (NRAEF003) toward Culinary Management A.S. Degree  For a current list of statewide agreements, visit <a href="http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml</a> , and keywords: Gold Standard statewide articulation agreements.	
Career and Technical Student Association			
Distributive Education Clubs of America (DECA), Future Business Leaders of America (FBLA), Family, Career & Community Leaders of America (FCCLA), Future Farmers of America (FFA), Health Occupations Students of America (HOSA), SkillsUSA, and Technology Student Association (TSA)			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			


Career Cluster: Education & Training				CTE Secondary Program: Early Childhood Education Middle School Program: Family and Consumer Science				
Offered at: East Ridge High School and Lake Minneola High School				Industry Certification: Child Development Associate (CDA); ServSafe®; NRFSP				
	16 CORE CURRICULUM CREDITS					8 ADDITIONAL CREDITS		
	ENGLISH 4 credits	MATH 4 credits	SCIENCE 3 credits, 2 with lab	SOCIAL STUDIES 3 credits	OTHER REQUIRED COURSES FINE ARTS (1 credit) HOPE (1 credit)	CAREER AND TECHNICAL EDUCATION COURSES	RECOMMENDED ELECTIVES (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
HIGH SCHOOL	<ul style="list-style-type: none"><li>SIXTEEN CORE CURRICULUM CREDITS - One course within the 24 credit program must be an online course.</li><li>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="http://mycareershines.org">mycareershines.org</a></li><li>Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.</li><li>Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	9 <sup>th</sup>	English I	Algebra I	Biology	Social Studies Elective	HOPE	Early Childhood Education 1	Foreign Language for SUS admission or other elective appropriate for student's career and education plan.
	10 <sup>th</sup>	English II	Geometry	Chemistry	World History		Early Childhood Education 2	Foreign Language for SUS admission or other electives appropriate for student's career and education plan.
	11 <sup>th</sup>	English III	Algebra II	Anatomy & Physiology or Environ. Sciences	United States History	Practical Arts or Fine Arts course (1 credit)	Early Childhood Education 3	Other elective course appropriate for student's career and education plan.
	12 <sup>th</sup>	English IV	Probability & Statistics or Pre-Calculus	Physics	United States Government. & Economics w/Financial Literacy		Early Childhood Education 4	Other elective courses appropriate for student's career and education plan.




POST-SECONDARY	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.		
	TECHNICAL CENTER/COLLEGE PROGRAM(S)	COMMUNITY/STATE COLLEGE PROGRAM(S)	UNIVERSITY PROGRAM(S)
	<b>Certificates:</b> Child Care Center Management, Child Care Center Operations, Early Childhood Development Specialization, Principles of Teaching, School Age Professional Certificate	<b>A.S. Degrees:</b> ASL – English Interpreting. Associate in Science in Early Childhood Education; Associate in Arts, Early Childhood Pathway, Instructional Services Technology, Translation-Interpretation Studies – English-Spanish Track  <b>B.S Degree:</b> Early Childhood Education	<b>A.S. Degrees:</b> Associate in Science in Early Childhood Education; Associate in Arts, Early Childhood Pathway  <b>B.S Degree:</b> Early Childhood Education
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on approved articulations for school year 2021-22)		
	Digital Information Technology, Early Childhood Education 1, 2, and 3 to College of Central Florida’s Early Childhood Education Program option A - Credit by Assessment up to 9 credits  For a current list of local agreements, visit <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a>	<b>Secondary to College of Central Florida:</b> Up to 12 credits towards Early Childhood Education A.S. Degree	A.S. to B.S. Degree
	<b>Statewide Articulation:</b> 9 Credits for Child Development Associate (CDA) Certification (CPREC001) toward Early Childhood Education A.S. Program  For a current list of statewide agreements, visit <a href="http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml</a> and keywords: Gold Standard statewide articulation agreements		
Career and Technical Student Association			
Family, Career and Community Leaders of America (FCCLA)			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			

Career Cluster: Business, Management & Administration				CTE Secondary Program: Electronic Business Enterprise (E-Commerce) Middle School Program: Integrated Technology Studies				
Offered at: South Lake High School				Industry Certification: CompTIA ITF+; Entrepreneurship and Small Business (ESBv2)				
	16 CORE CURRICULUM CREDITS					8 ADDITIONAL CREDITS		
	ENGLISH 4 credits	MATH 4 credits	SCIENCE 3 credits, 2 with lab	SOCIAL STUDIES 3 credits	OTHER REQUIRED COURSES FINE ARTS (1 credit) HOPE (1 credit)	CAREER AND TECHNICAL EDUCATION COURSES	RECOMMENDED ELECTIVES (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
HIGH SCHOOL	<ul style="list-style-type: none"><li>SIXTEEN CORE CURRICULUM CREDITS - One course within the 24 credit program must be an online course.</li><li>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="http://mycareershines.org">mycareershines.org</a></li><li>Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.</li><li>Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	9 <sup>th</sup>	English I	Algebra I	Biology	Social Studies Elective	HOPE	Digital Information Technology	Foreign Language for SUS admission or other elective appropriate for student's career and education plan.
	10 <sup>th</sup>	English II	Geometry	Chemistry	World History		Introduction to E-Commerce	Foreign Language for SUS admission or other electives appropriate for student's career and education plan.
	11 <sup>th</sup>	English III	Algebra II	Anatomy & Physiology or Environ. Sciences	United States History	Practical Arts or Fine Arts course (1 credit)	E-Commerce Entrepreneurship	Other elective course appropriate for student's career and education plan.
	12 <sup>th</sup>	English IV	Probability & Statistics or Pre-Calculus	Physics	United States Government. & Economics w/Financial Literacy		E-Commerce Systems Analysis and Design	Other elective courses appropriate for student's career and education plan.


POST-SECONDARY	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.		
	TECHNICAL CENTER/COLLEGE PROGRAM(S)	COMMUNITY/STATE COLLEGE PROGRAM(S)	UNIVERSITY PROGRAM(S)
	<b>Certificates:</b> Accounting Operations, Administrative Office Specialist	<b>A.S. Degrees:</b> Business Administration,  <b>A.S. to B.A.S. Career Path:</b> Strategic Leadership  <b>Certificates:</b> Business Management, Business Operations, Business Specialist	<b>B.S. Degrees:</b> Accounting; Economics; Finance; Integrated Business; Management; Marketing; Real Estate  <b>M.B.A. Degree:</b> Accounting; Business Administration; Economics; Management; Real Estate; Sport Business Management
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on approved articulations for school year 2021-22)		
	<b>Secondary to Lake Technical College:</b> Digital Information Technology, Introduction to E-Commerce, E-Commerce Entrepreneurship, E- Commerce Systems Analysis and Design to Accounting Information Technology Assistant = up to 150 hours Administrative office Specialist; Information Assistant = up to 150 hours  For a current list of local agreements, visit <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a>	<b>Secondary to Lake-Sumter State College:</b> Option A (Credit by Exam) Electronic Business Enterprise (Digital Information Technology, Introduction to E-Commerce, E-Commerce Entrepreneurship)	A.A./A.S. to B.A./B.S. Degree
	<b>Statewide Articulation:</b> 3 Credits for CompTIA ITF+ Certification (COMPT018) toward Computer Information Technology program; 3 Credits for CompTIA ITF+ Certification (COMPT018) toward Computer Programming and Analysis program; 3 Credits for CompTIA ITF+ Certification (COMPT018) toward Network Systems Technology program  For a current list of statewide agreements, visit <a href="http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml</a> and keywords: Gold Standard statewide articulation agreements		
Career and Technical Student Association			
Future Business Leaders of America (FBLA)			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			

