

EdisonLearning Career and Technical Education



2023–2024 Digital Learning Solutions and Services

www.edisonlearning.com



EdisonLearning as your learning services provider



With over a decade of experience in successful virtual and blended learning programs, EdisonLearning helps districts establish a school environment that promotes student learning and success, including a full and rich curriculum and the ongoing training and professional development of high-performing administrators and teachers.

For our complete solution catalog, talk to your EdisonLearning representative.



Core and Elective eCourses

We provide eCourse content, delivery, and certified instructors for more than 150 different core and elective courses, grades 6-12.



Game Learning

Our game learning curriculum gives students an interactive and engaging way to connect with their academic content.



Career and Technical Education

Our career-focused eCourse curriculum offers pathways to prepare students for industry certifications, engage in career exploration, and learn about new technologies.



Professional Learning Courses

We offer expert-designed, product-agnostic learning solutions to address the needs of school staff regardless of the software, content, or other resources schools are using.



Social-Emotional Learning

Our Social-Emotional Learning and Soft Skill Development course helps students develop the skills and resiliency to feel better, accomplish more, and create the life they want.



Instructional & Student Support Services

Our certified virtual teachers and advisors provide students with a fully supported learning environment.

EdisonLearning is accredited as a Learning Service Provider by the Middle States Association Commission on Elementary and Secondary Schools (MSA-CESS). EdisonLearning has approval for NCAA initial eligibility for many of its high school courses. EdisonLearning has Quality Matters certification for a number of courses, indicated by the QM logo.





Our career-focused eCourse curriculum offers pathways to prepare students for industry certifications, engage in career exploration, and learn about new technologies.

Course Features

Empower students to explore career and technical skills through interactive and reflective course content and assessments. Our career-focused eCourse curriculum offers pathways to prepare students for industry certifications, engage in career exploration, learn about forthcoming technologies, and examine the impact of such topics on our society and economy. The purposeful design allows schools to utilize eCourses aligned to the National CTE Foundation career clusters in virtual and blended learning programs.



With EdisonLearning you can count on your students being fully supported in any learning environment. We provide our partners with:

:)	Certified online teachers and tutors
9	who ensure students get
	personalized support while
	alleviating workload for school staff.

Seamless integration and robust reporting through eSchoolware™– our proprietary learning management system.



Expert-designed, product agnostic professional learning solutions to address the needs of school staff leading and teaching digital learning programs.



We also offer over 150 core and elective eCourses for students grades 6–12. Learn more at www.edisonlearning.com.

Career and Technical Education Course List

eCourses and Career Clusters

Architecture & Construction

Architectural Design I + Architectural Design II + Architectural Design III Building Maintenance Technologies I Building Maintenance Technologies II + Construction: Fundamentals and Careers LEED Green Associate +

Agriculture, Food & Natural Resources

Agriscience I Agriscience II Agriscience III

Arts, A/V Tech & Communications

Adobe After Effects + Adobe Illustrator + Adobe InDesign + Adobe Photoshop + Adobe Premiere Pro +

Business Management & Administration

Entrepreneurship & Small Business + Microsoft Excel + Microsoft Outlook + Microsoft PowerPoint + Microsoft Word + Social Media Business Marketing + Startups and Innovation

Finance

Career Exploration in Finance Fundamentals of Bitcoin & Cryptocurrency Personal Finance Quickbooks +

Education & Training

Early Childhood Education I + Early Childhood Education II + Education & Teaching Advanced Teaching as a Profession

Health Science

Career Exploration in Dentistry Career Exploration in Healthcare Healthcare Management & Information Systems +

Information Technology

Cybersecurity Fundamentals to Blockchain & Cryptography Java SE 8 Associate + Networking + Swift App Development+

STEM

Aeronautics and Space Travel Augmented and Virtual Reality Applications Cloud Technologies and the Internet of Things Introduction to Artificial Intelligence Robotics: Applications and Careers Smart Cities: Technology & Applications Transportation Technologies Wearable Technology Innovations

Additional CTE Electives

Drones: Remote Pilot + Career & Financial Management Project Management + The History of Gaming and Esports

Career and Technical Education Course Descriptions Architecture and Construction

Architectural Design I

In Architectural Design I, students will review various concepts used in the design and architecture field. They will learn about basic drafting equipment and how to use and maintain it. They will analyze challenges and solutions within the development of design. They will also learn how to prepare drawings manually and using AutoCAD software. A substantial portion of the course will be spent on sequential processes so that students develop an understanding of creating and annotating drawings as well as how to apply standard rules regarding line types, offset objects, creating layers, and setting up a page for plotting. They will also explore three-dimensional drawing and use coordinating and navigation systems to create them.

