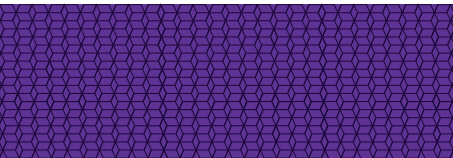




FUEL EDUCATION SOLUTION

Career Readiness Pathways™

Connecting to the Future:
Comprehensive Career and Technical Education
Through Online and Blended Learning



fueleducation®

IGNITING PASSION, FUELING THE FUTURE

The economy is changing, and so is the way we prepare students for their future. Vocational training for a few has evolved into career and technical education (CTE) opportunities for all students.

The new economy beckons with high-skill, high-demand jobs for students right out of high school as well as for college graduates.

School administrators and state policymakers are rallying to transform America's high schools to address these new economic needs.

Career readiness programs are igniting a passion for learning in students, increasing their engagement levels at school, and opening up opportunities for training and certifications.



93%

of students in CTE programs graduate, outpacing the overall national graduation rate of 80%.*

75%

of high school students who concentrate in CTE pursue postsecondary studies shortly after graduation.*

81%

of students who didn't finish high school say relevant, real-world learning opportunities would have kept them in school.*



Comprehensive Pathways from Exploration to Certification

Fuel Education’s Career Readiness Pathways brings a comprehensive, end-to-end approach to career and technical education through online and blended learning.

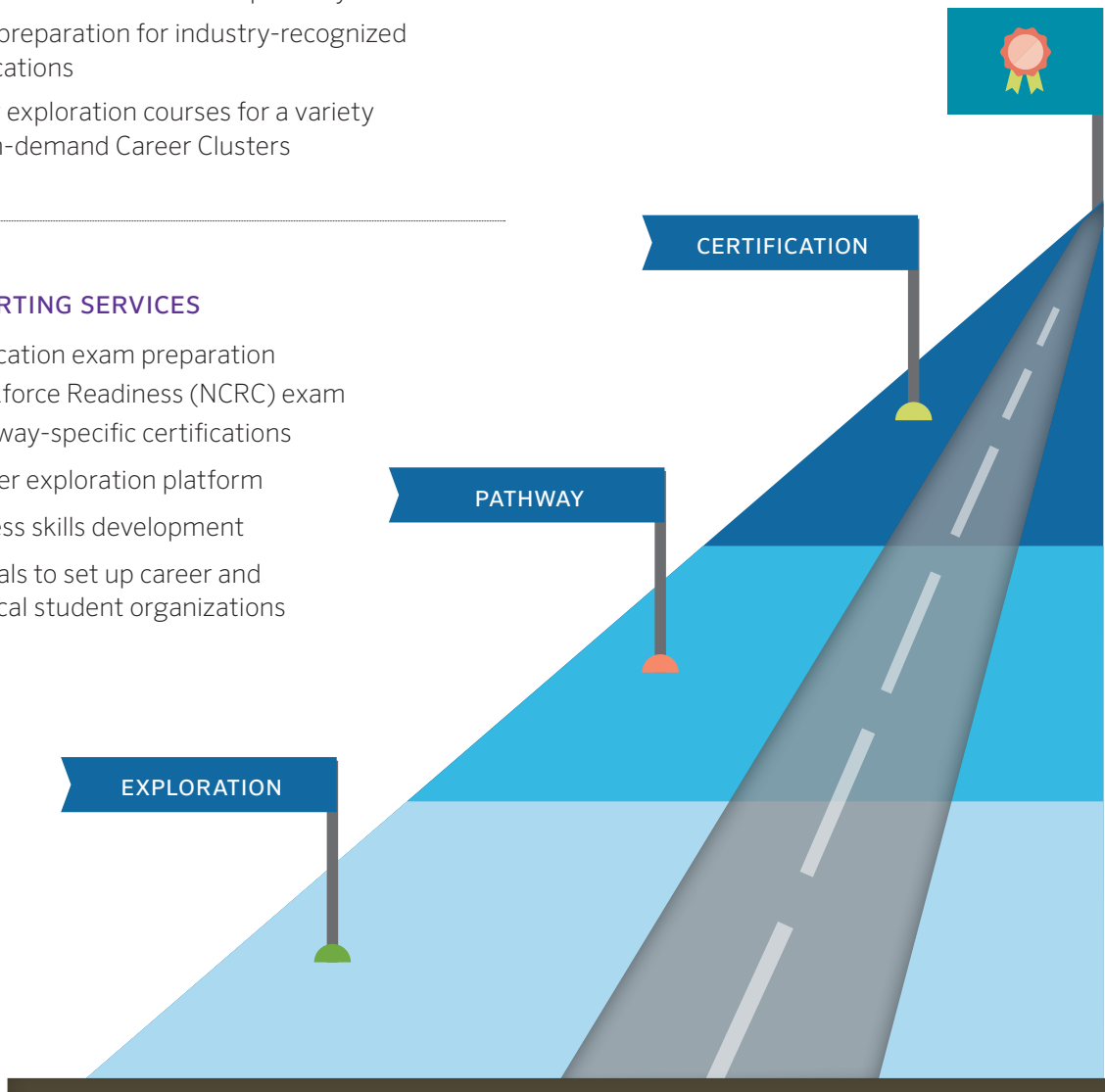
Our innovative, affordable program offers true **college and career readiness—from career exploration to well-designed curriculum pathways** that help students prepare for certifications.