Career Cluster: Energy				CTE Secondary Program: Energy Technician Middle School Program: Integrated Technology Studies				
Offered at: Leesburg High School				Industry Certification: HBI PACT Core; HBI Core Green; HBI Electrical; HBI Carpentry				
	16 CORE CURRICULUM CREDITS					8 ADDITIONAL CREDITS		
	ENGLISH 4 credits	MATH 4 credits	SCIENCE 3 credits, 2 with lab	SOCIAL STUDIES 3 credits	OTHER REQUIRED COURSES FINE ARTS (1 credit) HOPE (1 credit)	CAREER AND TECHNICAL EDUCATION COURSES	RECOMMENDED ELECTIVES (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
HIGH SCHOOL	<ul style="list-style-type: none"><li>SIXTEEN CORE CURRICULUM CREDITS - One course within the 24 credit program must be an online course.</li><li>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="http://mycareershines.org">mycareershines.org</a></li><li>Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.</li><li>Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	9 <sup>th</sup>	English I	Algebra I	Biology	Social Studies Elective	HOPE	Energy Industry Fundamentals	Foreign Language for SUS admission or other elective appropriate for student's career and education plan.
	10 <sup>th</sup>	English II	Geometry	Chemistry	World History		Electricity 1	Foreign Language for SUS admission or other electives appropriate for student's career and education plan.
	11 <sup>th</sup>	English III	Algebra II	Anatomy & Physiology or Environ. Sciences	United States History	Practical Arts or Fine Arts course (1 credit)	Introduction to Alternative Energy	Other elective course appropriate for student's career and education plan.
	12 <sup>th</sup>	English IV	Probability & Statistics or Pre-Calculus	Physics	United States Government. & Economics w/Financial Literacy		Electricity 2	Other elective courses appropriate for student's career and education plan.

POST-SECONDARY	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.		
	TECHNICAL CENTER/COLLEGE PROGRAM(S)	COMMUNITY/STATE COLLEGE PROGRAM(S)	UNIVERSITY PROGRAM(S)
	<b>Certificates:</b> CNC Production Specialist; Building Construction Technologies; Electricity; Electronic Systems Integration & Automation; Energy Technician	<b>A.A.S. Degree:</b> Electrical Distribution Technology  <b>Certificate:</b> Electric Utility Lineworker-Basic; Electric Utility Lineworker-Advanced	<b>B.S. Degrees:</b> Aerospace Engineering; Computer Engineering; Electrical Engineering; Environmental Engineering; Industrial Engineering  <b>M.B.A. Degree:</b> Aerospace Engineering; Computer Engineering; Electrical Engineering; Engineering Management; Environmental Engineering; Industrial Engineering
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on articulations as of December 2020)		
	For a current list of local agreements, visit <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a> .	Secondary to Lake-Sumter State College: Option A (Credit by Exam) Energy Technician (Energy Industry Fundamentals, Electricity 1, Introduction to Alternative Energy, Electricity 2)	A.A./A.S to B.A./BS Degree
		For a current list of statewide agreements, visit <a href="http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml</a> and keywords: Gold Standard statewide articulation agreements.	
Career and Technical Student Association			
SkillsUSA			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			


Career Cluster: Engineering & Technology Education				CTE Secondary Program: Engineering Pathways Middle School Program: Integrated Technology Studies				
Offered at: East Ridge High School, Eustis High School				Industry Certification: Certified SolidWorks Associate (CSWA); Certified SolidWorks Professional (CSWP); Autodesk Certified User- Inventor				
	16 CORE CURRICULUM CREDITS					8 ADDITIONAL CREDITS		
	ENGLISH 4 credits	MATH 4 credits	SCIENCE 3 credits, 2 with lab	SOCIAL STUDIES 3 credits	OTHER REQUIRED COURSES FINE ARTS (1 credit) HOPE (1 credit)	CAREER AND TECHNICAL EDUCATION COURSES	RECOMMENDED ELECTIVES (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
HIGH SCHOOL	<ul style="list-style-type: none"><li>SIXTEEN CORE CURRICULUM CREDITS - One course within the 24 credit program must be an online course.</li><li>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="http://mycareershines.org">mycareershines.org</a></li><li>Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.</li><li>Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	9 <sup>th</sup>	English I	Algebra I	Biology	Social Studies Elective	HOPE	Introduction to Engineering Design	Foreign Language for SUS admission or other elective appropriate for student's career and education plan.
	10 <sup>th</sup>	English II	Geometry	Chemistry	World History		Principles of Engineering	Foreign Language for SUS admission or other electives appropriate for student's career and education plan.
	11 <sup>th</sup>	English III	Algebra II	Anatomy & Physiology or Environ. Sciences	United States History	Practical Arts or Fine Arts course (1 credit)	Digital Electronics	Other elective course appropriate for student's career and education plan.
	12 <sup>th</sup>	English IV	Probability & Statistics or Pre-Calculus	Physics	United States Government. & Economics w/Financial Literacy		Civil Engineering and Architecture, or Engineering Design & Development	Other elective courses appropriate for student's career and education plan.