Length: One Year | Course Materials: AutoCAD Required Certification PREP: Autodesk Certified User in AutoCAD

Architectural Design II

In this course, students will learn various concepts used in the design and architecture field. They will gain an understanding of basic architectural and civil drawings as well as prepare for the Autodesk® Certified User certification in AutoCAD exam. In addition to learning fundamental architectural drawing concepts like creating site plans, floor plans, and electrical plans, students will learn functions of Computer-Aided Drafting (CAD). CAD functions build on the foundation of architectural drawing, using specialized tools for enhancement, layout, and scale. Students will review the essentials of civil drawings including the interpretation and development of topographical illustrations. To round out the course, students will prepare computer-aided drawings to demonstrate utilizing software to perform activities such as drawing site plans, roof plans, and wall sections. Finally, students will be provided an overview of the requirements, structure, and preparation techniques for the Autodesk[®] Certified User certification in AutoCAD exam.

Length: One Year

Course Materials: Purchase of AutoCAD Required Certification PREP: Autodesk Certified User in AutoCAD

Architectural Design III

In Architectural Design III, students will review various concepts used in the design and architecture field. They will learn about additional CAD functions, professional ethics, and legal responsibilities as well as explore career options and complete a comprehensive Architectural Design project.

Length: One Year | Course Materials: Purchase of AutoCAD Required



Building Maintenance Technology I

The Building Maintenance Technology course will focus on all aspects of the construction industry from health and safety to the tools that every construction professional needs in their collection. Students will learn about the various roles in the industry as well as job outlooks, educational and experiential requirements, and salary information. Some activities will focus on career exploration to discover career options that best align with interests and talents. Students will learn basic construction math and how it is applied during design and building phases of projects. They will learn specifics about carpentry, construction drawings, framing floor systems, framing walls, and framing roofs. Throughout, they will establish a foundation for what opportunities exist for them in the industry.

Length: One Year

Career and Technical Education Course Descriptions Architecture and Construction

Building Maintenance Technology II

The Building Maintenance Technology II course examines the multi-faceted construction industry. Students will explore contract documents and how each is pertinent to establishing business relationships with designers, clients, and other stakeholders. They will identify what goes into building a successful contract and how estimates, costs, and timeframes are estimated and calculated. Drafting techniques using CAD and BIM technology will also be discussed, specifically pertaining to how these technologies have transformed the building industry. Several logistical components like zoning, property lines, property setbacks, site elevations, calculating materials and labor costs, and establishing construction schedules are critical to the building process. Students will discover the impact of the built environment on the natural environment and how it has evolved over many years. Finally, students will learn about issues related to sustainability and creating more environmentallyfriendly practices, procurement, and techniques in the construction industry.

Length: One Year Certification PREP: OSHA 30 Hour Construction

Construction: Fundamentals and Careers

This course introduces students to some of the foundational elements of home construction and then does a deep dive into careers, technology, and the future of home construction. It also addresses some of the academic proficiencies that different careers in the field of home construction will have to have. Later in the course, specific careers, career outlooks, and specialized education and training requirements will be covered. Students will discover the varied roles within the field as well as what it takes to own a construction company. Finally, the course delves into green construction and where the future of construction is headed.

Length: One Year

LEED Green Associate

This course introduces students to the LEED process. LEED, or Leadership in Energy and Environmental Design, is the global standard for green building certification. Throughout the course, students will gain an understanding of the various components of green building. The theme of sustainability and sustainable construction is woven throughout each module both in terms of physical environment and as it pertains to LEED certification.

Length: One Semester Certification PREP: LEED Green Certified Associate

Course Elements

Every Career and Education Course comes equipped with myriad course elements to keep all students engaged and focused on their coursework.



