



# College and Career Readiness

**Planning Guide**

**School Board of Lake County,  
Florida**

[www.lake.k12.fl.us](http://www.lake.k12.fl.us)

## **Our Mission Statement**

**The College and Career Readiness department is committed to empowering all students through enhanced acceleration opportunities which include advanced studies, improved digital literacy, and career and technical education that articulates to post-secondary education and the workplace.**





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

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# Advanced Studies & Dual Enrollment Program Descriptions

Program	Description
<p style="text-align: center;"><b><u>AICE</u></b></p> <p style="text-align: center;">(Advanced International Certificate of Education)</p> <div data-bbox="260 440 588 553">  <p><b>CAMBRIDGE</b> International Examinations <i>Excellence in education</i></p> </div> <p><b>Offered at:</b></p> <ul style="list-style-type: none"> <li>• Leesburg High</li> <li>• Umatilla High</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.</p> <p>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>
<div data-bbox="170 724 682 886">  <p><b>CollegeBoard</b> Advanced Placement Program</p> </div> <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>
<div data-bbox="233 1000 632 1146">  <p><b>AP Capstone™</b> CollegeBoard</p> </div> <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 schoolwide 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 (Mount Dora High is located on-site)</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>



## 2020-2021 HIGH SCHOOL Advanced Placement Courses

PROGRAM	EAST RIDGE	EUSTIS	LAKE MINNEOLA	LEESBURG	MT. DORA	SOUTH LAKE	TAVARES	UMATILLA
AP Art History	•							
AP Biology	•	•	•	•	•	•	•	
AP Calculus AB	•	•	•	•	•	•	•	•
AP Calculus BC	•				•	•	•	
AP Chemistry	•	•				•		
AP Comparative Government and Politics	•							
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 French Language and Culture	•							
AP Human Geography	•	•	•	•	•	•	•	•
AP Macroeconomics	•		•		•	•		
AP Microeconomics	•	•						
AP Music Theory	•		•					•
AP Physics 1	•	•		•				
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	•	•	•	•	•	•	•	•
AP World History: Modern	•	•	•	•	•	•	•	•



**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 (0610) Grade 09-10**

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— Chemistry (0620) Grade 09-10**

The Cambridge IGCSE Chemistry syllabus enables 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 Chemistry 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, skills 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. 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 (0500) Grade 09-10**

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 (0486) Grade 09-10**

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.



### **Cambridge IGCSE— Global Perspectives (0457) Grade 09-10**

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— Mathematics (0580) Grade 09-10**

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 (9700) Grade 10**

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.

## **Cambridge International AS Level English Language (9093) Grade 10**

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

## **Cambridge International AS Level English – Literature (9695) Grade 11**

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 Global Perspectives and Research (9239) Grade 11**

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

### **Cambridge International AS Level European History (9389) Grade 10**

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.



### **Cambridge International AS Level Spanish - Language (8685) Grade 11**

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 US History (9389) Grade 11**

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.



## 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.

A photograph showing three students in a classroom. One student in the foreground is leaning over a large pink poster on a table, writing with a pink marker. The poster has the title 'BRAIN POWER' at the top and several lines of text below it. Another student is visible in the background, standing and looking towards the camera. A third student is partially visible in the foreground, also working on the poster. The classroom environment includes shelves with books and other materials in the background.



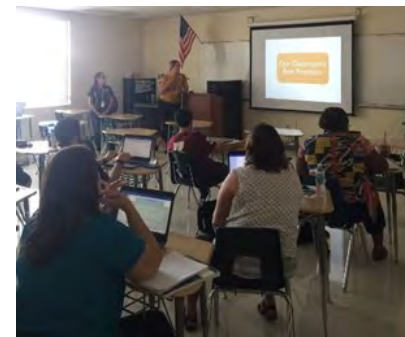
The **AP Chemistry** course is designed to be the equivalent of the general chemistry course usually taken during the first college year. The goal is that students will take the AP Exam to receive college credit or placement at the student's college of choice. Students may be able to undertake second-year 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.

The **AP** course in **Comparative Government and Politics** is equivalent to a one-semester introductory college course in comparative government and politics. AP Comparative Government and Politics introduces students to the rich diversity of political life outside the United States. The course uses a comparative approach to examine the political structures; policies; and political, economic, and social challenges of six selected countries: China, Iran, Mexico, Nigeria, Russia, and the United Kingdom. Students compare the effectiveness of approaches to many global issues by examining how different governments solve similar problems. They will also engage in disciplinary practices that require them to read and interpret data, make comparisons and applications, and develop evidence-based arguments.





**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 CS1 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.

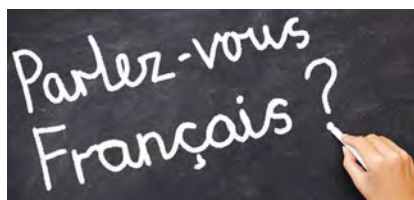


The **AP English Literature and Composition** course aligns to an introductory college-level literary analysis course. The course engages students in the close reading and critical analysis of imaginative literature to deepen their understanding of the ways writers use language to provide both meaning 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.



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 throughout the course 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 French 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 French 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 French.

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 geographers use in their research and applications. The curriculum reflects the goals of the National Geography Standards (2012).



# Advanced Placement Course Descriptions

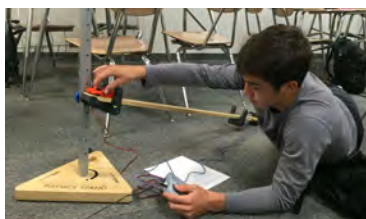
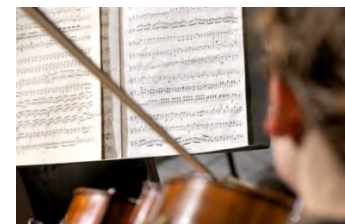
**AP Macroeconomics** is an introductory college-level course that focuses on the principles that apply to an economic system as a whole. The course places particular emphasis on the study of national income and price-level determination; it also develops students' familiarity with economic performance 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.



**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.

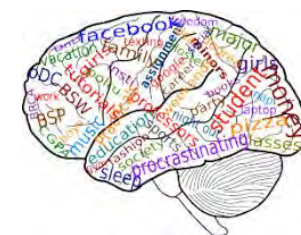


**AP Music Theory** corresponds to two semesters of a typical introductory college music theory course covering topics such as musicianship, theory, musical materials, and procedures. Students develop the ability to recognize, understand, and describe basic materials and processes of music that are heard 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 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.







**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.





**AP Studio Art: 2-D Design** — The AP Studio Art 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.



**AP Studio Art: 3-D Design** — The AP Studio Art 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.

**AP Studio Art: Drawing** — The AP Studio Art 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 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.





**AP U.S. Government and Politics** — This 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.

**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 throughout the course 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 throughout the course 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.



## What is Career & Technical Education (CTE)?

- **Career and Technical Education (CTE)** teaches students job skills and the relevance of academics in the real world.
- Lake County Schools offers **28 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**.
  - ⇒ **qualify for articulated college credits at no cost**.

**CTE students graduate high school prepared for continuing education and the world of work!**





## 2020-2021 HIGH SCHOOL CAREER-TECHNICAL EDUCATION PROGRAMS

PROGRAM	EAST RIDGE	EUSTIS	LAKE MINNEOLA	LEESBURG	MT. DORA	SOUTH LAKE	TAVARES	UMATILLA
Administrative Office Specialist	●	●						
Advanced Manufacturing Technology			●					
Agriculture Biotechnology			●					
Agritechnology	●			●	●	●	●	●
Air-Conditioning, Refrigeration & Heating Technology (HVAC)								●
Allied Health Assisting	●		●	●		●	●	●
Applied Cybersecurity	●	●						
Architectural Drafting					●			
Automotive Maintenance & Light Repair						●		
Building Trades & Construction Technology		●		●		●		
Culinary Arts	●	●	●	●	●	●	●	●
Digital Design		●	●	●	●	●		
Diversified Career Technology (DCT)		●					●	●
Early Childhood Education	●		●					
Electronic Business Enterprise (E-Commerce)						●		
Energy Technician				●				
Engineering Pathways	●	●		●				
Entrepreneurship		●						
Finance Academy			●					
Geospatial/Geographic Information Systems (GIS) Technology						●		
Horticulture Science and Services				●		●		●
Legal Administrative Specialist							●	
Marketing Management & Entrepreneurial Principles	●				●			
Nursing Assistant (Acute & Long Term Care)	●		●	●		●	●	
Principles of Teaching							●	
Promotional Enterprise							●	
Television Production Technology	●	●	●					
Web Development								●

# Career and Technical Education GPA Weighted Courses

High School CTE Course	East Ridge	Eustis	Lake Minneola	Leesburg	Mount Dora	South Lake	Tavares	Umatilla
Accounting Applications 1			•					
Advanced Manufacturing Tech 2, 3, & 4			•					
Advanced Manufacturing Tech Capstone			•					
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	•	•			•			
Civil Engineering & Architecture	•	•		•				
Computer & Network Security Fundamentals	•	•						
Culinary Arts 3 & 4	•	•	•	•	•	•	•	•
Cybersecurity Essentials	•	•						
Cybersecurity Planning & Analysis	•	•						
Database Security	•	•						
Digital Design 2, 3, 4 & 5		•	•	•	•	•		
Digital Electronics	•	•		•				
Drafting 1, 2, 3 & 4					•			
Early Childhood Education 3 & 4	•		•					
Economic & Financial Services			•					
E-Commerce & Marketing Essentials								•
Energy Industry Fundamentals				•				

## Career and Technical Education GPA Weighted Courses

High School CTE Course	East Ridge	Eustis	Lake Minneola	Leesburg	Mount Dora	South Lake	Tavares	Umatilla
Engineering Design & Development	•	•		•				
Foundations of Curriculum & Instruction							•	
Foundations of Web Design								•
Health Science Anatomy & Physiology	•		•	•		•	•	•
Health Science Foundations	•		•	•		•	•	•
Horticulture Science 3				•		•		•
Introduction to Alternative Energy				•				
Introduction to Engineering Design	•	•		•				
Introductory Horticulture 2				•		•		•
Legal Aspects of Business							•	
Nursing Assistant 3	•		•	•		•	•	
Operational Cybersecurity	•	•						
Personal Finance			•					
Plant Biotechnology			•					
Principles of Engineering	•	•		•				
Television Production Technology 3, 4, 5, 6	•	•	•					
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
Advanced GIS/RS Applications						•		
Agricultural Sales & Services 3						•		
Architectural Drafting 5 & 6					•			
Business Ownership	•	•			•			
Culinary Arts 2 & 3	•	•	•	•	•	•	•	•
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								•
GIS/RS Analysis & Modeling						•		
Horticulture Science 3				•		•		•
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								•
Principles of Entrepreneurship		•						
Television Production 1 - 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	Certified Internet Web (CIW) – Internet Business Associate QuickBooks Certified User Microsoft Office Specialist Master Microsoft Office Specialist (MOS) Bundle (Word, Excel, PowerPoint)	Certification Partners Intuit Microsoft Corporation Microsoft Corporation
Advanced Manufacturing Technology (Robotics)	Autodesk Certified User – Inventor Certified SolidWorks Associate – Academic (CSWA - Academic) MSSC Certified Production Technician (CPT) RECF Pre-Engineering Certification RECF Robotics Certification	Autodesk Dassault Systems SolidWorks Corporation Manufacturing Skills Standards Council (MSSC) Robotics Education and Competition Foundation (RECF) Robotics Education and Competition Foundation (RECF)
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 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
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 Forestry Specialist 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)	LEED Green Associate NCCER HVAC – Level 1 HVAC Excellence EmploymentReady – Air Conditioning	Green Building Certification Institute National Center for Construction Education & Research (NCCER) 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) Internet Business Associate Certified Internet Web (CIW) Network Technology Associate Certified Internet Web (CIW) Web Security Associate CompTIA Network+ CompTIA Project+ CompTIA Security+ CompTIA Server+ Microsoft Technology Associate (MTA) - Networking Fundamentals Microsoft Technology Associate (MTA) - Security Fundamentals	Certification Partners Certification Partners Certification Partners Computing Technology Industry Association (CompTIA) Computing Technology Industry Association (CompTIA) Computing Technology Industry Association (CompTIA) Computing Technology Industry Association (CompTIA) Microsoft Corporation Microsoft Corporation

NOTE: Available Certifications based on 2019-2020 CAPE Funding List. Subject to change.

<b>Career and Professional (CAPE) Academy</b>	<b>Industry Certification</b>	<b>Certifying Agency</b>
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 Automobile/Light Truck Technician: Automatic Transmission/Transaxle (A2) ASE Auto Maintenance & Light Repair (G1) ASE Entry-level – Auto: Automobile Service Technology (AS) ASE Entry-level – Auto: Brakes (BR) ASE Entry-level – Auto: Electrical/Electronic Systems (EE) ASE Entry-level – Auto: Engine Performance (EP) ASE Entry-level – Auto: Engine Repair (ER) ASE Entry-level – Auto: Heating and Air Conditioning (AC) ASE Entry-level – Auto: Manual Drive Train and Axles (MD) ASE Entry-level – Auto: Suspension and Steering (SS) ASE Entry-level – Truck: Brakes (TB) ASE Entry-level – Truck: Diesel Engines (DE) ASE Entry-level – Truck: Electrical/Electronic Systems (TE) ASE Entry-level – Truck: Steering & Suspension (TS) Florida Automobile Dealers Association (FADA) Certified Technician	National Institute for Automotive Service Excellence National Institute for Automotive Service Excellence National Institute for Automotive Service Excellence National Institute for Automotive Service Excellence National Institute for Automotive Service Excellence National Institute for Automotive Service Excellence National Institute for Automotive Service Excellence National Institute for Automotive Service Excellence National Institute for Automotive Service Excellence National Institute for Automotive Service Excellence National Institute for Automotive Service Excellence National Institute for Automotive Service Excellence National Institute for Automotive Service Excellence National Institute for Automotive Service Excellence National Institute for Automotive Service Excellence Florida Automobile Dealers Association
Building Construction Technologies	MSSC Certified Production Technician (CPT) NCCER Carpentry – Level 1 (Secondary) NCCER Carpentry – Level 3 (Secondary) NCCER Construction Technology (Secondary) NCCER Electrical – Level 1 (Secondary) NCCER Masonry – Level 1 (Secondary)	Manufacturing Skills Standards Council (MSSC) National Center for Construction Education and Research (NCCER) National Center for Construction Education and Research (NCCER) National Center for Construction Education and Research (NCCER) National Center for Construction Education and Research (NCCER) National Center for Construction Education and Research (NCCER)
Culinary Arts	Certified Food Associate (CFA) Certified Food Safety Manager Certified Food Protection Manager (ServSafe®) Foodservice Management Professional (FMP) National ProStart Certificate of Achievement	International Food Service Executives Association National Registry of Food Safety Professionals National Restaurant Association Educational Foundation National Restaurant Association Educational Foundation National Restaurant Association Educational Foundation

NOTE: Available Certifications based on 2019-2020 CAPE Funding List. Subject to change.