POST-SECONDARY	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.		
	TECHNICAL CENTER/COLLEGE PROGRAM(S)	COMMUNITY/STATE COLLEGE PROGRAM(S)	UNIVERSITY PROGRAM(S)
	<b>Certificates:</b> CNC Production Specialist; Welding Technology	<b>A.A.S. Degree:</b> Engineering Technology substation  <b>Certificate:</b> Engineering Technology Support Specialist	<b>B.S. Degrees:</b> Aerospace Engineering; Civil Engineering; Computer Engineering; Electrical Engineering; Environmental Engineering; Industrial Engineering; Mechanical Engineering;  <b>M.B.A. Degree:</b> Aerospace Engineering; Civil Engineering; Computer Engineering; Electrical Engineering; Engineering Management; Environmental Engineering; Industrial Engineering; Mechanical Engineering; Modeling & Simulation
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on approved articulations for school year 2021-22)		
	For a current list of local agreements, visit <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a>	Secondary to Lake-Sumter State College: Option A (Credit by Exam) Engineering Pathways (Introduction to Engineering Design, Principles of Engineering, Digital Electronics or Civil Engineering and Architecture)	A.A./A.S. to B.A./B.S. Degree
		Statewide Articulation: 3 credits for Certified SolidWorks Associate Certification (SOLID003) toward Manufacturing Technology or Engineering Technology  For a current list of statewide agreements, visit <a href="http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.shtml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.shtml</a> , and keywords: Gold Standard statewide articulation agreements.	
Career and Technical Student Association			
SkillsUSA and Technology Student Association (TSA)			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			


Career Cluster: Marketing, Sales & Service				CTE Secondary Program: Entrepreneurship Middle School Program: Integrated Technology Studies				
Offered at: Eustis High School				Industry Certification: QuickBooks Certified User; Entrepreneurship and Small Business (ESBv2)				
	16 CORE CURRICULUM CREDITS					8 ADDITIONAL CREDITS		
	ENGLISH 4 credits	MATH 4 credits	SCIENCE 3 credits, 2 with lab	SOCIAL STUDIES 3 credits	OTHER REQUIRED COURSES FINE ARTS (1 credit) HOPE (1 credit)	CAREER AND TECHNICAL EDUCATION COURSES	RECOMMENDED ELECTIVES (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
HIGH SCHOOL	<ul style="list-style-type: none"><li>SIXTEEN CORE CURRICULUM CREDITS - One course within the 24 credit program must be an online course.</li><li>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="http://mycareershines.org">mycareershines.org</a></li><li>Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.</li><li>Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	9 <sup>th</sup>	English I	Algebra I	Biology	Social Studies Elective	HOPE	Principles of Entrepreneurship	Foreign Language for SUS admission or other elective appropriate for student's career and education plan.
	10 <sup>th</sup>	English II	Geometry	Chemistry	World History		Business Management and Law	Foreign Language for SUS admission or other electives appropriate for student's career and education plan.
	11 <sup>th</sup>	English III	Algebra II	Anatomy & Physiology or Environ. Sciences	United States History	Practical Arts or Fine Arts course (1 credit)	Business Ownership	Other elective course appropriate for student's career and education plan.
	12 <sup>th</sup>	English IV	Probability & Statistics or Pre-Calculus	Physics	United States Government. & Economics w/Financial Literacy		Marketing Directed Study	Other electives courses appropriate for student's career and education plan.




POST-SECONDARY	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.		
	TECHNICAL CENTER/COLLEGE PROGRAM(S)	COMMUNITY/STATE COLLEGE PROGRAM(S)	UNIVERSITY PROGRAM(S)
	<b>Certificates:</b> Accounting Operations; Administrative Office Specialist	<b>A.S. Degrees:</b> Business Administration  <b>A.S. to B.A.S. Career Path:</b> Strategic Leadership  <b>Certificates:</b> Business Management.; Business Operations; Business Specialist	<b>B.S. Degrees:</b> Accounting; Economics; Finance; Integrated Business; Management; Marketing; Real Estate  <b>M.B.A. Degree:</b> Accounting; Business Administration; Economics; Management; Real Estate; Sport Business Management
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on approved articulations for school year 2021-22)		
	<b>Secondary to Lake Technical College:</b> Principles of Entrepreneurship, Business Management and Law, Business Ownership to Accounting Information Technology Assistant = up to 150 hours; Administrative office Specialist; Information Assistant = up to 150 hours  <i>For a current list of local agreements, visit</i> <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a>	<b>Secondary to Lake-Sumter State College:</b> Option A (Credit by Exam) Entrepreneurship (Principles of Entrepreneurship, Business Management and Law, Business Ownership)	A.A./A.S to B.A./BS Degree
<b>Statewide Articulation:</b> 3 credits for QuickBooks Certified User Certification (INTUT001) toward Accounting Technology  <i>For a current list of statewide agreements, visit</i> <a href="http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml</a> <i>and keywords: Gold Standard statewide articulation agreements.</i>			
Career and Technical Student Association			
Distributive Education Clubs of America (DECA) and Future Business Leaders of America (FBLA)			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			

Career Cluster: Finance				CTE Secondary Program: Finance Middle School Program: Integrated Technology Studies				
Offered at: Lake Minneola High School				Industry Certification: CompTIA ITF+; QuickBooks Certified User				
	16 CORE CURRICULUM CREDITS					8 ADDITIONAL CREDITS		
	ENGLISH 4 credits	MATH 4 credits	SCIENCE 3 credits, 2 with lab	SOCIAL STUDIES 3 credits	OTHER REQUIRED COURSES FINE ARTS (1 credit) PHYSICAL EDUCATION (1 credit)	CAREER AND TECHNICAL EDUCATION COURSES	RECOMMENDED ELECTIVES (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
HIGH SCHOOL	<ul style="list-style-type: none"><li>SIXTEEN CORE CURRICULUM CREDITS - One course within the 24 credit program must be an online course.</li><li>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="http://mycareershines.org">mycareershines.org</a></li><li>Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.</li><li>Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	9 <sup>th</sup>	English I	Algebra I	Biology	Social Studies Elective	HOPE	Digital Information Technology	Foreign Language for SUS admission or other elective appropriate for student's career and education plan.
	10 <sup>th</sup>	English II	Geometry	Chemistry	World History		Accounting Applications 1	Foreign Language for SUS admission or other electives appropriate for student's career and education plan.
	11 <sup>th</sup>	English III	Algebra II	Anatomy & Physiology or Environ. Sciences	United States History	Practical Arts or Fine Arts course (1 credit)	Economics and Financial Services	Other elective course appropriate for student's career and education plan.
	12 <sup>th</sup>	English IV	Probability & Statistics or Pre-Calculus	Physics	United States Government. & Economics w/Financial Literacy		Personal Finance	Other elective courses appropriate for student's career and education plan.