Career and Technical Education Course Descriptions Agriculture, Food & Natural Resources

Agriscience I

This course will prepare students for careers in agriscience. Agriculture is the world's largest industry, so the critical nature of understanding how agriculture must thrive in unpredictable conditions cannot be overstated. Throughout the modules, students will gain an understanding of some of the fundamental issues in agriscience, including safety, environmental factors such as climate change and extremeweather conditions, plant and animal science, and food safety. Additionally, students will explore how they can emerge as leaders in such a complex and exciting industry!

Length: One Year

Agriscience II

In this course, students will explore the various components of agriscience careers and agricultural living. Beginning with career exploration, students will become familiar with the vast array of opportunities that exist in agriscience. They will discover what is necessary for the proper care and management of livestock from keeping living quarters clean to caring for newborn animals. Students will understand the ways in which plants, crops, and vegetation thrive in varying conditions. They will explore the fundamentals of running a successful agriscience operation as well as how agriscience affects and is affected by global economic conditions.

Length: One Year

Agriscience III

This course further delves into agriscience as a core global business. Students will explore fundamental business operations and structures as well as financial considerations. Students will understand the nutritional needs of livestock in order for them to be free from disease and be able to thrive in good health. Plants are heavily dependent on proper fertilization, irrigation, and nutrition to prosper. Thus, students will take a comprehensive look at the systems necessary to produce bountiful crops. The course will be rounded out learning about the tools and techniques needed to run an agriscience business and harvest crops.

Length: One Year



Career and Technical Education Course Descriptions Arts, A/V Tech & Communications

Adobe After Effects

In this course, students will explore the comprehensive Adobe After Effects software. Adobe After Effects is the industry standard for making motion graphics and special effects for presentations, internet content, and video. Both Windows and Mac OS systems can run After Effects, so students will uncover the nuances of working with each. The modules in the course will take students through the creation of a project from defining the audience to organization to publishing their creations.

Length: One Semester

Course Materials: Adobe v18 or Above Certification PREP: Adobe Certified Professional

Adobe Illustrator

This course introduces students to the world of Adobe Premiere Pro. Students will get an insight into the video design and production industry. Over 7 modules, students will progress from absolute basics like navigation to performing complex tasks like editing videos, applying filters and effects, and even creating original artwork. The course contains guided tutorials, engaging projects, and great resources that will help students practice and learn how to work in Premiere Pro. This course also prepares students for the Adobe Certified Associate Certification Exam on Premiere Pro.

Length: One Semester Course Materials: Adobe v18 or Above Certification PREP: Adobe Certified Professional

Adobe Premiere Pro

This course introduces students to the world of Adobe Premiere Pro. Students will get an insight into the video design and production industry. Over 7 modules, students will progress from absolute basics like navigation to performing complex tasks like editing videos, applying filters and effects, and even creating original artwork. The course contains guided tutorials, engaging projects, and great resources that will help students practice and learn how to work in Premiere Pro. This course also prepares students for the Adobe Certified Associate Certification Exam on Premiere Pro.

Adobe InDesign

This course introduces students to the world of Adobe InDesign and prepares students to obtain the Adobe Certified Professional Certification for InDesign. Students will get an insight into what it is like working in the print and digital media publishing industry. Over 10 modules, students will learn everything from absolute basics like navigating InDesign to performing complex tasks like creating multi-page documents, applying effects, and even creating original artwork. The course contains guided tutorials, do-it-yourself projects, and great resources that will help students practice and learn how to work in InDesign.

Length: One Semester Course Materials: Adobe v18 or Above Certification PREP: Adobe Certified Professional

Adobe Photoshop

This course introduces students to the world of Adobe Photoshop and prepares students to obtain the Adobe Certified Professional Certification for Adobe Photoshop. Students will get an insight into what it is like working in the visual and graphic design industry. Over 11 modules, students will learn everything from absolute basics like navigating Photoshop to performing complex tasks like editing and retouching photos, applying filters and effects, and even creating original artwork. The course contains guided tutorials, do-it-yourself projects, and great resources that will help students practice and learn how to work in Photoshop.

Length: One Semester Course Materials: Adobe v18 or Above Certification PREP: Adobe Certified Professional



Length: One Semester Course Materials: Adobe v18 or Above Certification PREP: Adobe Certified Professional

Career and Technical Education Course Descriptions Business Management & Administration

Entrepreneurship and Small Business

This course will prepare students for certification in Entrepreneurship and Small Business. The modules are designed to cover all aspects of entrepreneurship including traits of successful entrepreneurs, business management, hiring employees, creating a company culture, managing finances, and marketing products and services. Each module will challenge students to put themselves in the role of an entrepreneur and consider how they will handle the extensive responsibilities of starting a business.