<b>Career and Professional (CAPE) Academy</b>	<b>Industry Certification</b>	<b>Certifying Agency</b>
Digital Design	Adobe Certified Associate (ACA) – Dreamweaver CC* Adobe Certified Associate (ACA) – Flash/Animate CC* Adobe Certified Associate (ACA) – Illustrator CC* Adobe Certified Associate (ACA) – InDesign CC* Adobe Certified Associate (ACA) – Photoshop CC* Adobe Certified Associate (ACA) - Premiere Pro CC* Adobe Certified Expert (ACE) – After Effects CC* Adobe Certified Expert (ACE) – Photoshop CC* Adobe Certified Expert (ACE) – Illustrator CC* Adobe Certified Expert (ACE) – InDesign CC*	Adobe Systems Adobe Systems Adobe Systems Adobe Systems Adobe Systems Adobe Systems Adobe Systems Adobe Systems Adobe Systems Adobe Systems
Diversified Career Technology	Certified Internet Web (CIW) Internet Business Associate Microsoft Office Specialist (MOS) Bundle (Word, Excel, PowerPoint)	Certification Partners Microsoft Corporation
Early Childhood Education	Certified Food Protection Manager (ServSafe®) Certified Food Safety Manager Child Development Associate (CDA)	National Restaurant Association Educational Foundation National Registry of Food Safety Professionals Council for Professional Recognition
Electronic Business Enterprise (E-Commerce)	Adobe Certified Associate (ACA) – InDesign CC* Certified Internet Web (CIW) – Internet Business Associate Microsoft Office Specialist (MOS) Bundle (Word, Excel, PowerPoint)	Adobe Systems Certification Partners Microsoft Corporation
Energy Technician	NCCER Electrical – Level 1 (Secondary) NCCER Electrical –Level 2 (Secondary) MSSC Certified Production Technician (CPT)	National Center for Construction Education and Research (NCCER) National Center for Construction Education and Research (NCCER) Manufacturing Skills Standards Council (MSSC)
Engineering Pathways	Autodesk Certified User – Inventor Certified SolidWorks Associate – Academic (CSWA - Academic) MSSC Certified Production Technician (CPT) RECF Pre-Engineering Certification RECF Robotics Certification	Autodesk Dassault Systems SolidWorks Corporation Manufacturing Skills Standards Council (MSSC) Robotics Education and Competition Foundation (RECF) Robotics Education and Competition Foundation
Entrepreneurship	Adobe Certified Associate (ACA) – Photoshop CC* Certified Internet Web (CIW) Internet Business Associate QuickBooks Certified User Microsoft Office Specialist (MOS) Bundle (Word, Excel, PowerPoint)	Adobe Systems Certification Partners Intuit Microsoft Corporation
Finance Academy	Certified Internet Web (CIW) Internet Business Associate QuickBooks Certified User Microsoft Office Specialist (MOS) Bundle (Word, Excel, PowerPoint)	Certification Partners Intuit Microsoft Corporation
Geospatial Information System (GIS)	ArcGIS Desktop Entry SPACE Geospatial Certification STARS GIS Technician	ESRI DigitalQuest, Inc. DigitalQuest, Inc.

NOTE: Available Certifications based on 2019-2020 CAPE Funding List. Subject to change.

<b>Career and Professional (CAPE) Academy</b>	<b>Industry Certification</b>	<b>Certifying Agency</b>
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. Agricultural Education Services and Technology Inc. Florida Nursery Growers and Landscape Association
Legal Administrative Specialist	Certified Internet Web (CIW) Internet Business Associate QuickBooks Certified User Microsoft Office Specialist (MOS) Bundle (Word, Excel, PowerPoint) Microsoft Office Specialist Master	Certification Partners Intuit Microsoft Corporation Microsoft Corporation
Marketing Management and Entrepreneurial Principals	Adobe Certified Associate (ACA) – Photoshop CC* Certified Internet Web (CIW) Internet Business Associate Microsoft Office Specialist (MOS) Bundle (Word, Excel, PowerPoint)	Adobe Systems Certification Partners Microsoft Corporation
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	Microsoft Office Specialist (MOS) Bundle (Word, Excel, PowerPoint)	Microsoft Corporation
Promotional Enterprise	Adobe Certified Associate (ACA) – Photoshop CC* Certified Internet Web (CIW) Internet Business Associate Microsoft Office Specialist (MOS) Bundle (Word, Excel, PowerPoint)	Adobe Systems Certification Partners Microsoft Corporation
Television Production	Adobe Certified Associate (ACA) –Premiere Pro CC * Adobe Certified Expert (ACE) – Premiere Pro CC*	Adobe Systems Adobe Systems
Web Development	Adobe Certified Associate (ACA) – Dreamweaver CC* Certified Internet Web (CIW) Internet Business Associate Certified Internet Web (CIW) Site Development Associate	Adobe Systems Certification Partners Certification Partners

\*CC = Creative Cloud

NOTE: Available Certifications based on 2019-2020 CAPE Funding List. Subject to change.

**Option A – College Credit Through Career Pathways College Credit Assessment  
(Based on Articulation as of January 2020)**



Program	Lake-Sumter State College	Lake Technical College	Pasco County (Marchman)	College of Central Florida	Santa Fe College	Orange County (Westside Technical Center)	Daytona State College	Seminole State College	Valencia College
Administrative Office Specialist	Up to 6 Credits	Up to 600 Hours		Up to 3 Credits			Up to 3 Credits		Up to 9 Credits
Advanced Manufacturing	Up to 12 Credits	Up to 300 Hours		Up to 15 Credits			3 Credits	Up to 5 Credits	
Agricultural Biotechnology				Up to 9 Credits	Up to 8 Credits				
Agricultural Sales and Services				Up to 6 Credits					
Agritechnology				Up to 9 Credits					
Allied Health Assisting	Up to 9 Credits*	Up to 165 Hours							
Applied Cybersecurity	Up to 21 Credits	Up to 600 Hours					Up to 6 Credits		Up to 12 Credits
Architectural Drafting							3 Credits	Up to 6 Credits	Up to 9 Credits
Automation and Production Technology (Robotics)								Up to 3 Credits	
Automotive Collision, Repair & Refinishing		Up to 600 Hours							
Automotive Maintenance and Light Repair		Up to 300 Hours							
Biomedical Services					Up to 8 Credits				
Building Construction Technologies						Up to 450 Hours		Up to 3 Credits	Up to 6 Credits
Business Management and Analysis	Up to 3 Credits	Up to 150 Hours							
Culinary Arts		Up to 450 Hours							Up to 6 Credits
Digital Design	Up to 3 Credits	Up to 150 Hours		3 Credits				3 Credits	
Diversified Education	Up to 6 Credits								
Early Childhood Education				Up to 9 Credits					
Electronic Business Enterprise (E Commerce)	Up to 6 Credits	Up to 150 Hours		Up to 6 Credits					

**Option A – College Credit Through Career Pathways College Credit Assessment  
(Based on Articulation as of January 2020)**

Program	Lake-Sumter State College	Lake Technical College	Pasco County (Marchman)	College of Central Florida	Santa Fe College	Orange County (Westside Technical Center)	Daytona State College	Seminole State College	Valencia College
Energy Technician	3 Credits								
Engineering Pathways	Up to 12 Credits						Up to 7 Credit Hours	Up to 7 Credits	Up to 9 Credits
Entrepreneurship	Up to 3 Credits	Up to 150 Hours							
Geospacial (GIS)								3 credits	
Horticulture Science and Services				Up to 9 Credits					Up to 6 Credits
Legal Administrative Specialist	Up to 6 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	Up to 165 Hours							
Teaching Pathway				Up to 6 Credits					
Television Production			450 Hours					4 credits	
Web Development Services	Up to 6 Credits	Up to 150 Hours		3 Credits			Up to 6 Credits Hours		

*For a current list of local agreements, visit <https://www.lake.k12.fl.us/College & Career Readiness/Local Articulations>*


**Option A – College Credit Through Career Pathways College Credit Assessment – Local Articulation**  
**(Based on Articulation as of December 2019)**

Community/State College Program(s)			
Secondary Program	Post-Secondary	Post-Secondary Program	Option A (Credit by Exam)
<b>Administrative Office Specialist</b> (Digital Information Technology, Administrative Office Technology 1, Business Software Applications 1) to:	Lake-Sumter State College 	<b>Business Administration A.S. =</b> <b>Business Specialist Technical Certificate =</b> <b>Business Operations Technical Certificate =</b> <b>Business Management Technical Certificate =</b>	Business Computer Applications (3 Credits) Introduction to Business (3 Credits)
		<b>Computer Information Technology, A.S. =</b> <b>Criminal Justice Technology, A.S. =</b> <b>Health Information Technology A.S. =</b> <b>Electrical Distribution Technology Advanced</b> <b>Technical Certificate =</b> <b>Information Technology Analysis, Technical</b> <b>Certificate =</b> <b>Medical Office Management, Technical</b> <b>Certificate =</b> <b>A.A. Degree =</b>	Business Computer Applications (3 Credits)
<b>Advanced Manufacturing Technology</b> (Advanced Manufacturing Technology 1-4, Advanced Manufacturing Technology Capstone) to:	Lake-Sumter State College 	<b>Engineering Technology Substation and Relay</b> <b>Technology Specialization A.S. =</b> <b>Engineering Technology Support Specialist</b> <b>Technical Certificate =</b>	Mechanical Measurement and Instrumentation (3 Credits) Manufacturing Processes and Materials (3 Credits) Introduction to Quality Assurance (3 Credits) Industrial Safety (3 Credits)
		<b>A.A. Degree Elective Credits (not to exceed</b> <b>maximum elective credit hours for the</b> <b>program)</b>	Mechanical Measurement and Instrumentation (3 Credits) Manufacturing Processes and Materials (3 Credits) Introduction to Quality Assurance (3 Credits) Industrial Safety (3 Credits)




**Option A – College Credit Through Career Pathways College Credit Assessment – Local Articulation  
(Based on Articulation as of December 2019)**

**Community/State College Program(s)**




<b>Secondary Program</b>	<b>Post-Secondary</b>	<b>Post-Secondary Program</b>	<b>Option A (Credit by Exam)</b>
<b>Allied Health Assisting</b> (Health Science Anatomy & Physiology, Health Science Foundations, & Allied Health Assisting 3) to:	<b>Lake-Sumter State College</b> 	<b>Nursing RN A.S.</b> <b>Health Information Technology A.S. =</b>	Preferred Placement Point (1)
		<b>Health Information Technology A. S. =</b>	Medical Terminology (2 Credits) Medical Insurance & Coding 1 (3 Credits) Business Computer Applications (3 Credits)
		<b>Healthcare Informatics Specialist Technical Certificate =</b>	Medical Terminology (2 Credits) Medical Insurance & Coding 1 (3 Credits)
		<b>Medical Information Coder/Biller Technical Certificate</b>	Medical Terminology (2 Credits) Medical Insurance & Coding 1 (3 Credits)
		<b>Medical Office Management Technical Certificate =</b>	Medical Terminology (2 Credits) Medical Insurance & Coding 1 (3 Credits) Business Computer Applications (3 Credits)
		<b>A.A. =</b>	Medical Terminology (2 Credits) Business Computer Applications (3 Credits)

**Option A – College Credit Through Career Pathways College Credit Assessment – Local Articulation**  
**(Based on Articulation as of December 2019)**

Community/State College Program(s)			
Secondary Program	Post-Secondary	Post-Secondary Program	Option A (Credit by Exam)
<b>Applied Cybersecurity</b> (Introduction to Information Technology, Computer and Network Security Fundamentals, Cybersecurity Essentials) to:	Lake-Sumter State College 	<b>Computer Information Technology A.S. =</b>	Business Computer Applications (3 Credits) A+ Hardware (3 Credits) A+ Software (3 Credits) Networking Essentials (3 Credits) Network Security Fundamentals (3 Credits) Digital Forensics 1 (3 Credits) Digital Forensics 2 (3 Credits)
		<b>Information Technology Analysis Technical Certificate =</b>	Business Computer Applications (3 Credits) A+ Hardware (3 Credits) A+ Software (3 Credits) Networking Essentials (3 Credits) Network Security Fundamentals (3 Credits)
		<b>Digital Forensics Technical Certificate =</b>	Business Computer Applications (3 Credits) A+ Hardware (3 Credits) A+ Software (3 Credits) Networking Essentials (3 Credits) Network Security Fundamentals (3 Credits) Digital Forensics 1 (3 Credits) Digital Forensics 2 (3 Credits)
		<b>Business Administration A.S. =</b> <b>Criminal Justice A.S. =</b> <b>Electrical Distribution Technology Advanced Certificate+</b> <b>Electrical Distribution Technology A.A.S. =</b> <b>Health Information Technology A.S. =</b> <b>Medical Office Management Technical Certificate =</b>	Business Computer Applications (3 Credits)
		<b>A.A. Degree =</b>	Business Computer Applications (3 Credits) A+ Hardware (3 Credits) A+ Software (3 Credits) Networking Essentials (3 Credits) Network Security Fundamentals (3 Credits) Digital Forensics 1 (3 Credits) Digital Forensics 2 (3 Credits)




**Option A – College Credit Through Career Pathways College Credit Assessment – Local Articulation  
(Based on Articulation as of December 2019)**

**Community/State College Program(s)**

<b>Secondary Program</b>	<b>Post-Secondary</b>	<b>Post-Secondary Program</b>	<b>Option A (Credit by Exam)</b>
<p align="center"><b>Digital Design</b> (Digital Information Technology, Digital Design 1, Digital Design 2, Digital Design 3) to:</p>	<p align="center">Lake-Sumter State College</p> 	<p align="center">                     Business Administration A.S. =                      Computer Information A.S. =                      Criminal Justice A.S. =                      Electrical Distribution Technology A.A.S. =                      Health Information Technology A.S. =                      Business Operations Technical Certificate =                      Business Management Technical Certificate =                      Digital Forensics Technical Certificate =                      Electrical Distribution Technology Advanced Certificate =                      Information Technology Analysis Technical Certificate =                      Medical Office Management Technical Certificate =                      A.A. Degree =                 </p>	<p align="center">Business Computer Applications (3 Credits)</p>
<p align="center"><b>Diversified Career Technology</b> (Diversified Career Technology Principles, Diversified Career Technology Applications, Diversified Career Technology Management) to:</p>	<p align="center">Lake-Sumter State College</p> 	<p align="center">                     Business Administration A.S. =                      Business Specialist Technical Certificate =                      Business Operations Technical Certificate =                      Business Management Technical Certificate =                      A.A. Degree =                 </p>	<p align="center">                     Introduction to Business (3 Credits)                      Business Computer Applications (3 Credits)                 </p>
<p align="center"><b>Electronic Business Enterprise</b> (Intro to Information Tech or Digital Information Tech, introduction to E Commerce, E Commerce Entrepreneurship, E Commerce Systems Analysis &amp; Design) to:</p>	<p align="center">Lake-Sumter State College</p> 	<p align="center">                     Business Administration A.S. =                      Business Specialist Technical Certificate =                      Business Operations Technical Certificate =                      Business Management Technical Certificate =                      AA Degree =                 </p>	<p align="center">                     Business Computer Applications (3 credits)                      Introduction to eBusiness (3 credits)                 </p>


**Option A – College Credit Through Career Pathways College Credit Assessment – Local Articulation**  
**(Based on Articulation as of December 2019)**

**Community/State College Program(s)**

<b>Secondary Program</b>	<b>Post-Secondary</b>	<b>Post-Secondary Program</b>	<b>Option A (Credit by Exam)</b>
<b>Energy Technician</b> (Energy Industry Fundamentals, Electricity 1, Introduction to Alternative Energy, Electricity 2) to:	Lake-Sumter State College 	Electrical Distribution Technology A.A.S = Electrical Distribution Technology Basic Technical Certificate = Electrical Distribution Technology Advanced Technical Certificate = A.A. Degree =	Basic Electricity for Line Workers (3 Credits)
<b>Engineering Pathways</b> (Introduction to Engineering Design, Principles of Engineering, Digital Electronics, Computer Integrated Manufacturing or Civil Engineering and Architecture or Engineering Design and Development) to:	Lake-Sumter State College 	Engineering Technology Substation & Relay Technology Specialization A.S. = Engineering Technology Support Specialist Technical Certificate = A.A. Degree =	Introduction to Electronics (3 Credits) Introduction to AutoCAD (3 Credits) Manufacturing Materials and Processes (3 Credits) Mechanical Measurement and Instrumentation (3 Credits)
<b>Entrepreneurship</b> (Principles of Entrepreneurship, Business Management and Law, Business Ownership) to:	Lake-Sumter State College 	Business Administration A. S. = Business Development & Entrepreneurship Technical Certificate = A.A. =	Introduction to Entrepreneurship (3 Credits)