POST-SECONDARY	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.		
	TECHNICAL CENTER/COLLEGE PROGRAM(S)	COMMUNITY/STATE COLLEGE PROGRAM(S)	UNIVERSITY PROGRAM(S)
	<b>Certificate:</b> Accounting Operations	<b>A.S. Degrees:</b> Business Administration  <b>A.S. to B.A.S. Career Path:</b> Strategic Leadership  <b>Certificates:</b> Business Management; Business Operations; Business Specialist	<b>B.S. Degrees:</b> Accounting; Economics; Finance; Integrated Business; Management; Marketing; Real Estate  <b>M.B.A. Degree:</b> Accounting; Business Administration; Economics; Management; Real Estate; Sport Business Management
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on approved articulations for school year 2021-22)		
	For a current list of local agreements, visit <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a>	Secondary to Lake-Sumter State College: Option A (Credit by Exam) Finance (Digital Information Technology, Accounting Applications 1, Economics and Financial Services, Personal Finance)	A.A./A.S to B.A./BS Degree
		Statewide Articulation: 3 Credits for CompTIA ITF+ Certification (COMPT018) toward Computer Information Technology program; 3 Credits for CompTIA ITF+ Certification (COMPT018) toward Computer Programming and Analysis program; 3 Credits for CompTIA ITF+ Certification (COMPT018) toward Network Systems Technology program; 3 credits for QuickBooks Certified User (INTUT001) toward Accounting Technology program  For a current list of statewide agreements, visit <a href="http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml</a> and keywords: Gold Standard statewide articulation agreements	
Career and Technical Student Association			
Distributive Education Clubs of America (DECA) and Future Business Leaders of America (FBLA)			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			

Career Cluster: Information Technology				CTE Secondary Program: Game/Simulation/Animation Programming Middle School Program: Integrated Technology Studies				
Offered at: Tavares High School				Industry Certification: Autodesk Certified User - MAYA				
	16 CORE CURRICULUM CREDITS					8 ADDITIONAL CREDITS		
	ENGLISH 4 credits	MATH 4 credits	SCIENCE 3 credits, 2 with lab	SOCIAL STUDIES 3 credits	OTHER REQUIRED COURSES FINE ARTS (1 credit) PHYSICAL EDUCATION (1 credit)	CAREER AND TECHNICAL EDUCATION COURSES	RECOMMENDED ELECTIVES (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
HIGH SCHOOL	<ul style="list-style-type: none"><li>SIXTEEN CORE CURRICULUM CREDITS - One course within the 24 credit program must be an online course.</li><li>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="http://mycareershines.org">mycareershines.org</a></li><li>Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.</li><li>Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	9 <sup>th</sup>	English I	Algebra I	Biology	Social Studies Elective	HOPE	Game & Simulation Foundations	Foreign Language for SUS admission or other elective appropriate for student's career and education plan.
	10 <sup>th</sup>	English II	Geometry	Chemistry	World History		Game & Simulation Design	Foreign Language for SUS admission or other electives appropriate for student's career and education plan.
	11 <sup>th</sup>	English III	Algebra II	Anatomy & Physiology or Environ. Sciences	United States History	Practical Arts or Fine Arts course (1 credit)	Game & Simulation Programming	Other elective course appropriate for student's career and education plan.
	12 <sup>th</sup>	English IV	Probability & Statistics or Pre-Calculus	Physics	United States Government. & Economics w/Financial Literacy		Multi-User Game & Simulation Programming	Other elective courses appropriate for student's career and education plan.

POST-SECONDARY	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.		
	TECHNICAL CENTER/COLLEGE PROGRAM(S)	COMMUNITY/STATE COLLEGE PROGRAM(S)	UNIVERSITY PROGRAM(S)
	<b>Certificates:</b> Accounting Operations; Administrative Office Specialist	<b>A.S. Degree:</b> Computer Information Technology  <b>A.S. to B.A.S. Career Path:</b> Strategic Leadership  <b>Certificates:</b> Information Technology Analysis; Cybersecurity	<b>B.S. Degrees:</b> Computer Engineering; Computer Science  <b>M.B.A. Degree:</b> Computer Engineering; Computer Science
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on approved articulations for school year 2021-22)		
	<b>Secondary to Lake Technical College:</b> Digital Information Tech, Game & Simulation Found, & Game & Simulation Design to Computer Information Technology to Accounting Information Tech Assistant = up to 150 hours; Administration Office Specialist or Information Tech Assistant = up to 150 hours  For a current list of local agreements, visit <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a>	<b>Secondary to Lake-Sumter State College:</b> Option A (Credit by Exam) Game/Simulation/Animation Programming (Game & Simulation Foundations; Game & Simulation Design; Game & Simulation Programming; Multi-User Game & Simulation Programming)	A.A./A.S to B.A./BS Degree
		<b>Statewide Articulation:</b> 9 credits for Autodesk Certified User – MAYA Certification (ADESK030) toward Game Development Design program  For a current list of statewide agreements, visit <a href="http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml</a> and keywords: Gold Standard statewide articulation agreements	
Career and Technical Student Association			
Future Business Leaders of America (FBLA)			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			


Career Cluster: Agriculture, Food and Natural Resources				CTE Secondary Program: Horticulture Science and Services Middle School Program: Introduction to Agriscience				
Offered at: Leesburg High School, South Lake High School, and Umatilla High School				Industry Certification: Certified Horticulture Professional; Agritechnology Specialist Certification; Agricultural Communications Specialist Certification; Agricultural Mechanics Specialist Certification				
	16 CORE CURRICULUM CREDITS					8 ADDITIONAL CREDITS		
	ENGLISH 4 credits	MATH 4 credits	SCIENCE 3 credits, 2 with lab	SOCIAL STUDIES 3 credits	OTHER REQUIRED COURSES FINE ARTS (1 credit) PHYSICAL EDUCATION (1 credit)	CAREER AND TECHNICAL EDUCATION COURSES	RECOMMENDED ELECTIVES (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
HIGH SCHOOL	<ul style="list-style-type: none"><li>SIXTEEN CORE CURRICULUM CREDITS - One course within the 24 credit program must be an online course.</li><li>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="http://mycareershines.org">mycareershines.org</a></li><li>Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.</li><li>Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	9 <sup>th</sup>	English I	Algebra I	Biology	Social Studies Elective	HOPE	Agriscience Foundations	Foreign Language for SUS admission or other elective appropriate for student's career and education plan.
	10 <sup>th</sup>	English II	Geometry	Chemistry	World History		Introductory Horticulture 2	Foreign Language for SUS admission or other electives appropriate for student's career and education plan.
	11 <sup>th</sup>	English III	Algebra II	Anatomy & Physiology or Environ. Sciences	United States History	Practical Arts or Fine Arts course (1 credit)	Horticulture Science 3, Horticulture Science & Services 4	Other elective course appropriate for student's career and education plan.
	12 <sup>th</sup>	English IV	Probability & Statistics or Pre-Calculus	Physics	United States Government. & Economics w/Financial Literacy		Horticulture Science and Services 5 & 6	Other elective courses appropriate for student's career and education plan.