Length: One Semester Certification PREP: Entrepreneurship and Small Business (ESB)

Microsoft Excel

This course introduces students to the world of Microsoft Excel. Students will get an insight into the use of the product within the business setting. Over 8 modules, students will learn everything from absolute basics like navigating Microsoft Excel to performing complex tasks like formulas and functions. This course prepares students for the Microsoft Office Associate Microsoft Excel Certification.

Length: One Semester Course Materials: Microsoft 365 Certification PREP: Microsoft Office Specialist/Associate

Microsoft Outlook

In this course, students will navigate Microsoft Outlook, which is the preferred email client for sending and receiving emails from the Microsoft Exchange Server. Outlook includes access to contact, email, calendar, and task management tools. Microsoft Outlook is a component of Office 365 and the Microsoft Office suite, including Microsoft Excel and PowerPoint. From fundamental processes like adding an account to more complex tasks such as customizing features to better accommodate specific needs, students will explore all that Microsoft Outlook can do.

Length: One Semester Course Materials: Microsoft 365 Certification PREP: Microsoft Office Specialist/Associate

Microsoft PowerPoint

This course introduces students to the world of Microsoft PowerPoint. Students will get an insight into the use of the product within the business setting. Over 11 modules, students will learn everything from absolute basics like navigating Microsoft PowerPoint to performing complex tasks like 3DModels, Animations, and Transitions. This course prepares students for the Microsoft Office Associate Microsoft PowerPoint Certification.

Length: One Semester Course Materials: Microsoft 365 Certification PREP: Microsoft Office Specialist/Associate

Microsoft Word

In this course, students will navigate Microsoft Outlook, which is the preferred email client for sending and receiving emails from the Microsoft Exchange Server. Outlook includes access to contact, email, calendar, and task management tools. Microsoft Outlook is a component of Office 365 and the Microsoft Office suite, including Microsoft Excel and PowerPoint. From fundamental processes like adding an account to more complex tasks such as customizing features to better accommodate specific needs, students will explore all that Microsoft Outlook can do.

Length: One Semester Course Materials: Microsoft 365 Certification PREP: Microsoft Office Specialist/Associate



Microsoft Word

Microsoft Outlook

Career and Technical Education Course Descriptions Business Management & Administration

Social Media Business Marketing

The Social Media Business Marketing course is intended to prepare students to become Social Media Strategists. This course begins with an introduction to Social Media platforms and then goes in depth into the marketing and advertising strategies used to support a business in Business Social Media Marketing. Through activities and projects students will gain firsthand knowledge of this fulfilling field. This course prepares students for the Social Media Strategist certification.

Length: One Semester Certification PREP: Social Media Strategist

Startups and Innovation

Students hear a lot of contradictory advice in life. On one hand, they may hear something like "Follow your dreams. Pursue your passion and the money will come!" On the other hand, they may hear something completely opposite, like "Most startups fail! It's much safer to get a safe, steady job." So which side is right? Given the massive changes to the economy and society, the skills of entrepreneurship are going to be critical in building a lasting career. The entrepreneurial mindset of searching for opportunities, creating value, and solving pain points will always be valuable. And this mindset applies not just to starting a business, but in any organization that someone is a part of: school, established companies, or non-profits. In this course, students will explore how to use this mindset to create the next world-class startup.

Length: One Semester

IJ

"The content is approachable, and the assignments are clear. Having the rubric right there below the instructions helps the students know just what to do, and it saves me a step as well. The varied options for projects keep it interesting and also introduces kids to new presentation platforms. I think the blend of video and reading for the content is good – construction is a visual field and demonstrations are effective."

Allison Flint, Teacher



Career and Technical Education Course Descriptions **Finance**

Career Exploration in Finance

This course introduces students to the challenging and lucrative world of finance. While "Wall Street" may still get a bad rap after the 2008 financial crisis, finance careers still remain highly sought after and can be highly rewarding. The course reviews key financial terms and examines various groups, positions, and roles within financial institutions. Students will learn about resumes, interviews, and networking. Students will also discuss ethics on Wall Street and the role of finance within society.