**Option A – College Credit Through Career Pathways College Credit Assessment – Local Articulation  
(Based on Articulation as of December 2019)**



**Community/State College Program(s)**

<b>Secondary Program</b>	<b>Post-Secondary</b>	<b>Post-Secondary Program</b>	<b>Option A (Credit by Exam)</b>
<b>Legal Administrative Specialist (Digital Information Technology, Administrative Office Technology 1, Business Software Applications 1, Legal Aspects of Business) to:</b>	<b>Lake-Sumter State College</b> 	<b>Business Administration A. S. = Business Specialist Technical Certificate = Business Operations Technical Certificate = Business Management Technical Certificate = Computer Information Technology A.S. = Criminal Justice A.S. = Health Information Technology A.S. = Digital Forensics Technical Certificate = Electrical Distribution Technology Advanced Certificate = Information Technology Analysis Technical Certificate =</b>	Business Computer Application (3 Credits)
		<b>A.A. Degree =</b>	Business Computer Applications (3 Credits) Microsoft Windows – Introduction (3 Credits)




**Option A – College Credit Through Career Pathways College Credit Assessment – Local Articulation**  
**(Based on Articulation as of December 2019)**

**Community/State College Program(s)**

<b>Secondary Program</b>	<b>Post-Secondary</b>	<b>Post-Secondary Program</b>	<b>Option A (Credit by Exam)</b>
<b>Marketing, Management &amp; Entrepreneurial Principles</b> (Marketing Essentials, Marketing Applications, Marketing Management, Business Ownership) to:	<b>Lake-Sumter State College</b> 	<b>Business Administration A.S. =</b> <b>Business Specialist Technical Certificate =</b> <b>Business Operations Technical Certificate =</b> <b>Business Management Technical Certificate =</b> <b>A.A. Degree =</b>	Introduction to Business (3 Credits) Principles of Marketing (3 Credits)
<b>Nursing Assisting</b> (Health Science Anatomy & Physiology, Health Science Foundations, Nursing Assisting 3) to:	<b>Lake-Sumter State College</b> 	<b>Nursing (A.S. Degree) RN</b>	Preferred placement point (1 point)
		<b>Health Information Technology A.S. =</b>	Medical Terminology (2 Credits) Medical Insurance & Coding 1 (3 Credits) Business Computer Applications (3 Credits)
		<b>Healthcare Informatics Specialist Technical Certificate =</b>	Medical Terminology (2 Credits) Medical Insurance & Coding 1 (3 Credits)
		<b>Medical Information Coder/Biller Technical Certificate =</b>	Medical Terminology (2 Credits) Medical Insurance & Coding 1 (3 Credits)
		<b>Medical Office Management Technical Certificate =</b>	Medical Terminology (2 Credits) Medical Insurance & Coding 1 (3 Credits) Business Computer Applications (3 Credits)
		<b>A.A. =</b>	Medical Terminology (2 Credits) Business Computer Applications (3 Credits)

**Option A – College Credit Through Career Pathways College Credit Assessment – Local Articulation**  
**(Based on Articulation as of December 2019)**

**Community/State College Program(s)**

<b>Secondary Program</b>	<b>Post-Secondary</b>	<b>Post-Secondary Program</b>	<b>Option A (Credit by Exam)</b>
<p align="center"><b>Web Development</b>            (Digital Information Technology,            Foundations of Web Design, User            Interface Design) to:</p>	<p align="center">Lake-Sumter State            College</p> 	<p align="center"><b>Computer Information Technology A.S. =</b></p>	<p align="center">Business Computer Applications (3 Credits)            Web Programming (3 Credits)</p>
		<p align="center"> <b>Business Administration A.S. =</b>  <b>Criminal Justice Technology A.S. =</b>  <b>Electrical Distribution Technology A.A.S. =</b>  <b>Health Information Technology A.S. =</b>  <b>Business Operations Technical Certificate =</b>  <b>Business Management Technical Certificate =</b>  <b>Digital Forensics Technical Certificate =</b>  <b>Electrical Distribution Technology Advanced</b>  <b>Technical Certificate =</b>  <b>Information Technology Analysis Technical</b>  <b>Certificate =</b>  <b>Medical Office Management Technical</b>  <b>Certificate =</b> </p>	<p align="center">Business Computer Applications (3 Credits)</p>
		<p align="center"><b>A.A. Degree =</b></p>	<p align="center">Business Computer Applications (3 Credits)            Web Programming (3 Credits)</p>

# Educational Program Clubs and Organizations



## Distributive Education Clubs of America

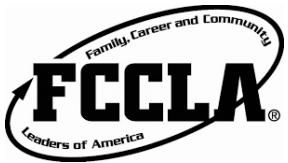
DECA is a youth organization for American and Canadian high school and college students interested in business, marketing, management and entrepreneurship. DECA works in cooperation with high school and college marketing and business education programs.

## Future Business Leaders of America - Phi Beta Lambda

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



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. Today over 227,000 members are active in a network of associations in 50 states as well as in the District of Columbia, the Virgin Islands, and Puerto Rico. 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 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.



# Educational Program Clubs and Organizations



## **Florida Future Educators of America**

FFEA provides a forum for students to become aware of career opportunities in education and nurtures their interest in teaching as a career. It also provides an avenue for members to stay informed of the latest issues and advancements in the profession.

## **Health Occupations Students of America**

Health Occupations Students of America (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)**

The Technology Student Association (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; and
- 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>.



The **Administrative Office Specialist** program content includes Microsoft Office Suite software applications, office technology, office procedures, 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 **Certified Internet Web (CIW)—Internet Business Associate**, **Microsoft Office Specialist (MOS) Bundle (Word, Excel, PowerPoint)**, and **Microsoft Office Specialist MASTER** are the industry certifications which 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 **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 and the Florida Nursery, Growers and Landscape Association **Certified Horticulture Professional (FCHP)**.





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; 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 Architecture & Construction career cluster. The industry certification for this program, issued by the National Center for Construction Education and Research, is the NCCER HVAC-Level 1.



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 Certified Internet Web (CIW)—Network Technology Associate and Certified Internet Web (CIW)—Web Security Associate, and Computing Technology Industry Association CompTIA Security+ are some of the appropriate industry certifications for this program.



The **Architectural Drafting** program utilizes AutoCAD and other Autodesk softwares 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 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 offered in this program by the National Center for Construction Education and Research include NCCER Masonry-Level 1 and the NCCER Construction Technology.





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 ProStart Certificate of Achievement** as well as the 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. The software used to accomplish graphic skills are **Adobe Certified User—Photoshop**, **Adobe Certified User—InDesign** and **Adobe Certified User—Illustrator** and students in this program have the opportunity to complete an industry certification in each course within the program.

**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 peruse **Certified Internet Web—Internet Business Associate** and **Microsoft Office Specialist (MOS) Bundle (Word, Excel, PowerPoint)**.



**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 will help prepare 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)**.



**The Electronic Business Enterprise (E-Commerce)** 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 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 *Certified Internet Web (CIW) — Internet Business Associate* and the *Microsoft Office Specialist (MOS) Bundle (Word, Excel, PowerPoint)* are industry certifications that may be earned in this program.

The **Energy Technician** program allows students to gain hands-on experience working with alternate energy technologies like fuel cells, photovoltaic systems, wind turbines and more. Students work in labs and shop classes on wiring connector boxes, service panels, light fixtures, and alarm systems as well as residential, industrial and commercial wiring. Students in this program have the opportunity to earn the National Center for Construction Education and Research (NCCER) *Electrical Level 1* and *Electrical Level 2* industry certifications.



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* and *Certified SolidWorks Associate* (CSWA) 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 *Certified Internet Web (CIW) — Internet Business Associate*, *Microsoft Office Specialist (MOS) Bundle (Word, Excel, PowerPoint)* and *Intuit QuickBooks Certified User* are industry certifications that may be earned in this program.







The purpose of the **Finance Academy** 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 **Certified Internet Web (CIW) — Internet Business Associate**, Intuit **QuickBooks Certified User** and the **Microsoft Office Specialist (MOS) Bundle (Word, Excel, PowerPoint)** are the industry certifications that may be earned in this program.

The **Geospatial/Geographic Information Systems (GIS) Technology** program provides an introduction to geographic information systems (GIS), remote sensing (RS), global positioning systems (GPS), and other emerging online mapping technologies. Students will explore the GIS profession, types of jobs in the field, required skills, and GIS programs offered at four-year institutions. This program covers the wide range of geospatial technology software including Google Earth, GPS, ArcGIS Explorer online, web mapping, and ArcGIS desktop. **ArcGIS Desktop Entry** is the industry certification that may be earned 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 **Legal Administrative Specialist** program prepares students for many specialized administrative support roles in the legal field and other areas of business. Coursework includes basic office skills as well as training in the preparation and handling of legal documents such as affidavits, wills, pleadings, deeds, and discovery documents. The program stresses the importance of accuracy, confidentiality and ethical considerations in the legal environment. Students may earn the **Certified Internet Web (CIW)—Internet Business Associate** and the **Microsoft Office Specialist (MOS) Bundle (Word, Excel, PowerPoint)** in this program.





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 **Certified Internet Web (CIW))—Internet Business Associate** and the **Microsoft Office Specialist (MOS) Bundle (Word, Excel, PowerPoint)** may be earned in this program.

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 provides coherent and rigorous content aligned with challenging academic standards and relevant technical knowledge. Developing skills needed to prepare for further education and careers in the Education & Training career cluster; this 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, along with knowledge of all aspects of the Education & Training career cluster. The industry certification in this program is **Microsoft Office Specialist (MOS) Bundle (Word, Excel, PowerPoint)**.

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 User—Photoshop**.



**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 User—Premiere Pro** is the appropriate industry certification 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 also learn planning, technologies, publishing, performance, and the use of GUI software for creating websites. The industry certifications in this program include **Certified Internet Web (CIW)—Internet Business Associate**, **Certified Internet Web (CIW)—Site Development Associate** and the **Adobe Certified User—Dreamweaver** certification.



# **Career and Technical Education**




## **Programs of Study**









<b>Career Cluster:</b> Business, Management & Administration				<b>CTE Program:</b> <b>Secondary: Administrative Office Specialist</b> <b>Postsecondary:</b> Business Administration A.S.; Business Specialist Technical Certificate; Business Operations Technical Certificate; Business Management Technical Certificate; Computer Information Technology A.S.				
<b>Career Cluster Pathway:</b> Management				<b>Industry Certification:</b> <b>Secondary:</b> Certified Internet Web (CIW) - Internet Business Associate; Microsoft Office Specialist (MOS) Bundle (Word, Excel, PowerPoint); Microsoft Office Specialist Master; <b>Postsecondary:</b> Microsoft Office Specialist Bundle; Microsoft Office Specialist Master; QuickBooks Certified User				
	<b>16 CORE CURRICULUM CREDITS</b>					<b>8 ADDITIONAL CREDITS</b>		
	<b>ENGLISH</b> 4 credits	<b>MATH</b> 4 credits	<b>SCIENCE</b> 3 credits, 2 with lab	<b>SOCIAL STUDIES</b> 3 credits	<b>OTHER REQUIRED COURSES</b> FINE ARTS (1 credit) HOPE (1 credit)	<b>CAREER AND TECHNICAL EDUCATION COURSES</b>	<b>RECOMMENDED ELECTIVES</b> (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
<b>HIGH SCHOOL</b>	<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>							
	<b>9<sup>th</sup></b>	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.
	<b>10<sup>th</sup></b>	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.
	<b>11<sup>th</sup></b>	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.
	<b>12<sup>th</sup></b>	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)
	Lake Technical College <a href="http://www.laketech.org/programs">www.laketech.org/programs</a> <b>Certificates:</b> Accounting Operations; Administrative Office Specialist	Lake-Sumter State College <a href="http://www.lssc.edu/academics">www.lssc.edu/academics</a> <b>A.S. Degrees:</b> Business Administration <b>A.S. to B.A.S Career Path:</b> Organizational Management <b>Certificates:</b> Business Development & Entrepreneurship; Business Mgmt.; Business Operations; Business Specialist  College of Central Florida <a href="http://www.cf.edu/programs">www.cf.edu/programs</a> <b>A.S. Degree:</b> Office Administration- Legal Office Specialization; Office Management Specialization	University of Central Florida <a href="http://www.ucf.edu/academics">www.ucf.edu/academics</a> <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
CAREER	Sample Career Specialties (The Targeted Occupations List may be used to identify appropriate careers.)		
	Claims Adjusters; Computer User Support Specialists; First-Line Supervisors of Retail Sales Workers; Human Resource Assistant; Paralegal & Legal Assistant	Administrative Services Manager; Business Operations Specialist; Loan Officers	Accountant & Auditor; Business Teacher, Postsecondary; Management Analysts; Public Relations Specialists; Sales Manager; Vocational Teacher, Secondary School; Chief Executive; Editor; Public Relations & Fundraising Manager; Training & Development Specialist; Writer & Author
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on articulations as of December 2019)		
	Secondary to Lake Technical College 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 30 Hours: Front Desk Specialist or Administrative Office Specialist = up to 150 Hours  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>	Secondary to Lake-Sumter State College Option A (Credit by Exam) Administrative Office Specialist, Introduction to Information Technologies or Digital Information Technology, Administrative Office Technology 1, Business Software Applications 1  Secondary to College of Central Florida 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
	Statewide Articulation: 3 credits for MOS Bundle (3 of 6) Certification (MICRO069) toward Office Administration 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: Manufacturing			CTE Program: Secondary: Advanced Manufacturing Technology Postsecondary: CNC Production Specialist; Welding Technology; Welding Technology – Advanced					
Career Cluster Pathway: Manufacturing Production Process			Industry Certification: Secondary: Autodesk Certified User – Inventor; Certified SolidWorks Associate (CSWA); RECF Robotics Certification; MSSC Certified Production Technician (CPT); Postsecondary: IHK (Industrial Specialist in CNC Technology); American Welding Society (AWS) 6G Pipe					
	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.		
	<b>TECHNICAL CENTER/COLLEGE PROGRAM(S)</b>  <b>Lake Technical College</b> <a href="http://www.laketech.org/programs">www.laketech.org/programs</a> <b>Certificate:</b> CNC Production Specialist; Welding Technology; Welding Technology - Advanced	<b>COMMUNITY/STATE COLLEGE PROGRAM(S)</b>  <b>College of Central Florida</b> <a href="http://www.cf.edu/programs">www.cf.edu/programs</a> <b>A.S. Degree:</b> Engineering Technology- Quality Specialization & Advance Manufacturing Specialization, Electronics Specialization <b>Certificate (s):</b> MSSC CPT, Certified Production Technician; Fanuc Certified Robotic Training; Lean Manufacturing Bronze	<b>UNIVERSITY PROGRAM(S)</b>  <b>University of Central Florida</b> <a href="http://www.ucf.edu/academics">www.ucf.edu/academics</a> <b>B.S. Degrees:</b> Engineering (Electrical, Aerospace, Civil, Computer, Environmental, Industrial, Mechanical)
CAREER	Sample Career Specialties (Bold text signifies High Skill & High Wage.)		
	Architectural & Civil Drafter; Construction & Building Inspector; Electrician; Machinist; Sales Representative; Surveying & Mapping Technician	Civil Engineering Technician; Electrical & Electronics Engineering Technician; Environmental Engineering Technician; Mechanical Engineering Technician	Architectural & Engineering Manager; Construction Manager; Surveyor; Civil Engineer; Computer Hardware Engineer; Electrical Engineer; Electronics Engineer; General & Operations Managers; Industrial Engineer; Mechanical Engineer
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on articulations as of December 2019)		
	For a current list of local agreements, visit <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>Secondary to College of Central Florida</b> Option A (Credit by Exam) Advanced Manufacturing Technology (Advanced Manufacturing 1, Advanced Manufacturing 2, Advanced Manufacturing 3)  <b>Statewide Articulation:</b> 3 credits for Autodesk Inventor Certification (ADESK011) toward Engineering Technology; up to 15 credits for MSSC Certified Production Technician Certification (MSSCN001) toward Electronics Engineering Technology or Engineering Technology or Manufacturing 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.shtml">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.shtml</a> , and keywords: Gold Standard statewide articulation agreements.	A.A./A.S. to B.A./B.S. Degree
Career and Technical Student Association			
SkillsUSA; Florida Technology Student Association (FL-TSA)			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			