PROGRAM FEATURES

- A progression of high-quality, rigorous courses in 24 distinct career pathways
- Exam preparation for industry-recognized certifications
- Career exploration courses for a variety of high-demand Career Clusters

SUPPORTING SERVICES

- Certification exam preparation
 - Workforce Readiness (NCRC) exam
 - Pathway-specific certifications
- A career exploration platform
- Business skills development
- Referrals to set up career and technical student organizations



Six Essential Career Clusters, 24 Pathways to Follow



MANUFACTURING

- Manufacturing Production
- Process Development
- Production



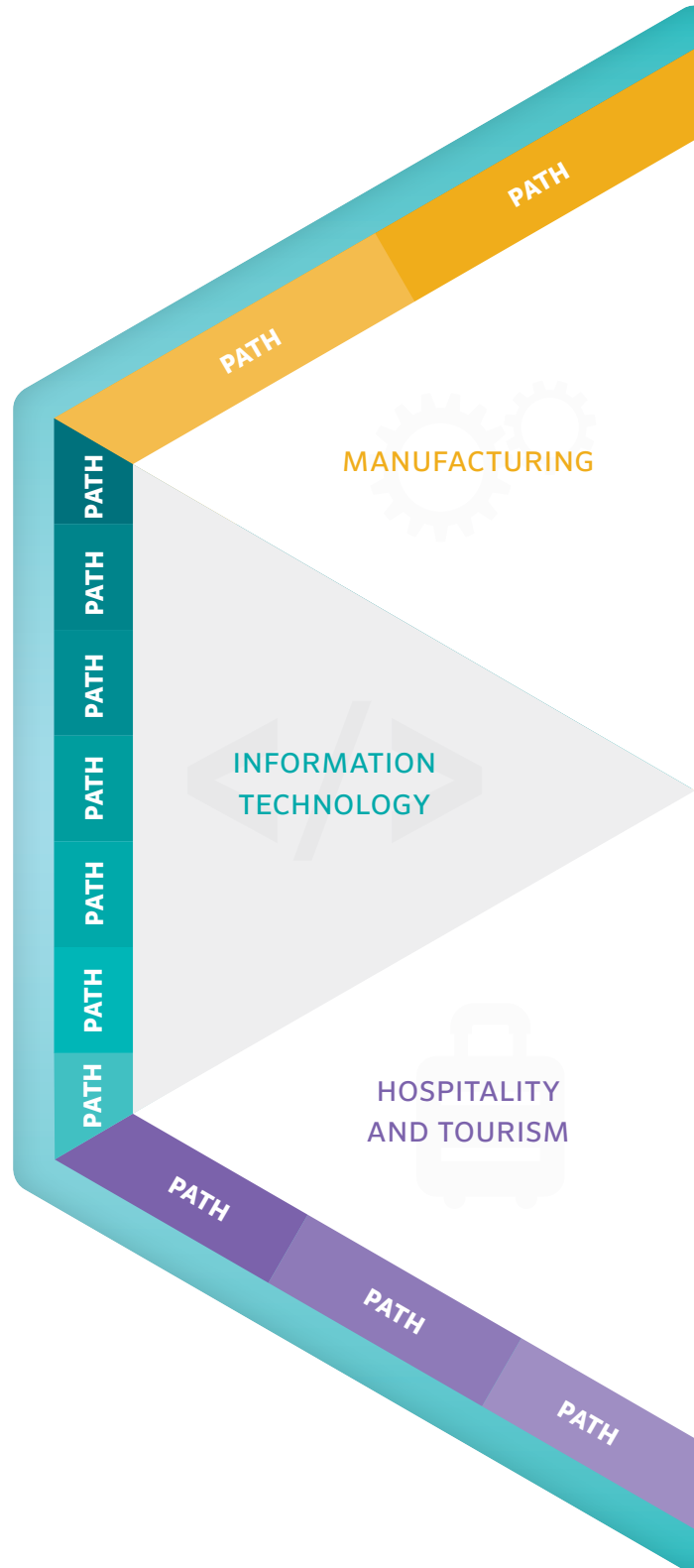
INFORMATION TECHNOLOGY

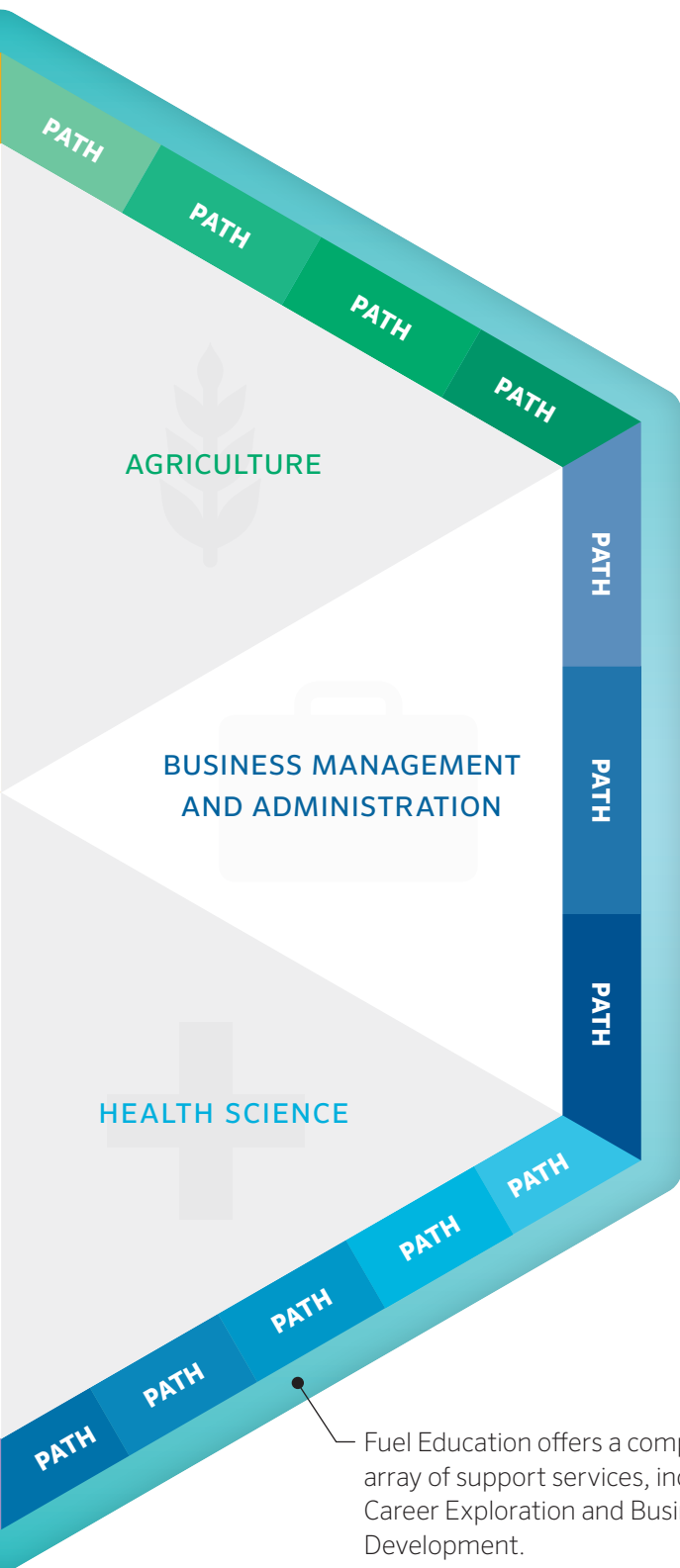
- Information Support and Services
- Programming and IT Support: Java
- Programming and IT Support: Python
- Programming and IT Support: C++
- Programming and IT Support: Web/HTML
- Web and Digital Communications: Adobe
- Web and Digital Communications: Game Design



HOSPITALITY AND TOURISM

- Food Service and Hospitality
- Food Science and Nutrition
- Travel and Tourism





Fuel Education offers a comprehensive array of support services, including Career Exploration and Business Skills Development.