POST-SECONDARY	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.		
	TECHNICAL CENTER/COLLEGE PROGRAM(S)	COMMUNITY/STATE COLLEGE PROGRAM(S)	UNIVERSITY PROGRAM(S)
	This program leads to a broad range of postsecondary career pathways in all sectors of the agriculture and related industries	<b>A.S. Degrees:</b> Agribusiness Management  <b>Certificates:</b> Horticulture)	<b>B.S. Degrees:</b> Agriculture Education & Communication; Agriculture Operations Management; Animal Sciences; Environmental Management in Agriculture & Natural Resources; Horticultural Science; Nutritional Sciences; Plant Science  <b>M.S. Degrees:</b> Agricultural & Biological Engineering; Animal Sciences; Food Science; Genetics & Genomics; Horticultural Sciences
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on approved articulations for school year 2021-22)		
	<i>For a current list of local agreements, visit <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a></i>	<b>Secondary to College of Central Florida:</b> Option A (Credit by Exam) Horticulture Science and Services (Agriscience Foundations 1, Introductory Horticulture 2, Horticulture Science 3, Horticulture Science and Services 4, 5 & 6) up to 9 credits toward Agribusiness Management A.S. program	A.A./A.S. to B.A./B.S. Degree
	<b>Statewide Articulation:</b> 3 credits for Agritechnology Specialist certification (FLFBR001) toward Agricultural Production Technology program; 6 credits for Certified Horticulture Professional (FNGLA001) certification toward Landscape and Horticulture Technology program  <i>For a current list of statewide agreements, visit <a href="http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml</a>, and keywords: Gold Standard statewide articulation agreements.</i>		
Career and Technical Student Association			
Future Farmers of America (FFA)			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			


Career Cluster: Marketing, Sales & Service				CTE Secondary Program: Marketing, Management and Entrepreneurial Principles Middle School Program: Integrated Technology Studies				
Offered at: East Ridge High School, Mount Dora High School				Industry Certification: Entrepreneurship and Small Business (ESBv2); CIW-Social Media Strategist				
	16 CORE CURRICULUM CREDITS					8 ADDITIONAL CREDITS		
	ENGLISH 4 credits	MATH 4 credits	SCIENCE 3 credits, 2 with lab	SOCIAL STUDIES 3 credits	OTHER REQUIRED COURSES FINE ARTS (1 credit) PHYSICAL EDUCATION (1 credit)	CAREER AND TECHNICAL EDUCATION COURSES	RECOMMENDED ELECTIVES (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
HIGH SCHOOL	<ul style="list-style-type: none"><li>SIXTEEN CORE CURRICULUM CREDITS - One course within the 24 credit program must be an online course.</li><li>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="http://mycareershines.org">mycareershines.org</a></li><li>Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.</li><li>Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	9 <sup>th</sup>	English I	Algebra I	Biology	Social Studies Elective	HOPE	Marketing Essentials	Foreign Language for SUS admission or other elective appropriate for student's career and education plan.
	10 <sup>th</sup>	English II	Geometry	Chemistry	World History		Marketing Applications	Foreign Language for SUS admission or other electives appropriate for student's career and education plan.
	11 <sup>th</sup>	English III	Algebra II	Anatomy & Physiology or Environ. Sciences	United States History	Practical Arts or Fine Arts course (1 credit)	Marketing Management	Other elective course appropriate for student's career and education plan.
	12 <sup>th</sup>	English IV	Probability & Statistics or Pre-Calculus	Physics	United States Government. & Economics w/Financial Literacy		Business Ownership	Other elective courses appropriate for student's career and education plan.




POST-SECONDARY	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.		
	TECHNICAL CENTER/COLLEGE PROGRAM(S)	COMMUNITY/STATE COLLEGE PROGRAM(S)	UNIVERSITY PROGRAM(S)
	<b>Certificates:</b> Accounting Operations; Administrative Office Specialist	<b>A.S. Degrees:</b> Business Administration  <b>A.S. to B.A.S. Career Path:</b> Strategic Leadership  <b>Certificates:</b> Business Management; Business Operations; Business Specialist	<b>B.S. Degrees:</b> Accounting; Economics; Finance; Integrated Business; Management; Marketing; Real Estate  <b>M.B.A. Degree:</b> Accounting; Business Administration; Economics; Management; Real Estate; Sports Business Management
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on approved articulations for school year 2021-22)		
	<b>Secondary to Lake Technical College:</b>  Marketing Essentials, Marketing Applications, Marketing Management & Business Ownership to Accounting Information Tech Assistant up to 150 hours; Administration Office Specialist, Information Technology Assistant up to 150 hours  <i>For a current list of local agreements, visit</i> <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a>	<b>Secondary to Lake-Sumter State College:</b> Option A (Credit by Exam) Marketing, Management and Entrepreneurial Principles (Marketing Essentials, Marketing Applications, Marketing Management, Business Ownership)	A.A./A.S to B.A./BS Degree
		<b>Statewide Articulation:</b> 3 Credits for MOS Bundle (3 of 6) Certification (MICRO069) toward an Office Administration program  <i>For a current list of statewide agreements, visit</i> <a href="http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml</a> , <i>and keywords: Gold Standard statewide articulation agreements.</i>	
Career and Technical Student Association			
Distributive Education Clubs of America (DECA) and Future Business Leaders of America (FBLA)			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			

Career Cluster: Health Science				CTE Secondary Program: Nursing Assistant (Acute and Long Term Care) Middle School Program: Health Science				
Offered at: East Ridge High School, Lake Minneola High School, Leesburg High School, South Lake High School, Tavares High School				Industry Certification: Certified Nursing Assistant (CNA); CMAA; Certified EKG Technician (CET)				
	16 CORE CURRICULUM CREDITS					8 ADDITIONAL CREDITS		
	ENGLISH 4 credits	MATH 4 credits	SCIENCE 3 credits, 2 with lab	SOCIAL STUDIES 3 credits	OTHER REQUIRED COURSES FINE ARTS (1 credit) PHYSICAL EDUCATION (1 credit)	CAREER AND TECHNICAL EDUCATION COURSES	RECOMMENDED ELECTIVES (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
HIGH SCHOOL	<ul style="list-style-type: none"><li>SIXTEEN CORE CURRICULUM CREDITS - One course within the 24 credit program must be an online course.</li><li>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="http://mycareershines.org">mycareershines.org</a></li><li>Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.</li><li>Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	9 <sup>th</sup>	English I	Algebra I	Biology	Social Studies Elective	HOPE	Health Science Anatomy and Physiology	Foreign Language for SUS admission or other elective appropriate for student's career and education plan.
	10 <sup>th</sup>	English II	Geometry	Chemistry	World History		Health Science Foundations	Foreign Language for SUS admission or other electives appropriate for student's career and education plan.
	11 <sup>th</sup>	English III	Algebra II	Anatomy & Physiology or Environ. Sciences	United States History	Practical Arts or Fine Arts course (1 credit)	Allied Health Assisting 3 (recommended)	Other elective course appropriate for student's career and education plan.
	12 <sup>th</sup>	English IV	Probability & Statistics or Pre-Calculus	Physics	United States Government. & Economics w/Financial Literacy		Nursing Assistant 3	Other elective courses appropriate for student's career and education plan.