Length: One Semester

Fundamentals of Bitcoin and Cryptocurrency

In this course, students will learn all about bitcoin, including its history, development, and context within the modern global economy. Students will learn the basic cryptographic principles that underlie bitcoin, and gain confidence by demonstrating strong security principles in storing and transacting bitcoin. Key principles such as mining, wallets, and hashing will be introduced. And finally, they will be familiarized with the nascent industry of digital currencies and how they function.

Length: One Semester

Personal Finance

The Personal Finance course is intended to prepare students to be successful financial citizens. They will learn their role and responsibilities as a responsible financial planner and saver as well as learn about the services, functions, and products of the financial industry. In addition, they will make informed buying decisions and understand personal taxation, wills, insurance, and contracts. Finally, they will learn about saving and investing as well as consumer credit and loans.

Length: One Semester

QuickBooks

In this course, students will explore how to start using QuickBooks Online. Learning this widely used accounting software will allow users to contribute to a large company's accounting team, or to use it independently as a small business owner. Students will learn how to complete administrative and accounting functions within QuickBooks. These include basics such as setting up lists, customers and products, to more complex tasks like managing journal entries and creating reports. Additionally, they will learn about the various services and products that can be added. As students learn about the accounting functions, they will discover how to record transactions, expenses, and receipts.

Length: One Semester Course Materials: QuickBooks Certification PREP: Intuit Quickbooks Certified User Online

Career and Technical Education Course Descriptions Education & Training

Early Childhood Education I

The Early Childhood Education I course is designed to provide an overview of the expectations and roles of the early childhood educator. The course provides details about childhood development, health, nutrition, and guidance strategies to help students understand the exciting and unique opportunities that a career in early childhood education can offer. The course is intended to prepare students for challenges they may face, but to emphasize the rewards of being able to influence the life of a young child. The ability to offer support to children as they learn, and grow is a point that is highlighted throughout each lesson.

Length: One Semester Certification PREP: Child Development Associate (CDA)

Early Childhood Education II

The Early Childhood Education II course is designed to provide an overview of the professional expectations of being an early childhood educator. Throughout the course, students will learn about what it means to be a professional, including the significance of professional development in any educational role. They will review observational methods and the history of education in the United States, with a focus on early childhood and school-age programs. They will spend a significant portion of the course learning about the importance of Developmentally Appropriate Practice ("DAP") and how to implement DAP strategies. Designing physical, social, and temporal environments will also be a major focus of the course, as will developing relationships with families and communities to strengthen their position and knowledge.

Length: One Semester Certification PREP: Child Development Associate (CDA)

Education & Teaching Advanced

This course is designed to prepare future educators for the classroom they will inherit! It starts with a history of education and how blended, adaptive, and personalized learning are coming to the forefront in learning. It then explores new and emerging technologies, along with their current and future impact on education. Throughout the course, students will explore a wide range of career possibilities in the education field and evaluate both the promises and pitfalls of technology in education.

Length: One Semester

Teaching as a Profession

Teaching can be a highly rewarding profession. Throughout the course, students will explore career opportunities within the field of education. They will learn what it means to be a professional in the classroom, whether it be working alongside co-teachers or managing an inclusive and diverse group of students. Students will learn about the code of conduct expected of educational professionals. Students will explore the history and best practices in the teaching profession as well as professional development opportunities. They will discover what it means to emerge as leaders in the field.

Career and Technical Education Course Descriptions Health Science

Career Exploration in Dentistry

This course introduces students to the exciting and varied career opportunities in the dentistry profession, from dental assistant all the way up through oral surgeon. Students will review the history of dentistry globally and in the U.S., and will learn key dental terminology. The course will introduce the roles and tasks done as well as skills and education required of nearly every member of the dental staff. Students will gain an understanding of what it takes to perform each position, and how they work together.

Length: One Semester

Healthcare Management and Information Systems

In this course, students will explore the comprehensive world of healthcare information and management. Throughout the modules, students will learn about the history of the healthcare system as well as the current best practices in the field. They will explore the innovative technologies being developed and applied in patient care and patient privacy. Students will become familiar with the specific terminology utilized within the clinical and information technology systems. Students will investigate the complexities of the business of healthcare including data organization and security considerations. Finally, students will identify the ways in which communication and leadership go hand in hand with a thriving career in healthcare information and management systems.