AGRICULTURE

- Agricultural Mechanics
- Agriscience
- Forestry and Natural Resources
- Food Products and Processing

BUSINESS MANAGEMENT AND ADMINISTRATION

- Administrative Support
- Business Information Management: Accounting
- General Management

HEALTH SCIENCE

- Therapeutic Services: Pharmacy Technician
- Therapeutic Services: Nursing Assistant
- Therapeutic Services: Medical Assistant
- Therapeutic Services: Dental Assistant
- Therapeutic Services: Sports Medicine

Program Details

ESSENTIAL CLUSTERS, CLEAR PATHWAYS

FuelEd’s comprehensive program brings together six of the most high-demand Career Clusters in the CTE world today that represent key cornerstones of our economy. Each cluster contains multiple, clear-cut career pathways—a total of 24—that all feature a carefully designed progression of rigorous courses.

Students can leave high school with a diploma and prepared to earn an empowering certification—in pathways for which national certifications are available. Every pathway is designed to equip students with the essential knowledge and skills to launch a career right after graduation or pursue postsecondary studies.

RESPECTED CREDENTIALS

Students have an opportunity to prepare for a wide variety of industry certifications, including:

- Microsoft® Office certifications in business
 - Certified nurse assistant (CNA), certified pharmacy technician (CPhT), and Dental Assisting National Board (DANB) in health care
 - CompTIA and Adobe® certifications
 - Machine tool operator (CNC) and NIMS Machining Level I in manufacturing
-

CAREER EXPLORATION

Through a variety of resources, students will discover their skills and interests and match them to related careers; research job fields, specific careers, and colleges; prepare resumes; and connect school work to real life.

CERTIFICATION EXAM PREPARATION

Students receive advanced preparation for workforce readiness certifications like the ACT NCRC. In addition, they receive pathway-specific exam preparation.

BUSINESS SKILLS DEVELOPMENT

Students develop critical, non-academic, “soft” skills enabling them to thrive as professionals in the workplace. These include teamwork, interpersonal skills, leadership skills, and other attributes they’ll need to navigate the working world.

CAREER AND TECHNICAL STUDENT ORGANIZATION





Students can enjoy the benefits of FuelEd’s partnership with SkillsUSA, which offers a structured program of citizenship, leadership, employability, and skills training. Students will participate in activities, instruction, projects, and statewide and national competitions, and they’ll build skills in communication, problem solving, teamwork, and leadership.

OPTIONAL INSTRUCTIONAL SERVICES

FuelEd’s dedicated, certified instructors are available as an optional, cost-effective way to staff all or part of your CTE program. Our teachers are extensively trained in online and blended best practices and have in-depth knowledge of our online curriculum.

Flexible Implementation Options

Whether you're seeking to implement a comprehensive two- or four-year career and technical education program that helps prepare for certification, trying to keep at-risk students engaged, or simply wanting to expand elective options for all your students, we'll partner with you to implement a Career Readiness Pathways program that fits your needs and budget.

PROGRAM SOLUTION	 4 YEARS Comprehensive Pathways	 2 YEARS Accelerated Pathways	 1-2 SEMESTERS Short Track for At-Risk Students	 1 SEMESTER Expanded Options for all Students
FOCUS STRATEGIES	<ul style="list-style-type: none"> • Full Pathway with certification preparation • On track start for freshmen 	<ul style="list-style-type: none"> • Modified Pathway with certification preparation • Target students with two years left 	<ul style="list-style-type: none"> • Short Pathway with certification preparation • Focus on most at-risk students 	<ul style="list-style-type: none"> • Extensive elective offerings • Provide initial exposure to a variety of career fields
IMPLEMENTATION	<ul style="list-style-type: none"> • Work with feeder middle schools to identify students • Provide middle school electives for exposure • In-class labs or supplemental course offerings 	<ul style="list-style-type: none"> • Work with high school counselors to identify students • Additional support with in-class labs or supplemental course offerings 	<ul style="list-style-type: none"> • Identify students through at-risk prevention, counselors, and classroom teachers • In-class lab with mentor support 	<ul style="list-style-type: none"> • Provide middle and high school students elective catalog offerings • Increase success rate by ensuring appropriate placement • In-class labs or supplemental course offerings