Career Cluster: Agriculture, Food & Natural Resources				CTE Program: Secondary: Agriculture Biotechnology Postsecondary: Agribusiness Management				
Career Cluster Pathway: Agriculture Biotechnology				Industry Certification: Secondary: Agriculture Associate Certification; Agricultural Biotechnology Specialist Certification; Agritechnology Specialist Certification; Certified Horticulture Professional; Aquaculture Technician; Agricultural Communications Specialist Certification Postsecondary: Equine Assistant Manager; Equine Technician				
	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.		
	<b>TECHNICAL CENTER/COLLEGE PROGRAM(S)</b>	<b>COMMUNITY/STATE COLLEGE PROGRAM(S)</b>	<b>UNIVERSITY PROGRAM(S)</b>
	This program leads to a broad range of postsecondary career pathways in all sectors of the agriculture and related industries.	<b>Santa Fe College</b> <i>Perry Center For Emerging Technologies</i> <a href="http://www.sfcollege.edu/programs/types-of-degree">www.sfcollege.edu/programs/types-of-degree</a> <b>Certificates:</b> Chemical Laboratory Specialist <b>A.S. Degree:</b> Biomedical Equipment Technician; Biotechnology lab Technology <b>B.A.S. Degrees:</b> Clinical Laboratory Science; Industrial Biotechnology	<b>Florida Gulf Coast University</b> <a href="http://www.fgcu.edu/CAS/Biotechnology/index.asp">www.fgcu.edu/CAS/Biotechnology/index.asp</a> <b>B.S. Degree:</b> Biotechnology  <b>University of Florida</b> <a href="http://www.cals.ufl.edu/">www.cals.ufl.edu/</a> <b>B.S. Degrees:</b> Agriculture Education & Communication; Agriculture Operations Management; Animal Sciences; Biology; Biological Engineering;
CAREER	Sample Career Specialties (Bold text signifies High Skill & High Wage.)		
	Chemical Equipment Operator & Tender; Demonstrator & Product Promoter; Measurer, Checker & Sample Recordkeeping	Environmental Engineering Technician; Agricultural & Food Science Technician; Biological Technician; Vocational Education Teacher, Postsecondary; Medical & Clinical Laboratory Technician/Technologists; First-Line supervisor of Farming, Fishing, & Forestry Worker; Hazardous Materials Removal Worker	Medical & Health Service Manager; Secondary School Teachers; Exc. Special Ed and Voc. Ed.; Vocational Education Teachers, Secondary School; Market Research Analyst & Marketing Specialist; Biomedical Engineer; Food Scientist & Technologist; Soil & Plant Scientist; Biological Scientist
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on articulations as of December 2019)		
	For a current list of local agreements, visit <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>Secondary to Santa Fe College</b> Option A (Credit by Exam) Biotechnology Lab Tech AS (Agriscience Foundations 1, Agricultural Biotechnology 2, Agricultural Biotechnology 3)  <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  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./BS Degree
<b>Career and Technical Student Association</b>			
The National FFA Organization (FFA)			
<b>Internship/Work Experience Recommendations</b>			
Job shadowing, on-the-job training and professional organization experiences.			




<b>Career Cluster:</b> Agriculture, Food & Natural Resources				<b>CTE Program:</b> <b>Secondary:</b> Agritechnology <b>Postsecondary:</b> Agribusiness Management; Equine Studies; Landscape & Horticulture Technology (Specializations: Horticulture & Landscape Design)				
<b>Career Cluster Pathway:</b> Food Products & Processing Systems				<b>Industry Certification:</b> <b>Secondary:</b> Agritechnology Specialist Certification; Certified Horticulture Professional; Aquaculture Technician; Agricultural Communications Specialist Certification; Animal Science Specialist Certification; <b>Postsecondary:</b> Equine Assistant Manager; Horticulture Specialist (Specializations: Horticulture & Landscape)				
	<b>16 CORE CURRICULUM CREDITS</b>					<b>8 ADDITIONAL CREDITS</b>		
	<b>ENGLISH</b> 4 credits	<b>MATH</b> 4 credits	<b>SCIENCE</b> 3 credits, 2 with lab	<b>SOCIAL STUDIES</b> 3 credits	<b>OTHER REQUIRED COURSES</b> FINE ARTS (1 credit) HOPE (1 credit)	<b>CAREER AND TECHNICAL EDUCATION COURSES</b>	<b>RECOMMENDED ELECTIVES</b> (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
<b>HIGH SCHOOL</b>	<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>							
	<b>9<sup>th</sup></b>	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.
	<b>10<sup>th</sup></b>	English II	Geometry	Chemistry	World History		Agritechnology 1	Foreign Language for SUS admission or other electives appropriate for student's career and education plan.
	<b>11<sup>th</sup></b>	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.
	<b>12<sup>th</sup></b>	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>Lake Technical College</b> <a href="http://www.laketechnical.org/programs">www.laketechnical.org/programs</a> <b>Certificates:</b> Welding Technology; Welding Technology Advanced	<b>College of Central Florida</b> <a href="http://www.cf.edu/programs">www.cf.edu/programs</a> <b>Certificates:</b> Horticulture <b>A.S. Degrees:</b> Agribusiness Management	<b>University of Florida</b> <i>College of Agriculture and Life Sciences</i> <a href="http://www.cals.ufl.edu/">www.cals.ufl.edu/</a> <b>B.S.</b> Agriculture Education & Communication; Agriculture Operations Management; Animal Sciences; Biology; Biological Engineering; Botany; Environmental Management in Agriculture & Natural Resources; Environmental Science; Forest Resources & Conservation; Horticultural Science; Plant Science; Soil & Water Sciences; Wildlife Ecology & Conservation
CAREER	Sample Career Specialties (Bold text signifies High Skill & High Wage.)		
	<b>Bus and Truck Mechanic &amp; Diesel Engine Specialist;</b> <b>Supervisor of Landscaping, Lawn Service, &amp; Grounds Keeping;</b> <b>Transportation Security Screener; Welder, Cutter, Solder, &amp; Brazier</b>	<b>Environmental Engineering Technician; Agricultural &amp; Food Science Technician;</b> <b>Biological Technician; First-Line Supervisor, Landscaping &amp; Groundskeeping Worker; First-Line Supervisor of Production &amp; Operating Worker;</b> <b>Vocational Education Teacher, Postsecondary; Laboratory Technician; Welder, Cutter, Solder &amp; Brazier</b>	<b>Vocational Education Teachers, Secondary School;</b> <b>Market Research Analyst &amp; Marketing Specialist;</b> <b>Management Analysts; Environmental Engineer</b>
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on articulations as of December 2019)		
	At the time of publication, there was no local articulation agreement for this program.  <i>For a current list of local agreements, visit</i> <a href="https://www.lake.k12.fl.us/College&amp;CareerReadiness/LocalArticulations">https://www.lake.k12.fl.us/College&amp;CareerReadiness/LocalArticulations</a>	<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)  <b>Statewide Articulation:</b> 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  <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>	A.A./A.S to B.A./BS Degree
Career and Technical Student Association			
The National FFA Organization (FFA)			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			


Career Cluster: Architecture & Construction				CTE Program: Secondary: Air Conditioning, Refrigeration & Heating Technology (HVAC) Postsecondary: Air Conditioning, Refrigeration & Heating Technology				
Career Cluster Pathway: Construction Career				Industry Certification: Secondary: NCCER HVAC – Level 1; HVAC Excellence EmploymentReady – Air Conditioning; LEED Green Associate Postsecondary: EPA Certification; HVAC Excellence				
	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.		
	<b>TECHNICAL CENTER/COLLEGE PROGRAM(S)</b>	<b>COMMUNITY/STATE COLLEGE PROGRAM(S)</b>	<b>UNIVERSITY PROGRAM(S)</b>
	<b>Lake Technical College</b> <a href="https://www.laketech.org/programs">https://www.laketech.org/programs</a> <b>Certificate:</b> EPA Certification; HVAC Excellence	<b>Valencia College</b> <a href="http://www.valenciacollege.edu">www.valenciacollege.edu</a> <b>A.S. Degrees:</b> Energy Management & Controls Technology	<b>University of Central Florida</b> <a href="http://www.ucf.edu/academics">www.ucf.edu/academics</a> <b>B.S. Degrees:</b> Construction Engineering; Electrical Engineering; Environmental Engineering; Industrial Engineering; & Mechanical Engineering <b>B.S. Degrees:</b> Electrical Engineering; & Engineering Management
CAREER	Sample Career Specialties (Bold text signifies High Skill & High Wage.)		
	Construction & Building Inspector; Sales Representative; Heating, Air Conditioning, & Refrigeration Mechanic & Installer; Welder, Cutter, Solderer, & Brazier	Construction Manager; General Operations Manager; Construction Manager	Chief Executive; Mechanical Engineer
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on articulations as of December 2017)		
	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>Statewide Articulation:</b> 3 credits for NCCER HVAC Certification-Level 1 (NCCER018) toward Air Conditioning, Refrigeration and Heating Systems 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			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training and professional organization experiences.			


Career Cluster: Health Science				CTE Program: Secondary: Allied Health Assisting Postsecondary: Nursing Assistant				
Career Cluster Pathway: Therapeutic Services				Industry Certification: Secondary: Certified Medical Administrative Assistant; Emergency Medical Responder Postsecondary: Certified Nursing Assistant (CNA); Certified EKG Technician; State Licensure for Practical Nurse; National Registry Administered Test for State of FL- EMT Licensure; State Administered Test for Paramedic Licensure; National Pharmacy Technician; State Licensure for Practical Nurse				
	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.

POST-SECONDARY	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>Lake Technical College</b> <a href="http://www.laketech.org/programs">www.laketech.org/programs</a> <b>Certificates:</b> Emergency Medical Technician; Medical Assisting; Nursing Assistant (CNA - Long Term Care); Paramedic; Pharmacy Technician; Phlebotomy; Practical Nursing	<b>COMMUNITY/STATE COLLEGE PROGRAM(S)</b>  <b>Lake-Sumter State College</b> <a href="http://www.lssc.edu/academics">www.lssc.edu/academics</a> <b>A.S. Degree:</b> Health Information Technology; Nursing <b>A.S. to B.S. Career Path:</b> Nursing <b>Certificate Programs:</b> Medical Information Coder/Biller; Health Informatics Specialist; Medical Office Management	<b>UNIVERSITY PROGRAM(S)</b>  <b>University of Central Florida</b> <a href="http://www.ucf.edu/academics">www.ucf.edu/academics</a> <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; Adult/Gerontology Clinical Nurse Specialist)
CAREER	Sample Career Specialties (Bold text signifies High Skill & High Wage.)		
	Diagnostic Medical Sonographer; Health Technologist & Technician; Licensed Practical & Licensed Vocation Nurse; Medical Assistant; Medical Secretary; Radiologic Technologist; Surgical Technologist	Biological Technician; Compensation, Benefits, & Job Analysis Specialist; Dental Hygienists; Medical & Clinical Laboratory Technician; Medical & Clinical Laboratory Technologist; Medical Records & Health Information Technician; Physical Therapist Assistant; Registered Nurse; Respiratory Therapists	Human Resources Manager; Medical & Health Services Manager; Human Resources Specialist; Biomedical Engineer; Health & Safety Engineer; Food Scientist & Technologist; Biological Scientist; Chemist; Substance Abuse & Behavioral Disorder Counselor; Medical & Clinical Laboratory Technician/ Technologists; Medical Records & Health Information Technician; Registered Nurse; Rehabilitation Counselor; Health Educator
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on articulations as of December 2019)		
	<b>Secondary to Lake Technical College</b> Health Science1, Health Science 2, and Allied Health Assisting 3 to Medical Assisting=90 hours; Basic Health Care Worker; Pharmacy Technician=90 hours; Patient Care Technician + Basic Health Care Worker= 90 hours; + Nurse Aide Orderly = 75 hours  <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;CareerReadiness/LocalArticulations</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) <i>Standard statewide articulation agreements.</i>	A.A./A.S. to B.A./B.S. Degree
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.			




<b>Career Cluster:</b> Information Technology				<b>CTE Program:</b> <b>Secondary:</b> Applied Cybersecurity <b>Postsecondary:</b> Business Administration; Business Specialist; Business Operations; & Computer Information Technology				
<b>Career Cluster Pathway:</b> Network Systems				<b>Industry Certification:</b> <b>Secondary:</b> Certified Internet Web (CIW) - Internet Business Associate; CompTIA Security+; CompTIA Network+; CIW/Web Security Associate; Network Technology Associate <b>Postsecondary:</b> TESTOUT Security Pro; CompTIA Security+; CompTIA Network+; CompTIA A+				
	<b>16 CORE CURRICULUM CREDITS</b>					<b>8 ADDITIONAL CREDITS</b>		
	<b>ENGLISH</b> 4 credits	<b>MATH</b> 4 credits	<b>SCIENCE</b> 3 credits, 2 with lab	<b>SOCIAL STUDIES</b> 3 credits	<b>OTHER REQUIRED COURSES</b> FINE ARTS (1 credit) HOPE (1 credit)	<b>CAREER AND TECHNICAL EDUCATION COURSES</b>	<b>RECOMMENDED ELECTIVES</b> (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
<b>HIGH SCHOOL</b>	<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 mycareershines.org</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>							
	<b>9<sup>th</sup></b>	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.
	<b>10<sup>th</sup></b>	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.
	<b>11<sup>th</sup></b>	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.
	<b>12<sup>th</sup></b>	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.		
	<b>TECHNICAL CENTER/COLLEGE PROGRAM(S)</b>	<b>COMMUNITY/STATE COLLEGE PROGRAM(S)</b>	<b>UNIVERSITY PROGRAM(S)</b>
	<b>Lake Technical College</b> <a href="http://www.laketech.org/programs">www.laketech.org/programs</a> <b>Certificates:</b> Accounting Operations; Administrative Office Specialist	<b>Lake-Sumter State College</b> <a href="http://www.lssc.edu/academics">www.lssc.edu/academics</a> <b>A.S. Degree:</b> Computer Information Technology <b>A.S. to B.S. Career Path:</b> Organizational Management <b>Certificate:</b> Information Technology Analysis; & Digital Forensics	<b>University of Central Florida</b> <a href="http://www.ucf.edu/academics">www.ucf.edu/academics</a> <b>B.S. Degree:</b> Computer Engineering; Computer Science <b>M.S. Degrees:</b> Computer Engineering; Computer Science
CAREER	Sample Career Specialties (Bold text signifies High Skill & High Wage.)		
	Data Entry Clerk; Computer Network Architect; Computer Network Support Specialist; Computer Programmer; Computer User Support Specialists; Information Security Analysts; Web Developer	Computer User Support Specialist; Software Developer, Applications; Database Administrator; Network & Computer Systems Administrator; Computer Systems Analysts; Database Administrators; Software Developer, Applications	Chief Executive; Computer Science Teacher; Computer & Information Systems Manager; Computer Systems Analysts; Computer Hardware Engineer; Logistician; Market Research analyst & Marketing Specialist; Securities, Commodities, & Financial Services Sales Agent
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on articulations as of December 2019)		
	<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 <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 Lake-Sumter State College</b> Option A (Credit by Exam) Applied Cybersecurity (Introduction to Information Technology, Computer and Network Security Fundamentals, Cybersecurity Essentials)  <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  <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>	A.A./A.S. to B.A./B.S. Degree
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 Program: Secondary: Architectural Drafting Postsecondary: Drafting and Design Technology				
Career Cluster Pathway: Design/Pre-Construction				Industry Certification: Secondary: Autodesk Certified User-AutoCAD; Autodesk Certified User-Inventor; Certified SolidWorks Associate CSWA; Certified Apprentice Drafter Architectural Postsecondary: AutoCAD Foundations; Drafting				
	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)
	Orange Technical College <a href="https://www.orangetechcollege.net/">https://www.orangetechcollege.net/</a> <b>Certificates</b> Building Construction Technologies; CNC Production Specialist; Drafting; Mechatronics Technologies	Valencia College <a href="http://www.valenciacollege.edu">www.valenciacollege.edu</a> <b>A.S. Degree:</b> Computer Aided Drafting and Design Technology <b>Certificates:</b> Architectural Drafting; Mechanical Drafting; Surveying Drafting	University of Central Florida <a href="http://www.ucf.edu/academics">www.ucf.edu/academics</a> <b>B.S. Degree:</b> Civil Engineering; Construction Engineering; Industrial Engineering <b>M.S. Degrees:</b> Civil Engineering; Engineering Management; Industrial Engineering
CAREER	Sample Career Specialties (Bold text signifies High Skill & High Wage.)		
	Architectural & Civil Drafter; Construction & Building Inspector; Electrician; Machinist; Sales Representative; Surveying & Mapping Technician	Construction Manager; General Operations Manager; Network & Computer Systems Administrator	Architectural & Engineering Manager; Chief Executive; Civil Engineer; Computer & Information Systems Manager; Human Resource Manager; Human Resources Specialist
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on articulations as of December 2019)		
	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>	Statewide Articulation: 3 credits for Certified Solidworks Associate-Academic Certificate (SOLID003) toward Manufacturing Technology or Engineering Technology; 3 credits for Autodesk Certified User - AutoCAD certification (ADESK002) toward the AS degree in Architectural Design & Construction Technology or 3 credits toward the AS degree in Drafting and Design Technology; 3 credits for Certified Apprentice Drafter – Architectural Certification (AMDDA002) toward Architectural Design & Construction Technology program and Drafting & Design Technology program;	A.A./A.S. to B.A./B.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.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			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			