Length: One Semester Certification PREP: Certified Associate in Healthcare Management & Information Systems

Career Exploration in Healthcare

This course introduces students to the exciting and varied career opportunities in the health care industry that will be in demand in their future! The course will introduce the roles and tasks, identify education and skills needed, identify responsibilities of roles which support or supervise their role, analyze legal and ethical responsibilities, limitations, and implications for each of these professions. Get ready. Get set. Learn about the Future of Health Care Careers!



Career and Technical Education Course Descriptions Information Technology

Cybersecurity

In the Cybersecurity course, students will learn about the practice of protecting networks, systems, and programs from digital attacks. They will better understand the aim of these attacks, such as destroying information, extorting money and resources, or disrupting business operations. They will learn about the challenges and opportunities that implementing cybersecurity measures can present. As attackers become more innovative, it is more important than ever to have effective cybersecurity channels in place to counter them. Students will learn about countermeasures and role recovery and their integral function in the cybersecurity realm. Additionally, students will learn what makes certain networks and systems more vulnerable to attacks. They will become adept at identifying potential viruses, worms, threats, and malware. The Cybersecurity course acts as a foundation on which to build extensive knowledge about threats to digital security.

Length: One Semester

Fundamentals to Blockchain & Cryptography

Blockchain seems to be the latest buzzword that the business world is taking about. But what is it? And why should a high school student care? This course will seek to answer those questions. It will strip away the layers of complexity and sophistication to help students understand the key concepts of the blockchain. The course will introduce and discuss applications where blockchain has the greatest potential.

Length: One Semester

Java SE 8 Associate

The Java SE 8 course is designed to provide preparation for the Oracle Certified Associate (OCA) exam. Throughout the course, students will learn about Java from the basics to string builder methods. They will spend a significant portion of the course learning about the basics of Java, data types, operators, arrays, loop constructs, encapsulation, inheritance, exceptions, and API.

Length: One Semester Course Materials: Java SE 8 Certification PREP: Oracle Certified Associate in Java and Information Technology Specialist in Java

Networking

The Networking course is intended to identify the key components of Networking in today's fast-moving world. From network fundamentals to automation and programming, students will learn the details of network access, IP connectivity and services, and security fundamentals. Through exciting and engaging interactivities, simulations, and projects students will explore firsthand these networking concepts to further their future with preparation for the Cisco Certified Network Associate (CCNA) exam.

Length: One Semester Certification PREP: Cisco Certified Network Associate (CCNA)

Swift App Development

In this course, students will learn about Swift App development and its components. Apple developed the powerful and user-friendly programming language Swift for creating iOS, Mac, Apple TV, and Apple Watch apps. Developers have more freedom than ever before, and the open-source app allows anyone with an idea to create something incredible. From planning to navigation to building, students will learn how to take an idea and create something potentially revolutionary!

Length: One Semester Course Materials: Swift Certification PREP: Swift Associate

Career and Technical Education Course Descriptions

Aeronautics and Space Travel

This course introduces students to the history and near future of space travel. Students will explore the possibilities of moon bases, Mars colonies, and visiting the outer planets in our solar system and their moons. Students will also discuss important ethical and legal issues around space exploration, such as asteroid mining and war in space. The course gives an expansive view of the technologies, science, and theories that will make far-fetched dreams into realities during the student's lifetime.

Length: One Semester

Augmented and Virtual Reality Applications

Separating hype from reality is hard... especially in the fast-growing and evolving space of augmented and virtual reality (AR/VR). Recent advances in technology has allowed AR/VR systems to become extremely sophisticated and realistic. This course introduces students to the technologies that underpin AR/VR systems. Then the course walks through 7 applications of AR/VR and how they will change and impact numerous aspects of our lives and the economy. Students will also learn about and discuss the risks and side effects of these systems, including health, privacy, and ethical implications.