POST-SECONDARY	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.		
	TECHNICAL CENTER/COLLEGE PROGRAM(S)	COMMUNITY/STATE COLLEGE PROGRAM(S)	UNIVERSITY PROGRAM(S)
	<b>Certificates:</b> Emergency Medical Technician; Medical Assisting (CNA – Long Term Care); Paramedic; Pharmacy Technician; Phlebotomy; Practical Nursing	<b>A.S. Degree:</b> Clinical Research Professional; Emergency Medical Services; Health Information Technology; Medical Lab Technology; Nursing; Occupational Therapist; Physical Therapist; Respiratory Care  <b>A.S. to B.S. Career Path:</b> Nursing  <b>Certificate Programs:</b> Medical Information Coder/Biller; Medical Office Management	<b>B.S.N Degrees:</b> Nursing (Accelerated Second Degree); Nursing RN (Concurrent ASN to BSN ; AS to BS)  <b>M.S. Degrees:</b> Nursing; Biomedical; Biotechnology  <b>M.S.N Degrees:</b> Nursing (Nursing & Health Care Simulation; Nurse Educator; Nursing Leadership & Management)
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on approved articulations for school year 2021-22)		
	<b>Secondary to Lake Technical College:</b> Health Science 1, Health Science 2, and Nursing Assistant 3 to Medical Assisting=90 hours Basic Health Care Worker to Medical Assisting, or Pharmacy Technician, or Patient Care Technician Programs  <i>For a current list of local agreements, visit</i> <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a>	<b>Secondary to Lake Sumter State College:</b> <b>Option A (Credit by Exam)</b> Nursing Assistant (Health Science Anatomy & Physiology, Health Science Foundations, Nursing Assistant 3); Nursing RN (AS Degree) – 1 preferred placement point, or up to 12 credits for AS in Health Services Management, or CCC in Medical Information Coder/Biller, or CCC in Medical Office Management	A.A./A.S to B.A./BS Degrees
<i>For a current list of statewide agreements, visit</i> <a href="http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml</a> <i>and keywords: Gold Standard statewide articulation agreements</i>			
Career and Technical Student Association			
Health Occupations Students of America (HOSA)			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			

Career Cluster: Education and Training					CTE Secondary Program: Principles of Teaching Middle School Program: Family and Consumer Science				
Offered at: Tavares High School					Industry Certification: CIW–Social Media Strategist				
	16 CORE CURRICULUM CREDITS					6 ADDITIONAL CREDITS			
	ENGLISH 4 credits	MATH 4 credits	SCIENCE 3 credits (2 with lab)	SOCIAL STUDIES 3 credits	OTHER REQUIRED COURSES 4 credits	CAREER AND TECHNICAL EDUCATION COURSES 4 credits	RECOMMENDED ELECTIVES (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	OBSERVATION AND FIELD EXPERIENCE HOURS Students can earn hours at any elementary school, middle school, or high school.	
HIGH SCHOOL	<ul style="list-style-type: none"><li>SIXTEEN CORE CURRICULUM CREDITS - One course within the 24 credit program must be an online course.</li><li>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="http://mycareershines.org">mycareershines.org</a></li><li>Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.</li><li>Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>								
	9 <sup>th</sup>	English I Honors	Algebra I or Geometry	Biology Or Earth Space Honors	AP Human Geography	HOPE	Introduction to the Teaching Profession	Other elective course appropriate for student’s career and education plan.	Student must acquire 200 hours of documented field experience and guided observations in grades PK-12 in an educational setting while enrolled in the Principles of Teaching program. Field experience hours can be earned in a variety of settings, such as academic classrooms, CTE classrooms, ESE classrooms or an adult classroom.
	10 <sup>th</sup>	English II Honors	Geometry or Algebra II	Chemistry	AP World History	Practical Arts Or Fine Arts Course	Human Growth and Development		
	11 <sup>th</sup>	AP Language or ENC 1101	Algebra II or Pre-Calculus	Physics	AP United States History	Foreign Language	Foundations of Curriculum and Instruction	Other elective course appropriate for student’s career and education plan.	
	12 <sup>th</sup>	AP Literature or ENC 1102	Pre-Calculus or AP Calculus	AP Chemistry, AP Biology, AP Physics, or AP Env. Sci.	AP United States Government/Politics & AP Macro/Micro Economics	Foreign Language	Principles of Teaching Internship	Other elective course appropriate for student’s career and education plan.	

POST-SECONDARY	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.		
	TECHNICAL CENTER/COLLEGE PROGRAM(S)	COMMUNITY/STATE COLLEGE PROGRAM(S)	UNIVERSITY PROGRAM(S)
	<b>Certificates:</b> Child Care Center Operations, Early Childhood Professional Certificate; School Age Professional Certificate	<b>A.S. Degrees:</b> ASL English Interpreting Associate; Sports, Fitness, & Recreation Management AS; Associate in Science in Early Childhood Education; Associate in Arts, Early Childhood Pathway  <b>B.S Degree:</b> Early Childhood Education  <b>Certificates:</b> Child Care Center Management; Early Childhood Development Specialization	<b>B.S. Degree in Education:</b> Elementary Education; Exceptional Student Education; Secondary Education <b>M.Ed. Degree:</b> Educational Leadership; Elementary Education; Exceptional Student Education; Secondary Education
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on approved articulations for school year 2021-22)		
	<i>For a current list of local agreements, visit</i> <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a>	<b>Secondary to College of Central Florida:</b> Up to 6 credits for Early Childhood Education A.S. Degree	A.A./A.S. to B.A./B.S. Degree
	<i>For a current list of statewide agreements, visit</i> <a href="http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml</a> <i>and keywords: Gold Standard statewide articulation agreements</i>		
Career and Technical Student Association			
Florida Future Educators of America (FFEA) and Florida Public Service Association, Inc. (FPSA)			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			


Career Cluster: Business Management & Administration				CTE Secondary Program: Promotional Enterprise Middle School: Integrated Technology Studies				
Offered At: Tavares High School				Industry Certification: CompTIA ITF+; Adobe Certified Profession in Visual Design; Entrepreneurship and Small Business (ESBv2)				
	16 CORE CURRICULUM CREDITS					8 ADDITIONAL CREDITS		
	ENGLISH 4 credits	MATH 4 credits	SCIENCE 3 credits, 2 with lab	SOCIAL STUDIES 3 credits	OTHER REQUIRED COURSES FINE ARTS (1 credit) HOPE (1 credit)	CAREER AND TECHNICAL EDUCATION COURSES	RECOMMENDED ELECTIVES (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
HIGH SCHOOL	<ul style="list-style-type: none"><li>SIXTEEN CORE CURRICULUM CREDITS - One course within the 24 credit program must be an online course.</li><li>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="http://mycareershines.org">mycareershines.org</a></li><li>Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.</li><li>Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	9 <sup>th</sup>	English I	Algebra I	Biology	Social Studies Elective	HOPE	Digital Information Technology	Foreign Language for SUS admission or other elective appropriate for student's career and education plan.
	10 <sup>th</sup>	English II	Geometry	Chemistry	World History		Custom Promotional Layout Design	Foreign Language for SUS admission or other electives appropriate for student's career and education plan.
	11 <sup>th</sup>	English III	Algebra II	Anatomy & Physiology or Environ. Sciences	United States History	Practical Arts or Fine Arts course (1 credit)	Promotional Design Management	Other elective course appropriate for student's career and education plan.
	12 <sup>th</sup>	English IV	Probability & Statistics or Pre-Calculus	Physics	United States Government. & Economics w/Financial Literacy		Custom Promotional Sales & Distribution Management / Promotional Business Management & Supervision 1	Other elective courses appropriate for student's career and education plan.