<b>Career Cluster:</b> Transportation, Distribution & Logistics				<b>CTE Program:</b> <b>Secondary:</b> Automotive Maintenance and Light Repair <b>Postsecondary:</b> Automotive Service Technology 1 & 2				
<b>Career Cluster Pathway:</b> Facility and Mobile Equipment Maintenance				<b>Industry Certification:</b> <b>Secondary:</b> ASE Auto Maintenance & Light Repair (G1); FADA Certified Technician <b>Postsecondary:</b> Automotive Service Excellence (ASE) Professional				
	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)
	Lake Technical College <a href="http://www.laketech.org/programs">www.laketech.org/programs</a> Certificate: Automotive Service Technology	Seminole State College <a href="http://www.seminolestate.edu">www.seminolestate.edu</a> A.A.S. Degree: Automotive Engineering Technology Certificate: Automotive Service Technology; Automotive Maintenance & Light Repair	University of Central Florida <a href="http://www.ucf.edu/academics">www.ucf.edu/academics</a> B.S. Degrees: Mechanical Engineering
CAREER	Sample Career Specialties (Bold text signifies High Skill & High Wage.)		
	Retail Salesperson; Sales Representative, Services; Billing & Posting Clerk; Order Clerk	Bus & Truck Mechanic & Diesel Engine Specialist; Cost Estimator; First-Line Supervisor of Mechanic, installer & Repairer; Purchasing Agent, Except Farm Products & Trade; Vocational Education Teacher, Postsecondary; Wholesale & Retail Buyer, Except Farm Products; Electrical & Electronics Engineering Technician; Mechanical Engineering Technician	Mechanical Engineer; Sales Manager; Vocational Education Teacher, Secondary School; Electrical Engineer; Mechanical Engineer
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on articulations as of December 2019)		
	Secondary to Lake Technical College Automotive Maintenance & Light Repair 1, Automotive Maintenance & Light Repair 2 & Automotive Maintenance & Light Repair 3 to Automotive Service Technology=Automotive Services Assistor (300 hours)  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>	Statewide Articulation: 3 credits for ASE Auto Maintenance & Light Repair (G1) ( NIASE076) toward AAS/AS Degree in Automotive Service Management Technology..  	




<b>Career Cluster:</b> Architecture & Construction				<b>CTE Program:</b> <b>Secondary:</b> Building Construction Technologies <b>Postsecondary:</b> Building Construction Technology				
<b>Career Cluster Pathway:</b> Construction Career				<b>Industry Certification:</b> <b>Secondary:</b> NCCER Electrical Level 1; NCCER Masonry Level 1; NCCER Carpentry Level 1; NCCER Construction Technology <b>Postsecondary:</b> Building Construction Technologies; CNC Production Specialist; Drafting; Machining Technologies				
	<b>16 CORE CURRICULUM CREDITS</b>					<b>8 ADDITIONAL CREDITS</b>		
	<b>ENGLISH</b> 4 credits	<b>MATH</b> 4 credits	<b>SCIENCE</b> 3 credits, 2 with lab	<b>SOCIAL STUDIES</b> 3 credits	<b>OTHER REQUIRED COURSES</b> FINE ARTS (1 credit) HOPE (1 credit)	<b>CAREER AND TECHNICAL EDUCATION COURSES</b>	<b>RECOMMENDED ELECTIVES</b> (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
<b>HIGH SCHOOL</b>	<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 mycareershines.org</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>							
	<b>9<sup>th</sup></b>	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.
	<b>10<sup>th</sup></b>	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.
	<b>11<sup>th</sup></b>	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.
	<b>12<sup>th</sup></b>	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.		
	<b>TECHNICAL CENTER/COLLEGE PROGRAM(S)</b>  <b>Orange Technical College</b> <a href="https://www.orangetechcollege.net/">https://www.orangetechcollege.net/</a> <b>Certificates</b> Building Construction Technologies; CNC Production Specialist; Drafting; Machining Technologies	<b>COMMUNITY/STATE COLLEGE PROGRAM(S)</b>  <b>Valencia College</b> <a href="http://www.valenciacollege.edu">www.valenciacollege.edu</a> <b>A.S. Degrees:</b> Construction & Civil Engineering Technology	<b>UNIVERSITY PROGRAM(S)</b>  <b>University of Central Florida</b> <a href="http://www.ucf.edu/academics">www.ucf.edu/academics</a> <b>B.S. Degree:</b> Civil Engineering; Construction Engineering; Industrial Engineering <b>M.S. Degrees:</b> Civil Engineering; Engineering Management; Industrial Engineering
CAREER	Sample Career Specialties (Bold text signifies High Skill & High Wage.)		
	Architectural & Civil Drafter; Construction & Building Inspector; Electrician; Machinist; Sales Representative; Surveying & Mapping Technician; Carpenter; Cement Masons & Concrete Finisher; Glazier; Pipe layer; Plasterer & Stucco Mason; Plumber, Pipefitter, & Steamfitter	Construction Manager; General Operations Manager; Network & Computer Systems Administrator; Construction Manager; Electrical & Electronics Engineering Technician	Architectural & Engineering Manager; Chief Executive; Civil Engineer; Computer & Information Systems Manager; Human Resource Manager; Human Resources Specialist
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on articulations as of December 2019)		
	For a current list of local agreements, visit <a href="https://www.lake.k12.fl.us/College_Career_Readiness/Local_Articulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations.</a>	<b>Statewide Articulation:</b> 3 credits for Construction Technology (NCCER008) for Architectural Design and Construction Technology program	A.A./A.S. to B.A./B.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: Hospitality & Tourism				CTE Program: Secondary: Culinary Arts Postsecondary: Professional Culinary Arts & Hospitality				
Career Cluster Pathway: Restaurants & Food/Beverage				Industry Certification: Secondary: Certified Food Safety Manager NRFSP; National ProStart Certificate of Achievement; Certified Food Protection Manager ServSafe; Certified Food Associate CFA Postsecondary: Nutrition; Supervision Management; Sanitation; ACF Certified Culinarian				
	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.		
	<b>TECHNICAL CENTER/COLLEGE PROGRAM(S)</b>  <b>Lake Technical College</b> <a href="http://www.laketech.org/programs">www.laketech.org/programs</a> <b>Certificate:</b> Professional Culinary Arts & Hospitality; Baking & Pastry Arts	<b>COMMUNITY/STATE COLLEGE PROGRAM(S)</b>  <b>Valencia College</b> <a href="http://www.valenciacollege.edu/">www.valenciacollege.edu/</a> <b>Certificate:</b> Baking & Pastry Arts; 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>A.S. Degrees:</b> Baking & Pastry Management; Culinary Management; Hospitality & Tourism Management; Restaurant & Food Service Management	<b>UNIVERSITY PROGRAM(S)</b>  <b>University of Central Florida</b> <i>Rosen College of Hospitality Management</i> <a href="http://www.hospitality.ucf.edu/">www.hospitality.ucf.edu/</a> <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
CAREER	Sample Career Specialties (Bold text signifies High Skill & High Wage.)		
	Cook, Institution & Cafeteria; Butcher & Meat Cutter; Cook, Fast Food; Food Preparation Worker	Chef & Head Cook; Food Service Manager; Purchasing Agent; Lodging Manager; Meeting, Convention, & Event Planner	Vocational Education Teacher, Secondary School; Food Scientist & Technologist; Health & Safety Engineer; Dietitian & Nutritionist
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on articulations as of December 2019)		
	<b>Secondary to Lake Technical College</b> Culinary Arts 1, Culinary Arts 2, Culinary Arts 3, and Culinary Arts 4 or Culinary 4 Track 1 or Culinary 4 Track 2 or Culinary 4 Track 3 to Professional Culinary Arts & Hospitality=150 hours Food Preparation; 150 hours Cook, Restaurant or 150 hours Culinary Arts; or Culinary & Hospitality Specialties 1, Culinary & Hospitality Specialties 2 to Professional Culinary Arts & Hospitality = 150 hours Culinary Arts  <i>For a current list of local agreements, visit</i> <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>Statewide Articulation:</b> 3 credits for National Pro-Start Certificate of Achievement (NRAEF002) Certification and 3 credits for Certified Professional Food Service Manager (NRAEF003) toward Culinary Management or Restaurant Management program; 3 credits for Certified Food Safety Manager (NRFSP001) toward Culinary Management or Baking and Pastry Management 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>	A.A./A.S. to B.A./B.S. Degree
Career and Technical Student Association			
Family, Career & Community Leaders of America (FCCLA) and SkillsUSA			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			


<b>Career Cluster:</b> Arts, A/V Technology & Communication				<b>CTE Program:</b> <b>Secondary:</b> Digital Design <b>Postsecondary:</b> Business Administration				
<b>Career Cluster Pathway:</b> Visual Arts				<b>Industry Certification:</b> <b>Secondary:</b> Certified Internet Web (CIW) - Internet Business Associate; Adobe Certified Associate – InDesign; Adobe Certified Associate – Illustrator; Adobe Certified – Photoshop; Adobe Certified Expert Photoshop; Adobe Certified Expert InDesign <b>Postsecondary:</b> Organizational Management <b>Certificates:</b> Business Development & Entrepreneurship; Business Mgmt.; Business Operations; Business 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	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)
	Lake Technical College <a href="http://www.laketech.org/programs">www.laketech.org/programs</a> <b>Certificates:</b> Accounting; Administrative Office Specialist	Lake-Sumter State College <a href="http://www.lssc.edu/academics">www.lssc.edu/academics</a> <b>A.S. Degrees:</b> Business Administration <b>A.S. to B.A.S Career Path:</b> Organizational Management <b>Certificates:</b> Business Management., Business Operations, Business Specialist	University of Central Florida <a href="http://www.ucf.edu/academics">www.ucf.edu/academics</a> School of Arts and Humanities <b>B.A. Degree:</b> Art - Emerging Media; Visual Arts & Emerging Media Management; Digital Media
CAREER	Sample Career Specialties (Bold text signifies High Skill & High Wage.)		
	Advertising Sales Agents; First-Line Supervisors of Retail Sales Workers; Sales Representative; Web Developer	Advertising & Promotions Manager; Graphic Designer; Multi-Media Artist & Animator; General and Operations Manager; Lodging Manager	Public Relations & Fundraising Manager; Art Director; Advertising & Promotions Manager; Business Teacher, Postsecondary; Chief Executive; Editor; Market Research analyst & Marketing Specialist; Marketing Manager; Writer & Author
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on articulations as of December 2019)		
	Secondary to Lake Technical College 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.  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>	Secondary to Lake-Sumter State College Option A (Credit by Exam)  Digital Design (Introduction to Information Technology or Digital Information Technology, Digital Design 1, Digital Design 2, Digital Design 3)	A.A./A.S. to B.A./B.S. Degree
	Statewide Articulation: 3 credits for Adobe Flash/Animate (ADOBE11) toward Internet Services 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			
SkillsUSA			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training and professional organization experiences.			