Length: One Semester

Cloud Technologies and the Internet of Things

First, we had the internet of computers. Then with the advent of email and social media, along with mobile technology, it became the internet of people. Today's world is increasingly becoming the internet of things. With advances in battery power, sensors, and computer chips, more and more devices are being connected to the internet. This will allow them to be monitored, controlled, and used more effectively for people and businesses. This course will examine the trends and opportunities surrounding the Internet of Things (IoT). Students will learn about the technologies, hardware, and software that underpin the Internet of Things. The course will examine a variety of end-market applications in our homes, businesses and cities. Finally, students will learn about the many career opportunities that the Internet of Things will enable.

Length: One Semester

Introduction to Artificial Intelligence

This course teaches what every student should know about Artificial Intelligence. AI is a fast-moving technology with impacts and implications for both our individual lives and society as a whole. In this course, students will get a basic introduction to the building blocks and components of artificial intelligence, learning about concepts like algorithms, machine learning, and neural networks. Students will also explore how AI is already being used, and evaluate problem areas of AI, such as bias. The course also contains a balanced look at AI's impact on existing jobs, as well as its potential to create new and exciting career fields in the future. Students will leave the course with a solid understanding of what AI is, how it works, areas of caution, and what they can do with the technology.

Robotics: Applications and Careers

It seems like many elementary to high school robotics courses are focused on simply coding a Lego robot to move its mechanical arm up and down. This course, in contrast, teaches students what a robot is and how it relates to other key technologies such as artificial intelligence and machine learning. Then the course examines 10 applications of robots and how they will change and impact various aspects of our lives and the economy. Will robots simply steal our jobs, or will they be a tool that will create new opportunities and even free humans to use our creativity and curiosity to their full potential? Students will grapple with this and many other questions as they explore this vital, future-focused subject.

Transportation Technologies

This course introduces students to the newest and most cutting-edge futuristic transportation technologies out there. Students gain familiarity with the history of transportation development and understand a framework with which to evaluate new transportation modes. Then the course dives into 10 different technologies on the horizon. Students examine the technologies, the pros and cons of each mode, and explore potential career paths in these emerging fields.

Length: One Semester

Length: One Semester

Smart Cities: Technology & Applications

This course will provide students with an overview of smart cities. The course will begin by providing a foundational explanation of what constitutes a smart city and why they are beginning to pop up around the globe. With a firm understanding of what a smart city is, the majority of the course will focus on various aspects of them such as energy, transportation, data, infrastructure, mobility, and IOT devices. The course will conclude with an analysis of careers related to smart cities.

Length: One Semester

Wearable Technology Innovations

From hearing aids to pedometers to smart watches, humans have made and worn devices to overcome physical deficiencies, count their steps, and communicate. With the continue miniaturization of chips and sensors, combined with increasing sophistication of artificial intelligence, wearable technology has proliferated into countless endmarkets. This course will introduce students to wearable technologies and the components and software that make these technologies possible. The course will also evaluate several applications of wearable technologies in various industries. Finally, the course will examine and discuss the implications of wearable technology, including its pros and cons, and potential implications to our health, privacy, and society.

Career and Technical Education Course Descriptions Additional CTE Electives

Drones: Remote Pilot

This course prepares students to take the Federal Aviation Administration (FAA) Part 107 exam, also know as the Unmanned Aircraft General – Small (UAG) exam, which is essential to becoming a commercial drone pilot. The field of unmanned aerial vehicles is growing rapidly, as the opportunities to use them for search and rescue, photography, recreation, inspection, and many others continue to multiply. Students will learn the critical facts to prepare for the test's topics, which include: regulations, airspace & requirements, weather, loading & performance, and operations. The course will conclude with a look at the most promising careers in the field of drones.

Length: One Semester Certification PREP: FAA Part 107 Commercial Drone Pilot

Career & Financial Management

The Career and Financial Management course prepares students to make decisions regarding their life, career, and financial future. Throughout the course, they will investigate a variety of career pathways and determine how to make decisions that will affect their employment opportunities.Students will identify career readiness skills, and how education opens up opportunities for advancement and growth. Through lessons on leadership, communication, and technology, students will better understand the modern workplace. The second half of the course focuses on money management, and includes critical topics such as budgeting, saving, loans and credit, identity protection, investing, insurance, and taxes.