POST-SECONDARY	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.		
	TECHNICAL CENTER/COLLEGE PROGRAM(S)	COMMUNITY/STATE COLLEGE PROGRAM(S)	UNIVERSITY PROGRAM(S)
	Certificate: Accounting; Administrative Office Specialist	A.S. Degrees: Business Administration  A.S. to B.A.S Career Path: Strategic Leadership  Certificates: Business Management; Business Operations; Business Specialist	B.A. Degree: Art - Emerging Media; Visual Arts & Emerging Media Management; Marketing
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on approved articulations for school year 2021-22)		
	For a current list of local agreements, visit <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a>	Secondary to College of Central Florida: Up to 3 credits towards Business Administration A.S. Degree	A.A./A.S to B.A./BS Degree
		Statewide Articulation:  3 Credits for CompTIA ITF+ Certification (COMPT018) toward Computer Information Technology program; 3 Credits for CompTIA ITF+ Certification (COMPT018) toward Computer Programming and Analysis program; 3 Credits for CompTIA ITF+ Certification (COMPT018) toward Network Systems Technology program; 3 Credits for Adobe Certified Profession in Visual Design (ADOBE024) towards Graphics Technology program  For a current list of statewide agreements, visit <a href="http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml</a> , and keywords: Gold Standard statewide articulation agreements	
Career and Technical Student Association			
Future Business Leaders of America (FBLA)			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			


Career Cluster: Arts, A/V Technology & Communication				CTE Secondary Program: Television Production Technology Middle School Program: Integrated Technology Studies				
Offered at: East Ridge High School, Eustis High School, Lake Minneola High School				Industry Certification: Adobe Certified Professional in Video Design				
	16 CORE CURRICULUM CREDITS					8 ADDITIONAL CREDITS		
	ENGLISH 4 credits	MATH 4 credits	SCIENCE 3 credits, 2 with lab	SOCIAL STUDIES 3 credits	OTHER REQUIRED COURSES FINE ARTS (1 credit) PHYSICAL EDUCATION (1 credit)	CAREER AND TECHNICAL EDUCATION COURSES	RECOMMENDED ELECTIVES (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
HIGH SCHOOL	<ul style="list-style-type: none"><li>SIXTEEN CORE CURRICULUM CREDITS - One course within the 24 credit program must be an online course.</li><li>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="http://mycareershines.org">mycareershines.org</a></li><li>Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.</li><li>Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	9 <sup>th</sup>	English I	Algebra I	Biology	Social Studies Elective	HOPE	Television Production 1	Foreign Language for SUS admission or other elective appropriate for student's career and education plan.
	10 <sup>th</sup>	English II	Geometry	Chemistry	World History		Television Production 2	Foreign Language for SUS admission or other electives appropriate for student's career and education plan.
	11 <sup>th</sup>	English III	Algebra II	Anatomy & Physiology or Environ. Sciences	United States History	Practical Arts or Fine Arts course (1 credit)	Television Production 3 & 4	Other elective course appropriate for student's career and education plan.
	12 <sup>th</sup>	English IV	Probability & Statistics or Pre-Calculus	Physics	United States Government. & Economics w/Financial Literacy		Television Production 5 & 6	Other elective courses appropriate for student's career and education plan.



POST-SECONDARY	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.		
	TECHNICAL CENTER/COLLEGE PROGRAM(S)	COMMUNITY/STATE COLLEGE PROGRAM(S)	UNIVERSITY PROGRAM(S)
	<b>Certificates:</b> Digital Audio Production; Digital Cinema Production; Digital Media/Multimedia Design; Digital Video Technology	<b>A.A.S. Degree:</b> Digital Media; Digital Cinema & Television Production; Sports & Media Track Pathway; Telecommunications Media & Society Pathway; Visual Arts & Emerging Media Management Pathway; Radio-Television Pathway  <b>Certificate:</b> Digital & Interactive Media Design; Animation & Visual Effects; Stage Technology; Video Editing & Post Production; Digital Video Fundamentals	<b>B.A. Degrees:</b> Digital Media; Emerging Media; Film; Writing & Rhetoric  <b>M.A. Degrees:</b> Emerging Media
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on approved articulations for school year 2021-22)		
	<b>Secondary to Pasco County (Marchman):</b> Up to 450 hours towards Digital Cinema Production Program  <i>For a current list of local agreements, visit</i> <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a>	<i>At the time of publication, there was no local articulation agreement for this program.</i> <i>For a current list of local agreements visit</i> <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a>	A.A./A.S. to B.A./B.S. Degree
CREDIT	<b>Statewide Articulation:</b> 3 credits for Adobe Certified Professional in Video Design (ADOBE023) toward Film Production Technology program; 3 credits for Adobe Certified Professional in Video Design (ADOBE023) toward Radio and Television Broadcast Programming program  <i>For a current list of statewide agreements, visit</i> <a href="http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml</a> <i>and keywords: Gold Standard statewide articulation agreements</i>		
	<b>Career and Technical Student Association</b> SkillsUSA <b>Internship/Work Experience Recommendations</b> Job shadowing, on-the-job training, and professional organization experiences.		