Career Cluster: Diversified Education				CTE Program: Secondary: Diversified Career Technology Postsecondary: Business Administration				
Career Cluster Pathway: TBA				Industry Certification: Secondary: Certified Internet Web (CIW) Internet Business Associate; Microsoft Office Specialist (MOS) Bundle (Word, Excel, PowerPoint) Postsecondary: Business Development & Entrepreneurship; Business Mgmt.; Business Operations; Business 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	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)
	Lake Technical College <a href="http://www.laketech.org/programs">www.laketech.org/programs</a> Certificates: Accounting Operations, Administrative Office Specialist	Lake-Sumter State College <a href="http://www.lssc.edu/academics">www.lssc.edu/academics</a> A.S. Degrees: Business Administration A.S. to B.A.S Career Path: Organizational Management Certificates: Business Management.; Business Operations; Business Specialist	University of Central Florida <a href="http://www.ucf.edu/academics">www.ucf.edu/academics</a> B.S. Degrees: Accounting; Economics; Finance; Integrated Business; Management; Marketing; Real Estate M.B.A. Degree: Business Administration; Accounting; Economics; Management; Real Estate; Sport Business Management
CAREER	Sample Career Specialties (Bold text signifies High Skill & High Wage.)		
	Advertising Sales Agents; Compliance Officers; First- Line Supervisors of Personal Service Workers; Human Resource Assistant; Paralegal & Legal Assistant; Sales Representative	First-Line Supervisor of Office & Administration Support Workers; Vocational Education Teacher, Postsecondary; Compensation, Benefits, & Job Analysis Specialists; Costs Estimator; Database Administrator; General and Operations Manager; Lodging Manager; Meeting, Convention, & Event Planner; Property, Real Estate, & Community Association Manager	Business Teacher, Postsecondary; Chief Executive; Human Resources Specialist; Management Analysts; Public Relations Specialists; Financial Analyst; Financial Manager; Training & Development Specialist
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on articulations as of December 2019)		
	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) Diversified Career Technology	A.A. /A.S. to B.A. /B.S. Degree.
		Statewide Articulation: 3 credits for MOS Bundle (3 of 6) Certification (MICRO069) toward Office Administration 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			
DECA, FBLA-PBL, FCCLA, FFA, FL-TSA, FPSA, HOSA, SkillsUSA			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			


Career Cluster: Education & Training				CTE Program: Secondary: Early Childhood Education Postsecondary: Early Childhood Education				
Career Cluster Pathway: Teaching/Training				Industry Certification: Secondary: Child Development Associate (CDA); Certified Food Protection Manager (ServSafe); Certified Food Safety Manager (NRFSP) Postsecondary: Child Care Center Management Specialization; Early Childhood Education – Early Intervention Specialist Certificate; Early Childhood Education Infant/Toddler Specialization; Early Childhood Education Preschool Specialization; Educational Assisting; Instructional Design; Early Childhood Professional (ECPC)				
	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.		
	<b>TECHNICAL CENTER/COLLEGE PROGRAM(S)</b>  <b>Orange Technical College</b> <a href="https://www.orangetechcollege.net/">https://www.orangetechcollege.net/</a> <b>Certificates:</b> Child Care Center Operations	<b>COMMUNITY/STATE COLLEGE PROGRAM(S)</b>  <b>College of Central Florida</b> <a href="http://www.cf.edu/programs">www.cf.edu/programs</a> Option A (Credit by Exam) Early Childhood Education (Digital Information Technology, Early Childhood Education 1, Early Childhood Education 2, Early Childhood Education 3)	<b>UNIVERSITY PROGRAM(S)</b>  <b>University of Central Florida</b> <a href="http://www.ucf.edu/academics">www.ucf.edu/academics</a> <b>B.S. Degree in Education:</b> Early Childhood Development and Education: Pre-Kindergarten - Primary (PK-3) Early Childhood Development <b>M.Ed. Degree:</b> Education
CAREER	Sample Career Specialties (Bold text signifies High Skill & High Wage.)		
	Teacher Assistant; Concierges; Correspondence Clerk	Social & Community Service Manager; Meeting, Convention, & Event Planner; Life, Physical, & social Science Technician; Preschool Teacher; Recreation Worker; Vocational Education Teacher, Postsecondary	Education Administrator, Elementary & Secondary; Elementary School Teacher; Kindergarten Teacher; Public Relations & Fundraising Manager; Human Resources Manager; Education Administrator, Preschool & Childcare; Human Resources Specialist; Labor Relations Specialist; Training & Development Specialist; Social Worker
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on articulations as of December 2019)		
	<i>For a current list of local agreements, visit</i> <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>Statewide Articulation:</b> 9 Credits for Child Development Associate (CDA) Certification (CPREC001) toward Early Childhood Education A.S. Program	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			
Family, Career and Community Leaders of America (FCCLA)			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			


<b>Career Cluster:</b> Business, Management & Administration				<b>CTE Program:</b> <b>Secondary:</b> Electronic Business Enterprise (E-Commerce) <b>Postsecondary:</b> Accounting Operations & Administrative Office Specialist				
<b>Career Cluster Pathway:</b> Marketing & Communications				<b>Industry Certification:</b> <b>Secondary:</b> Certified Internet Web (CIW) Internet Business Associate; Microsoft Office Specialist (MOS) Bundle (Word, Excel, PowerPoint); CIW IBA E-Commerce Specialist <b>Postsecondary:</b> Microsoft Office Specialist Bundle; QuickBooks Certified User; Microsoft Office Specialist Master				
	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.		
	<b>TECHNICAL CENTER/COLLEGE PROGRAM(S)</b>  <b>Lake Technical College</b> <a href="http://www.laketech.org/programs">www.laketech.org/programs</a> <b>Certificates:</b> Accounting Operations, Administrative Office Specialist	<b>COMMUNITY/STATE COLLEGE PROGRAM(S)</b>  <b>Lake-Sumter State College</b> <a href="http://www.lssc.edu/academics/degrees">www.lssc.edu/academics/degrees</a> <b>A.S. Degrees:</b> Business Administration, <b>A.S. to B.A.S Career Path:</b> Organizational Management <b>Certificates:</b> Business Management, Business Operations, Business Specialist	<b>UNIVERSITY PROGRAM(S)</b>  <b>University of Central Florida</b> <a href="http://www.ucf.edu/academics">www.ucf.edu/academics</a> <i>College of Business Administration</i> <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
CAREER	Sample Career Specialties (Bold text signifies High Skill & High Wage.)		
	Claims Adjusters, Examiners, & Investigators; Human Resource Assistant; Loan Interviewer & Clerk; Paralegal & Legal Assistant; Real Estate Broker; Sales Representative	First-Line Supervisor of Office and Administration Support Workers; Loan Officers; Vocational Education Teacher, Postsecondary; Compensation, Benefits & Job Analysis Specialist; Costs Estimators; General and Operations Manager; Lodging Manager; Meeting, Convention, & Event Planner; Property, Real Estate, & Community Association Manager; Purchasing Agent	Accountant & Auditor; Business Teacher, Postsecondary; Chief Executive; Human Resources Specialist; Public Relations Specialists; Training & Development Specialist; Economist; Financial Analyst; Financial Manager; Logistician; Personal Financial Advisor; Securities, Commodities, & Financial Services Sales Agent
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on articulations as of December 2019)		
	<i>For a current list of local agreements, visit</i> <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>Statewide Articulation:</b> 3 credits for MOS Bundle (3 of 6) Certification (MICRO069) toward Office Administration program;	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			
Future Business Leaders of America (FBLA)			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			




Career Cluster: Energy				CTE Program: Secondary: Energy Technician Postsecondary: Electrical Distribution Technology & Engineering Technology Specialist				
Career Cluster Pathway: Energy				Industry Certification: Secondary: NCCER–Electrical Level 1; NCCER–Electrical Level 2; MSSC Certified Production Technician Postsecondary: Electrical Distribution Technology Basic; Electrical Distribution Technology Advanced; & Engineering Technology 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	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)
	Orange Technical College <a href="https://www.orangetechcollege.net/">https://www.orangetechcollege.net/</a> Certificates: Electricity	Lake-Sumter State College <a href="http://www.lssc.edu/academics">www.lssc.edu/academics</a> A.A.S. Degree: Electrical Distribution Technology; Engineering Technology A.S. to B.S. Career Path: Organizational Management Certificate: Electric Utility Lineworker Basic; Electric Utility Lineworker Advanced; Engineering Technology Support Specialist	University of Central Florida <a href="http://www.ucf.edu/academics">www.ucf.edu/academics</a> B.S. Degree: Electrical Engineering M.S. Degree: Electrical Engineering
CAREER	Sample Career Specialties (Bold text signifies High Skill & High Wage.)		
	Installation, Maintenance, & Repair Worker; Construction & Building Inspector; Electrician; Surveying & Mapping Technician	Electrical & Electronic Engineering Technician; Electrician; Mechanical Engineering Technician; Vocational Education Teacher, Postsecondary: Media & Communication Equipment Worker; Outdoor Power Equipment & Small Engine Mechanic	Electrical Engineer; Electronics Engineer; Training & Development Specialist; Computer Hardware Engineer; Industrial Engineer; Urban & Regional Planner; Computer & Information Systems Manager
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on articulations as of December 2019)		
	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	A.A./A.S to B.A./BS Degree
		Statewide Articulation: Up to 15 credits for MSSC Certified Production Technician Certification (MSSCN001) toward Manufacturing Technology, Electronics Engineering Technology or Engineering 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			
SkillsUSA			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			


<b>Career Cluster:</b> Engineering & Technology Education				<b>CTE Program:</b> <b>Secondary: Engineering Pathways</b> Postsecondary: Electrical Distribution Technology & Engineering Technology				
<b>Career Cluster Pathway:</b> Engineering & Technology				<b>Industry Certification:</b> <b>Secondary:</b> Certified Solidworks Associate (CSWA); RECF Pre-Engineering Certification; MSSC Certified Production Technician (CPT); Autodesk Inventor Certified User <b>Postsecondary:</b> Electrical Distribution Technology Basic; Electrical Distribution Technology Advanced; & Engineering Technology Specialist				
	<b>16 CORE CURRICULUM CREDITS</b>					<b>8 ADDITIONAL CREDITS</b>		
	<b>ENGLISH</b> 4 credits	<b>MATH</b> 4 credits	<b>SCIENCE</b> 3 credits, 2 with lab	<b>SOCIAL STUDIES</b> 3 credits	<b>OTHER REQUIRED COURSES</b> FINE ARTS (1 credit) HOPE (1 credit)	<b>CAREER AND TECHNICAL EDUCATION COURSES</b>	<b>RECOMMENDED ELECTIVES</b> (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
<b>HIGH SCHOOL</b>	<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>							
	<b>9<sup>th</sup></b>	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.
	<b>10<sup>th</sup></b>	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.
	<b>11<sup>th</sup></b>	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.
	<b>12<sup>th</sup></b>	English IV	Probability & Statistics or Pre-Calculus	Physics	United States Government. & Economics w/Financial Literacy		Civil Engineering and Architecture	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.		
	<b>TECHNICAL CENTER/COLLEGE PROGRAM(S)</b>	<b>COMMUNITY/STATE COLLEGE PROGRAM(S)</b>	<b>UNIVERSITY PROGRAM(S)</b>
	<b>Lake Technical College</b> <a href="http://www.laketech.org/programs">www.laketech.org/programs</a> <b>Certificate:</b> CNC Production Specialist; Welding Technology; Welding Technology - Advanced	<b>Lake-Sumter State College</b> <a href="http://www.lssc.edu/academics">www.lssc.edu/academics</a> <b>A.A.S. Degree:</b> Electrical Distribution Technology & Engineering <b>A.S. to B.S. Career Path:</b> Organizational Management <b>Certificate:</b> Electric Utility Lineworker Basic; Electric Utility Lineworker Advanced; Engineering Technology Support Specialist	<b>University of Central Florida</b> <a href="http://www.ucf.edu/academics">www.ucf.edu/academics</a> <b>B.S. Degrees:</b> Engineering (Electrical, Aerospace, Civil, Computer, Construction, Environmental, Industrial, Mechanical); Technical Education & Industry Training <b>M.S. Degrees:</b> Aerospace Engineering; Civil Engineering; Electrical Engineering; Industrial Engineering; Mechanical Engineering
CAREER	Sample Career Specialties (Bold text signifies High Skill & High Wage.)		
	Architectural & Civil Drafter; Construction & Building Inspector; Electrician; Machinist; Sales Representative; Surveying & Mapping Technician	Civil Engineering Technician; Electrical & Electronics Engineering Technician; Environmental Engineering Technician; Mechanical Engineering Technician	Architectural & Engineering Manager; Construction Manager; Surveyor; Civil Engineer; Computer Hardware Engineer; Electrical Engineer; Electronics Engineer; Industrial Engineer; Materials Engineer; Mechanical Engineer; Urban & Regional Planner
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on articulations as of December 2019)		
	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 Lake-Sumter State College</b> Option A (Credit by Exam) Introduction to Engineering Design, Principles of Engineering, Digital Electronics or Civil Engineering and Architecture	A.A./A.S. to B.A./B.S. Degree
		<b>Statewide Articulation:</b> 3 credits for Certified Solidworks Associate Certification (SOLID0036) toward Manufacturing Technology program; Up to 15 credits for MSSC Certified Production Technician Certification (MSSCN001) toward Manufacturing Technology, Electronics Engineering Technology, or Engineering Technology & 3 credits for Autodesk Inventor Certified User Certification (ADESK011) toward 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			
Florida Technology Student Association (FL-TSA); SkillsUSA			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			


<b>Career Cluster:</b> Marketing, Sales & Service				<b>CTE Program:</b> <b>Secondary:</b> Entrepreneurship <b>Postsecondary:</b> Accounting Operations & Administrative Office Specialist				
<b>Career Cluster Pathway:</b> Management & Entrepreneurship				<b>Industry Certification:</b> <b>Secondary:</b> Certified Internet Web (CIW) - Internet Business Associate; Microsoft Office Specialist (MOS) Bundle Certification (3 out of 6 - Word, Excel, PowerPoint); QuickBooks Certified User <b>Postsecondary:</b> Microsoft Office Specialist Bundle; QuickBooks Certified User; Microsoft Office Specialist Master				
	<b>16 CORE CURRICULUM CREDITS</b>					<b>8 ADDITIONAL CREDITS</b>		
	<b>ENGLISH</b> 4 credits	<b>MATH</b> 4 credits	<b>SCIENCE</b> 3 credits, 2 with lab	<b>SOCIAL STUDIES</b> 3 credits	<b>OTHER REQUIRED COURSES</b> FINE ARTS (1 credit) HOPE (1 credit)	<b>CAREER AND TECHNICAL EDUCATION COURSES</b>	<b>RECOMMENDED ELECTIVES</b> (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
<b>HIGH SCHOOL</b>	<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 mycareershines.org</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>							
	<b>9<sup>th</sup></b>	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.
	<b>10<sup>th</sup></b>	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.
	<b>11<sup>th</sup></b>	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.
	<b>12<sup>th</sup></b>	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)
	Lake Technical College <a href="http://www.laketech.org/programs">www.laketech.org/programs</a> Certificates: Accounting Operations; Administrative Office Specialist	Lake-Sumter State College <a href="http://www.lssc.edu/academics">www.lssc.edu/academics</a> A.S. Degrees: Business Administration A.S. to B.A.S Career Path: Organizational Management Certificates: Business Management.; Business Operations; Business Specialist	University of Central Florida <a href="http://www.ucf.edu/academics">www.ucf.edu/academics</a> College of Business Administration B.S. Degrees: Accounting; Economics; Finance; Integrated Business; Management; Marketing; Real Estate M.B.A. Degree: Accounting; Business Administration; Economics; Management; Real Estate; Sport Business Management
CAREER	Sample Career Specialties (Bold text signifies High Skill & High Wage.)		
	First-Line Supervisors of Personal Service Workers; First-Line Supervisors of Retail Sales Workers; Human Resource Assistant; Insurance Sales Agent; Loan Interviewer & Clerk; Paralegal & Legal Assistant; Real Estate Broker; Sales Representative	First-Line Supervisor of Office & Administration Support Workers; Vocational Education Teacher, Postsecondary; Compensation, Benefits, & Job Analysis Specialists; Costs Estimators; First-Line Supervisor of Non-Retail Sales; General and Operations Manager; Lodging Manager; Meeting, Convention, & Event Planner; Property, Real Estate, & Community Association Manager; Purchasing Agent	Accountant & Auditor; Business Teacher, Postsecondary; Chief Executive; Human Resources Specialist; Public Relations Specialists; <del>Sales Manager</del> ; Financial Analyst; Financial Manager; Human Resource Manager; Logistician; Personal Financial Advisor; Securities, Commodities, & Financial Services Sales Agent
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on articulations as of December 2019)		
	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) Entrepreneurship	A.A./A.S to B.A./BS Degree
		Statewide Articulation: 3 credits for QuickBooks Certified User toward Accounting Technology Certification (INTUT001); 3 credits for MOS Bundle (3 of 6) Certification (MICRO069) toward Office Administration 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			
DECA; FBLA			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			