Length: One Semester

Project Management

The Project Management course is intended to identify the key components of a career as a project manager. Students will review the basics in project management terminology, such as designating distinctions among projects, products, programs, and portfolios. They will delve into concepts like managing deliverables and creating engaging relationships with stakeholders. The primary components of project planning will be laid out and described in detail. Students will explore teams and organizational structures. They will discover project management tools and innovation being used in the industry. Overall, they will develop a greater understanding of the mechanisms that are in place to effectively carry out projects of any size through specific project management techniques.

Length: One Semester Certification PREP: Certified Associate in Project Management and Project Management Ready

The History of Gaming and Esports

In this course, students will learn about the technologies and design principles that have been the foundation the development of video game technology over the last 50 years. Students will examine and discuss the impact of video games on culture and the economy. Students will learn about the current gaming and e-sports landscape, including strategies and techniques of top teams and individuals. This course will also discuss the risks and dangers of video games and understand how to set appropriate time and content parameters. Finally, the course will identify career paths and opportunities for those who are passionate about gaming.

Certification Pathways

Empower students to explore career and technical skills through career pathways that prepare them for industry certifications. After students complete the certification PREP course, they are better prepared to take the applicable certification exam.

eCourse	Certification Exam
Adobe After Effects	Adobe Certified Professional
Adobe Illustrator, InDesign, Photoshop	Adobe Certified Professional
Adobe Premiere Pro	Adobe Certified Professional
Architectural Design I & II	Autodesk Certified User in AutoCAD
Building Maintenance Technology II	OSHA 30 Hour Construction
Drones: Remote Pilot	FAA Part 107 Commercial Drone Pilot
Early Childhood Education I & II	Child Development Associate (CDA)
Entrepreneurship & Small Business	Entrepreneurship and Small Business (ESB)
Healthcare Managment Information Systems	Certified Associate in Healthcare Management & Information Systems
Java SE 8 Associate	Oracle Certified Associate in Java Information Technology Specialist in Java
LEED Green Associate	LEED Green Certified Associate
Microsoft Excel, Outlook, PowerPoint, Word	Microsoft Office Specialist/Associate
Networking	Cisco Certified Network Associate (CCNA)
Project Management	Certified Associate in Project Management Project Management Ready
Social Media Business Marketing	Social Media Strategist
Swift App Development	Swift Associate
Quickbooks	Intuit Quickbooks Certified User Online

edisonlearning[®] CTE Case Study

Promoting Student Ownership Through Career Education

Virtual Learning Academy Charter School Exeter, New Hampshire

School Profile

- State-approved charter school
- Public school
- 501(c)(3) non-profit organization

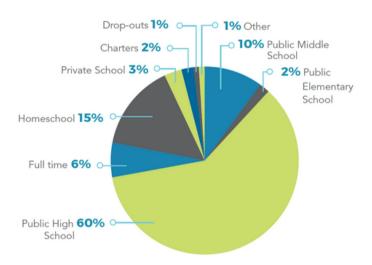
Challenge

The Virtual Learning Academy Charter School (VLACS) seeks to promote student ownership of their education by complementing their customized, competency-based learning model with additional career education offerings. By expanding options, they aim to further encourage students to pursue their interests, talents, and passions.

"Thank you for all the time you put into teaching me in this class. I appreciate it so much, and I've learned an unimaginable amount of things that I will continue to use as I get into these fields."

VLACS Student High School Senior

Student Statistics



Solution

With Career and Technical Education (CTE) eCourses, VLACS provided students with an opportunity to explore career-related subjects, while empowering them to recognize the limitless job opportunities they can seize. VLACS rewards every student who completes a CTE course with a digital badge.

Outcome

99

The CTE courses have made it possible for VLACS students to expand their career education and apply what they learn to realworld experiences. VLACS teachers enjoy seeing the growth of students' abilities through the courses and find that students enrolled in these courses are invested in the field and find the information useful and the assignments relative.

Get started with EdisonLearning eCourses[®] and services today!

To learn more or connect with a team member, scan here:





www.edisonlearning.com

EdisonLearning, Inc . One East Broward Blvd Suite 1599 Fort Lauderdale, Florida 33301

Corporate: 201-630-2600

© 2023 EdisonLearning, Inc. All rights reserved. EdisonLearning®, the EdisonLearning logo and the Edison "e" mark are trademarks of EdisonLearning, Inc.

Product details are subject to change, and may vary by individual client engagement. Student and school performance depends on many variables; as such, specific results are not guaranteed and may vary.