Career Cluster: Transportation, Distribution & Logistics				CTE Secondary Program: Unmanned Aircraft Systems (UAS) Operations Middle School Program: Integrated Technology Studies				
Offered at: East Ridge High School				Industry Certification: Small UAS (sUAS) Safety Certification: Level 1; Visual Line of Sight System Operator (VSO) Ground				
	16 CORE CURRICULUM CREDITS					8 ADDITIONAL CREDITS		
	ENGLISH 4 credits	MATH 4 credits	SCIENCE 3 credits, 2 with lab	SOCIAL STUDIES 3 credits	OTHER REQUIRED COURSES FINE ARTS (1 credit) HOPE (1 credit)	CAREER AND TECHNICAL EDUCATION COURSES	RECOMMENDED ELECTIVES (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
HIGH SCHOOL	<ul style="list-style-type: none"><li>SIXTEEN CORE CURRICULUM CREDITS - One course within the 24 credit program must be an online course.</li><li>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="http://mycareershines.org">mycareershines.org</a></li><li>Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.</li><li>Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	9 <sup>th</sup>	English I	Algebra I	Biology	Social Studies Elective	HOPE	Private Pilot Ground School	Foreign Language for SUS admission or other elective appropriate for student's career and education plan.
	10 <sup>th</sup>	English II	Geometry	Chemistry	World History		Unmanned Aircraft Systems (UAS) Operations 1	Foreign Language for SUS admission or other electives appropriate for student's career and education plan.
	11 <sup>th</sup>	English III	Algebra II	Anatomy & Physiology or Environ. Sciences	United States History	Practical Arts or Fine Arts course (1 credit)	Unmanned Aircraft Systems (UAS) Operations 2	Other elective course appropriate for student's career and education plan.
	12 <sup>th</sup>	English IV	Probability & Statistics or Pre-Calculus	Physics	United States Government. & Economics w/Financial Literacy		Unmanned Aircraft Systems (UAS) Operations 3	Other elective courses appropriate for student's career and education plan.

POST-SECONDARY	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.		
	TECHNICAL CENTER/COLLEGE PROGRAM(S)	COMMUNITY/STATE COLLEGE PROGRAM(S)	UNIVERSITY PROGRAM(S)
	This program leads to a broad range of postsecondary career pathways in all sectors of the information technology industries.	<b>A.S. Degrees:</b> Aviation Administration; Aviation Maintenance Management; Unmanned Vehicle Systems Operations  <b>Certificates:</b> Air Cargo Management; Airline Maintenance Procedures Records Management; Aviation Airframe Mechanics; Logistics & Transportation Specialist, C.C.C.	<b>B.S. Degrees:</b> Unmanned Aircraft Systems; Unmanned Aircraft Systems Science; Unmanned Systems Applications  <b>M.B.A. Degree:</b> Unmanned & Autonomous Systems Engineering; Unmanned Systems
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on approved articulations for school year 2021-22)		
	For a current list of local agreements, visit <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a>	At the time of publication, there was no local articulation agreement for this program. For a current list of local agreements visit <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a>	A.A./A.S. to B.A./B.S. Degree
		Statewide Articulation: 1 credit for Small UAS (sUAS) Safety Certification (USINS001) toward Professional Pilot Technology  For a current list of statewide agreements, visit <a href="http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml</a> , and keywords: Gold Standard statewide articulation agreements	
Career and Technical Student Association			
SkillsUSA and Technology Student Association (TSA)			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			

Career Cluster: Information Technology				CTE Secondary Program: Web Development Middle School Program: Integrated Technology Studies				
Offered at: Umatilla High School				Industry Certification: CompTIA ITF+; CIW–User Interface Designer				
	16 CORE CURRICULUM CREDITS					8 ADDITIONAL CREDITS		
	ENGLISH 4 credits	MATH 4 credits	SCIENCE 3 credits, 2 with lab	SOCIAL STUDIES 3 credits	OTHER REQUIRED COURSES FINE ARTS (1 credit) HOPE (1 credit)	CAREER AND TECHNICAL EDUCATION COURSES	RECOMMENDED ELECTIVES (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
HIGH SCHOOL	<ul style="list-style-type: none"><li>SIXTEEN CORE CURRICULUM CREDITS - One course within the 24 credit program must be an online course.</li><li>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="http://mycareershines.org">mycareershines.org</a></li><li>Students are also encouraged to participate in dual enrollment courses which may be used to satisfy high school graduation or Bright Futures Gold Seal Vocational Scholars course requirements.</li><li>Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	9 <sup>th</sup>	English I	Algebra I	Biology	Social Studies Elective	HOPE	Digital Information Technology	Foreign Language for SUS admission or other elective appropriate for student’s career and education plan.
	10 <sup>th</sup>	English II	Geometry	Chemistry	World History		Foundations of Web Design	Foreign Language for SUS admission or other electives appropriate for student’s career and education plan.
	11 <sup>th</sup>	English III	Algebra II	Anatomy & Physiology or Environ. Sciences	United States History	Practical Arts or Fine Arts course (1 credit)	User Interface Design; Web Scripting Fundamentals	Other elective course appropriate for student’s career and education plan.
	12 <sup>th</sup>	English IV	Probability & Statistics or Pre-Calculus	Physics	United States Government. & Economics w/Financial Literacy		Media Integration Essentials; E-Commerce & Marketing Essentials	Other elective courses appropriate for student’s career and education plan.

POST-SECONDARY	Based on the Career Cluster of interest and identified career and technical education program, the following postsecondary options are available.		
	TECHNICAL CENTER/COLLEGE PROGRAM(S)	COMMUNITY/STATE COLLEGE PROGRAM(S)	UNIVERSITY PROGRAM(S)
	This program leads to a broad range of postsecondary career pathways in all sectors of the information technology industries.	<b>A.S. Degree:</b> Computer Information Technology  <b>A.S. to B.S. Career Path:</b> Strategic Leadership  <b>Certificate:</b> Digital Forensics, Help Desk Support Technician, Information Technology Support Specialist, Information Technology Analysis	<b>B.A. &amp; B.S. Degrees:</b> Emerging Media; Computer Science; Marketing  <b>M.A &amp; M.S. Degrees:</b> Emerging Media; Computer Science
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on approved articulations for school year 2021-22)		
	<b>Secondary to Lake Technical College:</b> Digital Information Technology, Foundation of Web Design and User Interface Design to Accounting= up to 150 hours Information Technology; Administrative Office Specialist= up to 150 hours Information Technology Assistant  <i>For a current list of local agreements, visit</i> <a href="https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations</a>	<b>Secondary to Lake-Sumter State College:</b> Option A (Credit by Exam) Web Development (Digital Information Technology, Foundations of Web Design, User Interface Design)	A.A./A.S. to B.A./B.S. Degree
		<b>Statewide Articulation:</b> 3 Credits for CompTIA ITF+ Certification (COMPT018) toward Computer Information Technology program; 3 Credits for CompTIA ITF+ Certification (COMPT018) toward Computer Programming and Analysis program; 3 Credits for CompTIA ITF+ Certification (COMPT018) toward Network Systems Technology program; 3 credits for Adobe Certified Associate – Dreamweaver Certification (ADOBE010) towards Internet Services Technology program; 3 credits for Adobe Certified Associate – Flash/Animate Certification (ADOBE 011) towards Internet Services Technology program  <i>For a current list of statewide agreements, visit</i> <a href="http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stml</a> <i>and keywords: Gold Standard statewide articulation agreements.</i>	
Career and Technical Student Association			
Future Business Leaders of America (FBLA)			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			