Career Cluster: Finance				CTE Program: Secondary: Finance Postsecondary: Business Administration				
Career Cluster Pathway: Finance Career				Industry Certification: Secondary: Microsoft Office Specialist (MOS) Bundle Certification (3 out of 6 - Word, Excel, PowerPoint, Access, Outlook, SharePoint); Certified Internet Web (CIW) - Internet Business Associate; QuickBooks Certified User Postsecondary: Business Mgmt., Business Operations, Business 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) 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>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at mycareershines.org</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>One course within the 24 credit program must be an online course. 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.		
	<b>TECHNICAL CENTER/COLLEGE PROGRAM(S)</b>  <b>Lake Technical College</b> <a href="http://www.laketech.org">www.laketech.org</a> Certificate: Accounting Operations	<b>COMMUNITY/STATE COLLEGE PROGRAM(S)</b>  <b>Lake-Sumter State College</b> <a href="http://www.lssc.edu/academics">www.lssc.edu/academics</a> <b>A.S. Degrees:</b> Business Administration <b>A.S. to B.A.S Career Path:</b> Organizational Management <b>Certificates:</b> Business Management; Business Operations; Business Specialist	<b>UNIVERSITY PROGRAM(S)</b>  <b>University of Central Florida</b> <a href="http://www.ucf.edu/academics">www.ucf.edu/academics</a> <i>College of Business Administration</i> <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
CAREER	Sample Career Specialties (Bold text signifies High Skill & High Wage.)		
	Claims Adjusters, Examiners, & Investigators; Compliance Officers; Human Resource Assistant; Information Security Analysts; Insurance Sales Agent; Loan Interviewer & Clerk; Real Estate Broker; Sales Representative	Vocational Education Teacher, Postsecondary; Compensation, Benefits, & Job Analysis Specialist; Costs Estimators; First-Line Supervisor of Office and Administrative Support Workers; General and Operations Manager; Lodging Manager; Meeting, Convention, & Event Planner; Purchasing Agent	Accountant & Auditor; Business Teacher, Postsecondary; Chief Executive; Sales Manager; Market Research Analysts & Marketing Specialist; Financial Analyst; Financial Manager; Logistician; Marketing Manager; Personal Financial Advisor; Public Relations & Fundraising Manager; Securities, Commodities, & Financial Services Sales Agent
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on articulations as of December 2019)		
	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>Statewide Articulation:</b> 3 Credits for MOS Bundle (3 of 6) Certification (MICRO069) toward an Office Administration program; 3 credits for QuickBooks Certified User (INTUT001) toward Accounting Technology program	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.stm">http://www.fldoe.org/academics/career-adult-edu/career-technical-edu-agreements/industry-certification.stm</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)			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			


Career Cluster: Information Technology				CTE Program: Secondary: Geospatial/Geographic Information Systems (GIS) Technology Postsecondary: Computer Information Technology				
Career Cluster Pathway: Information Support & Services				Industry Certification: Secondary: ArcGIS Desktop Entry; STARS GIS Technician Postsecondary: Information Technology Analysis; & Digital Forensics				
	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>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>One course within the 24 credit program must be an online course. 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 GIS/RS 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		Essential GIS/RS Tools and Processes	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)	GIS/RS Analysis and Modeling	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 GIS/RS 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.		
	<b>TECHNICAL CENTER/COLLEGE PROGRAM(S)</b>	<b>COMMUNITY/STATE COLLEGE PROGRAM(S)</b>	<b>UNIVERSITY PROGRAM(S)</b>
	The program leads to a broad range of postsecondary career pathways in all sectors of the Geospatial/Geographic information Systems (GIS) Technology.	<b>Lake-Sumter State College</b> <a href="http://www.lssc.edu/academics">www.lssc.edu/academics</a> <b>A.S. Degree:</b> Computer Information Technology <b>A.S. to B.S. Career Path:</b> Organizational Management <b>Certificate:</b> Information Technology Analysis; & Digital Forensics	<b>University of Central Florida</b> <a href="http://www.ucf.edu/academics">www.ucf.edu/academics</a> <b>B.S. Degree:</b> Computer Science <b>M.B.A. Degree:</b> Computer Science
CAREER	Sample Career Specialties (Bold text signifies High Skill & High Wage.)		
	Computer Network Architects; Computer Network Support Specialists; Computer Programmer; Computer User Support Specialists; Information Security Analysts; Web Developer	Database Administrator; Network & Computer Systems Administrator; Software Developer, Applications; Media & Communication Equipment Worker; Computer Systems Analysts; Database Administrators	Computer & Information Systems Manager; Management Analyst; Computer Systems Analyst; Training & Development Specialist; Software Developer, Systems Software; Surveyor; Computer Hardware Engineer; Electronics Engineer; Urban & Regional Planner
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on articulations as of December 2019)		
	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>Statewide Articulation:</b> 3 credits for ArcGIS Desktop Entry (ESRIC001) Computer Information Technology.	A.A./A.S. to B.A./B.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			
Florida Technology Student Association (FL-TSA); FBLA			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training, and professional organization experiences.			


<b>Career Cluster:</b> Agriculture, Food and Natural Resources				<b>CTE Program:</b> <b>Secondary:</b> Horticulture Science and Services <b>Postsecondary:</b> Agribusiness Management				
<b>Career Cluster Pathway:</b> Plant Systems				<b>Industry Certification:</b> <b>Secondary:</b> Certified Horticulture Professional; Aquaculture Technician; Agritechnology Specialist Certification; Agricultural Communications Specialist Certification; Agricultural Mechanics Specialist Certification <b>Postsecondary:</b> Horticulture 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) 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>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>One course within the 24 credit program must be an online course. 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.		
	<b>TECHNICAL CENTER/COLLEGE PROGRAM(S)</b>	<b>COMMUNITY/STATE COLLEGE PROGRAM(S)</b>	<b>UNIVERSITY PROGRAM(S)</b>
	This program leads to a broad range of postsecondary career pathways in all sectors of the agriculture and related industries	<b>College of Central Florida</b> <a href="http://www.cf.edu/programs">www.cf.edu/programs</a>  <b>Certificates:</b> Horticulture Specialist (Specializations: Horticulture, Landscape)  <b>A.S. Degrees:</b> Agribusiness Management (Specializations: Business Management, (Specializations: Horticulture: Landscape Design)	<b>University of Florida</b> <i>College of Agriculture and Life Sciences</i> <a href="http://www.hos.ufl.edu/">www.hos.ufl.edu/</a> <b>B.S. Degrees:</b> Agriculture – The Horticultural Sciences Dept. offers specializations in: Horticultural Sciences; Horticultural Production; Organic Crop Production; Plant Molecular and Cellular Biology <b>M.S. Degree:</b> Horticultural Sciences
CAREER	<b>Sample Career Specialties (Bold text signifies High Skill &amp; High Wage.)</b>		
	Production, Planning, & Expediting Clerk; Chemical Equipment Operator & Tender; Measurer, Checker, & Sample, Recordkeeping; Insurance Claims & Policy Processing Clerk;	Agricultural & Food Science Technician; Environmental Engineering Technician; First-Line Supervisor of Farming, Fishing, & Forestry Worker; First-Line Supervisor Landscaping & Groundskeeping Worker, Hazardous Materials Removal Worker; Mechanical Engineering Technician; Laboratory Technician; Outdoor Power Equipment & Small Engine Mechanic; <b>Vocational Education Teacher, Postsecondary;</b>	Forester; <b>Vocational Education Teachers, Secondary School;</b> Natural Sciences Manager; <b>Market Research Analyst &amp; Marketing Specialist;</b> Biomedical Engineer; Food Scientist & Technologist; Soil & Plant Scientist; Biological Scientist; Conservation Scientist; Dietitian & Nutritionist; <b>Management Analysts; Environmental Engineer;</b> Health & Safety Engineer
CREDIT	<b>Articulation and CTE Dual Enrollment Opportunities (Based on articulations as of December 2019)</b>		
	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 College of Central Florida</b> Option A (Credit by Exam) Horticulture Science and Services (Digital Information Technology, Agriscience Foundations, Introductory Horticulture 2, Horticulture Science 3)	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.  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.	
<b>Career and Technical Student Association</b>			
The National FFA Organization (FFA)			
<b>Internship/Work Experience Recommendations</b>			
Job shadowing, on-the-job training, and professional organization experiences.			




<b>Career Cluster:</b> Business, Management & Administration				<b>CTE Program:</b> <b>Secondary:</b> Legal Administrative Specialist <b>Postsecondary:</b> Accounting Operations & Administrative Office Specialist				
<b>Career Cluster Pathway:</b> Administrative & Information Support				<b>Industry Certification:</b> <b>Secondary:</b> Certified Internet Web (CIW) - Internet Business Associate; Microsoft Office Specialist (MOS) Bundle Certification (3 out of 6 - Word, Excel, PowerPoint); QuickBooks Certified User; Microsoft Office Specialist Master <b>Postsecondary:</b> Microsoft Office Specialist Bundle; QuickBooks Certified User; Microsoft Office Specialist Master				
	<b>16 CORE CURRICULUM CREDITS</b>					<b>8 ADDITIONAL CREDITS</b>		
	<b>ENGLISH</b> 4 credits	<b>MATH</b> 4 credits	<b>SCIENCE</b> 3 credits, 2 with lab	<b>SOCIAL STUDIES</b> 3 credits	<b>OTHER REQUIRED COURSES</b> FINE ARTS (1 credit) PHYSICAL EDUCATION (1 credit)	<b>CAREER AND TECHNICAL EDUCATION COURSES</b>	<b>RECOMMENDED ELECTIVES</b> (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
<b>HIGH SCHOOL</b>	<ul style="list-style-type: none"><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>One course within the 24 credit program must be an online course. Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	<b>9<sup>th</sup></b>	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.
	<b>10<sup>th</sup></b>	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.
	<b>11<sup>th</sup></b>	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.
	<b>12<sup>th</sup></b>	English IV	Probability & Statistics or Pre-Calculus	Physics	United States Government. & Economics w/Financial Literacy		Legal Aspects of Business	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.		
	<b>TECHNICAL CENTER/COLLEGE PROGRAM(S)</b>	<b>COMMUNITY/STATE COLLEGE PROGRAM(S)</b>	<b>UNIVERSITY PROGRAM(S)</b>
	<b>Lake Technical College</b> <a href="http://www.laketech.org/programs">www.laketech.org/programs</a> <b>Certificates:</b> Accounting Operations; Administrative Office Specialist	<b>Lake-Sumter State College</b> <a href="http://www.lssc.edu/academics">www.lssc.edu/academics</a> <b>A.S. Degrees:</b> Business Administration <b>A.S. to B.A.S Career Path:</b> Organizational Management <b>Certificates:</b> Business Management; Business Operations; Business Specialist	<b>University of Central Florida</b> <a href="http://www.ucf.edu/academics">www.ucf.edu/academics</a> <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
CAREER	Sample Career Specialties (Bold text signifies High Skill & High Wage.)		
	Claims Adjusters, Examiners, & Investigators; Compliance Officers; Computer User Support Specialists; First-Line Supervisors of Personal Service Workers; First-Line Supervisors of Retail Sales Workers; Human Resource Assistant; Information Security Analysts; Insurance Sales Agent; Loan Interviewer & Clerk; Paralegal & Legal Assistant	Administrative Services Manager; Business Operations Specialist; First-Line Supervisor of Office & Administration Support Workers; Vocational Education Teacher, Postsecondary; Compensation, Benefits, & Job Analysis Specialists; General and Operations Manager; Lodging Manager; Meeting, Convention, & Event Planner; Property, Real Estate, & Community Association Manager; Purchasing Agent	Accountant & Auditor; Business Teacher, Postsecondary; Chief Executive; Human Resources Specialist; Financial Analyst; Financial Manager; Personal Financial Advisor; Public Relations & Fundraising Manager; Securities, Commodities, & Financial Services Sales Agent; Training & Development Specialist
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on articulations as of December 2019)		
	<b>Secondary to Lake Technical College</b> Digital Information Technology, Accounting Application 1 & International Business Systems to Accounting = up to 330 hours; Information Technology Assistant or Accounting Clerk = up to 330 hours  <i>For a current list of local agreements, visit</i> <a href="https://www.lake.k12.fl.us/College_Career_Readiness/Local_Articulations">https://www.lake.k12.fl.us/College_Career_Readiness/Local_Articulations</a>	<b>Secondary to Lake-Sumter State College</b> Option A (Credit by Exam) Legal Administrative Specialist (Digital Information Technology, Administrative Office Technology 1, Business Software Applications 1, Legal Aspects of Business)  <b>Statewide Articulation:</b> 3 Credits for MOS Bundle (3 of 6) Certification (MICRO069) toward an Office Administration program; 3 Credits for QuickBooks Certified User Certification (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> , <i>and keywords: Gold Standard statewide articulation agreements</i>	A.A./A.S to B.A./BS Degree
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.			


<b>Career Cluster:</b> Marketing, Sales & Service				<b>CTE Program:</b> <b>Secondary:</b> Marketing, Management and Entrepreneurial Principles Secondary <b>Postsecondary:</b> Business Administration				
<b>Career Cluster Pathway:</b> Professional Sales & Marketing				<b>Industry Certification:</b> <b>Secondary:</b> Microsoft Office Specialist (MOS) Bundle Certification (3 out of 6 - Word, Excel, PowerPoint); Certified Internet Web (CIW) - Internet Business Associate; Adobe Certified Associate Photoshop CC <b>Postsecondary:</b> Business Development & Entrepreneurship, Business Mgmt., Business Operations, Business Specialist				
	<b>16 CORE CURRICULUM CREDITS</b>					<b>8 ADDITIONAL CREDITS</b>		
	<b>ENGLISH</b> 4 credits	<b>MATH</b> 4 credits	<b>SCIENCE</b> 3 credits, 2 with lab	<b>SOCIAL STUDIES</b> 3 credits	<b>OTHER REQUIRED COURSES</b> FINE ARTS (1 credit) PHYSICAL EDUCATION (1 credit)	<b>CAREER AND TECHNICAL EDUCATION COURSES</b>	<b>RECOMMENDED ELECTIVES</b> (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
<b>HIGH SCHOOL</b>	<ul style="list-style-type: none"><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>One course within the 24 credit program must be an online course. Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	<b>9<sup>th</sup></b>	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.
	<b>10<sup>th</sup></b>	English II	Geometry	Chemistry	World History		Marketing Applications	Foreign Language for SUS admission or other electives appropriate for student's career and education plan.
	<b>11<sup>th</sup></b>	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.
	<b>12<sup>th</sup></b>	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.		
	<b>TECHNICAL CENTER/COLLEGE PROGRAM(S)</b>  <b>Marchman Technical Education Center</b> <a href="http://mtec.pasco.k12.fl.us/">http://mtec.pasco.k12.fl.us/</a> Certificate: Digital Cinema	<b>COMMUNITY/STATE COLLEGE PROGRAM(S)</b>  <b>Lake-Sumter State College</b> <a href="http://www.lssc.edu/academics">www.lssc.edu/academics</a> <b>A.S. Degrees:</b> Business Administration <b>A.S. to B.A.S Career Path:</b> Organizational Management <b>Certificates:</b> Business Management; Business Operations; Business Specialist	<b>UNIVERSITY PROGRAM(S)</b>  <b>University of Central Florida</b> <a href="http://www.ucf.edu/academics">www.ucf.edu/academics</a> <i>College of Business Administration</i> <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
CAREER	Sample Career Specialties (Bold text signifies High Skill & High Wage.)		
	Advertising Sales Agents; Computer User Support Specialists; First-Line Supervisors of Retail Sales Workers; Human Resource Assistant; Insurance Sales Agent; Loan Interviewer & Clerk; Paralegal & Legal Assistant; Real Estate Broker; Sales Representative	Administrative Services Manager; First-Line Supervisor of Office and Administration Support Workers; Vocational Education Teacher, Postsecondary; Compensation, Benefits, & Job Analysis Specialist; Costs Estimators; First-Line Supervisor of Non-Retail Sales; General and Operations Manager; Graphic Designer; Lodging Manager; Meeting, Convention, & Event Planner; Property, Real Estate, & Community Association Manager; Purchasing Agent	Advertising & Promotions Manager; Business Teacher, Postsecondary; Chief Executive; Marketing Manager; Human Resources Specialist; Market Research Analysts & Marketing Specialist; Public Relations & Fundraising Manager; Securities, Commodities, & Financial Services Sales Agent; Training & Development Specialist
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on articulations as of December 2019)		
	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 Lake-Sumter State College</b> Option A (Credit by Exam) Marketing, Management and Entrepreneurial Principles (Marketing Essentials, Marketing Applications, Marketing Management, Business Ownership)  <b>Statewide Articulation:</b> 3 Credits for MOS Bundle (3 of 6) Certification (MICRO069) toward an Office Administration 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./BS Degree
Career and Technical Student Association			
Distributive Education Clubs of America (DECA); FBLA			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training and professional organization experiences.			


Career Cluster: Health Science				CTE Program: Secondary: Nursing Assistant (Acute and Long Term Care) Postsecondary: Nursing Assistant Articulated (CNA)				
Career Cluster Pathway: Therapeutic Services				Industry Certification: Secondary: Certified Nursing Assistant (CNA); Certified Medical Administrative Assistant (CMAA); Certified Patient Care Technician; Emergency Medical Technician; Medical Assisting; Paramedic; Pharmacy Technician; Phlebotomy; Practical Nursing Postsecondary: Certified Nursing Assistant (CNA); State Licensure for Practical Nurse; National Registry Administered Test for State of Florida EMT Licensure; State Administered Test for Paramedic Licensure; National Pharmacy Technician; State Licensure for Practical Nurse				
	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>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>One course within the 24 credit program must be an online course. 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>Lake Technical College</b> <a href="http://www.laketech.org/programs">www.laketech.org/programs</a> <b>Certificates:</b> Emergency Medical Technician; Medical Assisting (CNA – Long Term Care) Assistant; Paramedic; Pharmacy Technician; Phlebotomy; Practical Nursing	<b>Lake-Sumter State College</b> <a href="http://www.lssc.edu/academics">www.lssc.edu/academics</a> <b>A.S. Degree:</b> Health Information Technology, Nursing <b>A.S. to B.S. Career Path:</b> Nursing <b>Certificate Programs:</b> Medical Information Coder/Biller, Health Informatics Specialist; Medical Office Management	<b>University of Central Florida</b> <a href="http://www.ucf.edu/academics">www.ucf.edu/academics</a> <b>B.A/B.S. Degrees:</b> Athletic Training, Communication Sciences and Disorders, Health Sciences, Health Services Administration, Medical Laboratory Sciences, Nursing, Biomedical Sciences, Biotechnology <b>M.S. Degrees:</b> Communication Sciences and Disorders, Health Administration, Health Care Informatics, Health Sciences, Nursing, Physical Therapy, Research Administration, Biomedical, Biotechnology, Doctor of Medicine
CAREER	Sample Career Specialties (Bold text signifies High Skill & High Wage.)		
	Diagnostic Medical Sonographer; Health Technologist & Technician; Licensed Practical & Licensed Vocation Nurse; Medical Assistant; Medical Secretary; Radiologic Technologist; Surgical Technologist	Biological Technician; Compensation, Benefits, & Job Analysis Specialist; Dental Hygienists; Medical & Clinical Laboratory Technician; Medical & Clinical Laboratory Technologist; Medical Records & Health Information Technician; Physical Therapist Assistant; Registered Nurse; Respiratory Therapists	Biological Scientist; Biomedical Engineer; Chemist; Health Educator; Human Resources Manager; Human Resources Specialist; Health & Safety Engineer; Food Scientist & Technologist; Medical & Clinical Laboratory Technician/Technologist; Medical & Health Services Manager; Medical Records & Health Information Technician; Registered Nurse; Rehabilitation Counselor; Substance Abuse & Behavioral Disorder Counselor
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on articulations as of December 2019)		
	<b>Secondary to Lake Technical College</b> Health Science1, Health Science 2, and Nursing Assistant 3 to Medical Assisting=90 hours Basic Health Care Worker; Pharmacy Technician=90 hours Basic Health Care Worker; Patient Care Technician = Basic Health Care Worker = 90 hours + Nurse Aide Orderly = 75 hours  <i>For a current list of local agreements, visit</i> <a href="https://www.lake.k12.fl.us/College%20&amp;CareerReadiness/LocalArticulations">https://www.lake.k12.fl.us/College &amp; Career Readiness/Local Articulations.</a>	<b>Secondary to Lake-Sumter State College:</b> Nursing RN (AS Degree) RN- 1 preferred placement point.	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.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>			
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 Program: Secondary: Principles of Teaching Postsecondary: B.S. Degree in Education				
Career Cluster Pathway: Professional Support Services					Industry Certification: Microsoft Office Specialist (MOS) Bundle Certification (3 out of 6 - Word, Excel, PowerPoint)				
	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>Students are encouraged to begin planning for careers and postsecondary options by exploring resources at <a href="https://www.floridashines.org/find-a-career/mycareershines">https://www.floridashines.org/find-a-career/mycareershines</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>One course within the 24 credit program must be an online course. 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.		
	<b>TECHNICAL CENTER/COLLEGE PROGRAM(S)</b>  <b>Orange Technical College</b> <a href="https://www.orangetechcollege.net/">https://www.orangetechcollege.net/</a> <b>Certificates:</b> Child Care Center Operations	<b>COMMUNITY/STATE COLLEGE PROGRAM(S)</b>  <b>College of Central Florida</b> <a href="http://www.cf.edu/programs">www.cf.edu/programs</a>  <b>Certificates:</b> Child Care Center Management <b>A.S. Degree:</b> Early Childhood Education <b>A.A. Degree:</b> Early Childhood Education Pathway <b>A.S./A.A. to B.S.:</b> Early Childhood Education	<b>UNIVERSITY PROGRAM(S)</b>  <b>University of Central Florida</b> <a href="http://www.ucf.edu/academics">www.ucf.edu/academics</a> <b>B.S. Degree in Education:</b> Early Childhood Development and Education; Elementary; Exceptional Student; English Language Art; Mathematics; Science; Social Science; Sport & Exercise; Art; Physical Education; World Language; & Technical & Industry Training Education <b>M.Ed. Degree:</b> Education
CAREER	Sample Career Specialties (Bold text signifies High Skill & High Wage.)		
	Teacher Assistant; Concierges; Correspondence Clerk	Social & Community Service Manager; Meeting, Convention, & Event Planner; Life, Physical, & social Science Technician; Preschool Teacher; Recreation Worker; Vocational Education Teacher, Postsecondary	Education Administrator, Elementary & Secondary; Elementary School Teacher; Kindergarten Teacher; Public Relations & Fundraising Manager; Human Resources Manager; Education Administrator, Preschool & Childcare; Human Resources Specialist; Labor Relations Specialist; Training & Development Specialist; Social Worker
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on articulations as of December 2019)		
	At the time of publication, there was no local articulation agreement for this program.  <i>For a current list of local agreements, visit</i> <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>Statewide Articulation:</b> 3 credits for MOS Bundle 3 of 6 Certification (MICRO069) toward 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>	A.A./A.S. to B.A./B.S. Degree
Career and Technical Student Association			
Florida Future Educators of America (FFEA) & 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 Program: Secondary: Promotional Enterprise Postsecondary:				
Career Cluster Pathway: Management Career				Industry Certification: Secondary: Adobe Certified Associate Photoshop CC; Certified Internet Web (CIW) - Internet Business Associate; Microsoft Office Specialist (MOS) Bundle Certification (3 out of 6 - Word, Excel, PowerPoint) Postsecondary: Business Development & Entrepreneurship, Business Mgmt., Business Operations, Business 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>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>One course within the 24 credit program must be an online course. 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)
	Lake Technical College <a href="http://www.laketech.org/programs">www.laketech.org/programs</a> Certificates: .	Lake-Sumter State College <a href="http://www.lssc.edu/academics">www.lssc.edu/academics</a> A.S. Degree: A.S. to B.S. Career Path: Certificate:	University of Central Florida <a href="http://www.ucf.edu/academics">www.ucf.edu/academics</a> B.S. Degrees:
CAREER	Sample Career Specialties (Bold text signifies High Skill & High Wage.)		
	Advertising Sales Agents; Computer User Support Specialists; First-Line Supervisors of Retail Sales Workers; Human Resource Assistant; Insurance Sales Agent; Loan Interviewer & Clerk; Paralegal & Legal Assistant; Real Estate Broker; Sales Representative	Administrative Services Manager; First-Line Supervisor of Office and Administration Support Workers; Vocational Education Teacher, Postsecondary; Compensation, Benefits, & Job Analysis Specialist; Costs Estimators; First-Line Supervisor of Non-Retail Sales; General and Operations Manager; Graphic Designer; Lodging Manager; Meeting, Convention, & Event Planner; Property, Real Estate, & Community Association Manager; Purchasing Agent	Advertising & Promotions Manager; Business Teacher, Postsecondary; Chief Executive; Marketing Manager; Human Resources Specialist; Market Research Analysts & Marketing Specialist; Public Relations & Fundraising Manager; Securities, Commodities, & Financial Services Sales Agent; Training & Development Specialist
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on articulations as of December 2017)		
	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) Marketing, Management and Entrepreneurial Principles (Marketing Essentials, Marketing Applications, Marketing Management, Business Ownership)	A.A./A.S to B.A./BS Degree
		Statewide Articulation: 3 Credits for MOS Bundle (3 of 6) Certification (MICRO069) toward an Office Administration 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.			

<b>Career Cluster:</b> Arts, A/V Technology & Communication			<b>CTE Program:</b> <b>Secondary:</b> Television Production Technology <b>Postsecondary:</b> Entertainment Design & Technology; Film Production Technology					
<b>Career Cluster Pathway:</b> Journalism & Broadcasting			<b>Industry Certification:</b> <b>Secondary:</b> Adobe Certified Associate (ACA) - Premiere Pro; Adobe Certified Expert Premiere Pro <b>Postsecondary:</b> Digital Audio Production; Digital Cinema Production; Digital Media/Multimedia Design; Digital Video Technology					
	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>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>One course within the 24 credit program must be an online course. 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.		
	<b>TECHNICAL CENTER/COLLEGE PROGRAM(S)</b>  <b>Marchman Technical Education Center</b> <a href="http://mtec.pasco.k12.fl.us/">http://mtec.pasco.k12.fl.us/</a> Certificate: Digital Cinema  <b>Orange Technical College</b> <a href="https://www.orangetechcollege.net/">https://www.orangetechcollege.net/</a> <b>Certificates:</b> Digital Audio Production; Digital Cinema Production; Digital Media/Multimedia Design; Digital Video Technology	<b>COMMUNITY/STATE COLLEGE PROGRAM(S)</b>  <b>Seminole State College</b> <a href="http://www.seminolestate.edu">www.seminolestate.edu</a> <b>A.A.S. Degree:</b> Radio - Television <b>Certificate:</b> Video Editing and Post Production	<b>UNIVERSITY PROGRAM(S)</b>  <b>University of Central Florida</b> <a href="http://www.ucf.edu/academics">www.ucf.edu/academics</a> <b>B.A. Degrees:</b> Digital Media; Film; Film – Cinema Studies Track; Writing & Rhetoric <b>M.A. Degrees:</b> Digital Media; Interactive Entertainment
CAREER	Sample Career Specialties (Bold text signifies High Skill & High Wage.)		
	Demonstrator & Product Promoter; Correspondence Clerk; Musician & Singer; Merchandise Displayer & Window Trimmer	Multi-Media Artist & Animator; Set & Exhibit Designer; Audio & Video Equipment Technician; Broadcast Technician; Film & Video Editor; Media & Communication Equipment Worker	<b>Producer &amp; Director;</b> Advertising & Promotions Manager; Art Director; Music Director & Composer; Broadcast News Analyst; Reporter & Correspondent
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on articulations as of December 2019)		
	<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>Statewide Articulation:</b>  <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.			



<b>Career Cluster:</b> Information Technology			<b>CTE Program:</b> <b>Secondary:</b> Web Development <b>Postsecondary:</b> Computer Information Technology					
<b>Career Cluster Pathway:</b> Interactive Media			<b>Industry Certification:</b> <b>Secondary:</b> Certified Internet Web (CIW) - Internet Business Associate; Certified Internet Web (CIW) – Web Foundations Associate; Adobe Certified Associate (ACA) Web Communication using Adobe – Dreamweaver; Certified Internet Web (CIW) JavaScript Specialist <b>Postsecondary:</b> Information Technology Analysis; & Digital Forensics					
	<b>16 CORE CURRICULUM CREDITS</b>					<b>8 ADDITIONAL CREDITS</b>		
	<b>ENGLISH</b> 4 credits	<b>MATH</b> 4 credits	<b>SCIENCE</b> 3 credits, 2 with lab	<b>SOCIAL STUDIES</b> 3 credits	<b>OTHER REQUIRED COURSES</b> FINE ARTS (1 credit) HOPE (1 credit)	<b>CAREER AND TECHNICAL EDUCATION COURSES</b>	<b>RECOMMENDED ELECTIVES</b> (ALIGNED WITH COMMUNITY/STATE COLLEGE & STATE UNIVERSITY SYSTEM PROGRAMS)	
<b>HIGH SCHOOL</b>	<ul style="list-style-type: none"><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>One course within the 24 credit program must be an online course. Cumulative GPA of 2.0 on a 4.0 scale for 24 credit program.</li></ul>							
	<b>9<sup>th</sup></b>	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.
	<b>10<sup>th</sup></b>	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.
	<b>11<sup>th</sup></b>	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.
	<b>12<sup>th</sup></b>	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.		
	<b>TECHNICAL CENTER/COLLEGE PROGRAM(S)</b>  <b>Lake Technical College</b> <a href="http://www.laketech.org/programs">www.laketech.org/programs</a> <b>Certificates:</b> This program leads to a broad range of postsecondary career pathways in all sectors of the information technology industries.	<b>COMMUNITY/STATE COLLEGE PROGRAM(S)</b>  <b>Lake-Sumter State College</b> <a href="http://www.lssc.edu/academics">www.lssc.edu/academics</a> <b>A.S. Degree:</b> Computer Information Technology <b>A.S. to B.S. Career Path:</b> Organizational Management <b>Certificate:</b> Information Technology Analysis; & Digital Forensics	<b>UNIVERSITY PROGRAM(S)</b>  <b>University of Central Florida</b> <a href="http://www.ucf.edu/academics">www.ucf.edu/academics</a> <b>B.S. Degrees:</b> Digital Media; Computer Science; Information Technology
CAREER	Sample Career Specialties (Bold text signifies High Skill & High Wage.)		
	Computer Network Architect; Computer Network Support Specialist; Web Developer; Computer Programmer; Computer User Support Specialists;	Software Developer, Applications; Database Administrator; Network & Computer Systems Administrator; Compensation, Benefits, & Job Analysis Specialists; Computer Systems Analysts; First-Line Supervisor of Office and Administrative Support Workers; General and Operations Manager; Graphic Designer	Chief Executive; Computer Science Teacher; Software Developer, Systems Software; Business Teacher, Postsecondary; Editor; Human Resource Manager; Human Resource Specialist; Training & Development Specialist; Writer & Author
CREDIT	Articulation and CTE Dual Enrollment Opportunities (Based on articulations as of December 2019)		
	<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; 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;CareerReadiness/LocalArticulations">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)  <b>Statewide Articulation:</b> 3 credits for Adobe Certified Associate – Dreamweaver Certification (ADOBE010) towards Internet Services Technology program; 3 credits for Certified Internet Web (CIW) JavaScript Specialist Certification (PROSO017) towards Computer Programming and Analysis; 3 credits for MOS Bundle 3 of 6 Certification (MICRO069) toward Office Administration program; 3 credits for Certified Internet Web Network Technology Associate Certification (PROSO020) toward 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.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			
Future Business Leaders of America (FBLA)			
Internship/Work Experience Recommendations			
Job shadowing, on-the-job training and professional organization experiences.			





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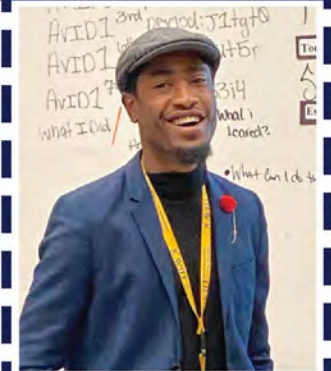
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