 **Agriculture**



- Agriculture and related businesses added \$775.8 billion to the U.S. economy in 2012*
- More than 21 million U.S. workers cultivate, process, and sell food and fiber products*

Examples of Careers in the Agricultural Cluster

Agricultural and Food Scientists

\$62,470 PER YEAR MEDIAN PAY (\$30.03/HOUR)**

Conservation Scientists and Foresters

\$60,220 PER YEAR MEDIAN PAY (\$28.95/HOUR)**

PATH	PATH	PATH	PATH
<p>Agriculture Mechanics</p> <p>COURSES</p> <ul style="list-style-type: none"> • Agricultural Mechanics I • Agricultural Mechanics II • Agricultural Mechanics III • Welding I • Welding II 	<p>Agriscience</p> <p>COURSES</p> <ul style="list-style-type: none"> • Introduction to Agriscience • Agriscience II • Earth Science • Environmental Science • Biology 	<p>Forestry and Natural Resources</p> <p>COURSES</p> <ul style="list-style-type: none"> • Introduction to Forestry and Natural Resources • Wildlife and Natural Resource Management I • Wildlife and Natural Resource Management II 	<p>Food Products and Processing</p> <p>COURSES</p> <ul style="list-style-type: none"> • Principles of Agriculture, Food and Natural Resources • Food Production I • Food Production II • Livestock & Poultry Production I • Livestock & Poultry Production II • Livestock & Poultry Production III
<p>The course sequence is designed to prepare students for these nationally recognized certification exams:</p>			
<p>BASE CREDENTIAL</p> <p>NOCTI Agriculture Mechanics; AWS Sense Level I and II</p>			
<p>OTHER CREDENTIALS</p> <p>Fuel Education’s Career Readiness Pathways are designed to meet many of the needs of local certification requirements.</p>			

Business Management and Administration



- Traditionally the most popular CTE cluster—more than 96 percent of public high schools with a CTE program offer courses in this cluster*

Examples of Careers in the Business Management and Administration Cluster

Bookkeeping and Accounting Clerks

\$37,250 PER YEAR MEDIAN PAY (\$17.91/HOUR)**

Administrative Assistant

\$36,500 PER YEAR MEDIAN PAY (\$17.55/HOUR)**

PATH	PATH	PATH
<p>Administrative Support (Microsoft Office Certification)</p> <p>COURSES</p> <ul style="list-style-type: none"> • Business and Healthcare Explorations • Marketing I • General Accounting I • General Accounting II • Entrepreneurship I • Microsoft Word® with Certification Preparation • Microsoft PowerPoint® with Certification Preparation • Microsoft Excel® with Certification Preparation • Microsoft Access® with Certification Preparation 	<p>Business Information Management (Accounting)</p> <p>COURSES</p> <ul style="list-style-type: none"> • Business and Healthcare Explorations • Marketing I • General Accounting I • General Accounting II • Entrepreneurship I <p><i>Available in Spring 2018:</i></p> <ul style="list-style-type: none"> • Advanced Accounting I • Advanced Accounting II <p><i>The course sequence is designed to cover all standards assessed in the certification exam.</i></p>	<p>General Management</p> <p>COURSES</p> <ul style="list-style-type: none"> • Business and Healthcare Explorations • Marketing I • General Accounting I • General Accounting II • Entrepreneurship I • Entrepreneurship II <p><i>The course sequence is designed to cover all standards assessed in the certification exam.</i></p>
<p>The course sequence is designed to prepare students for these nationally recognized certification exams:</p>		
<p>ADVANCED CREDENTIAL Business Concepts Certification</p> <p>BASE CREDENTIAL Microsoft Office Specialist (MOS) Certification Exams</p> <p>National Occupational Competency Testing Institute (NOCTI) Business Information Processing Exam</p>	<p>ADVANCED CREDENTIAL A*S*K Business Institute Finance Certification</p> <p>BASE CREDENTIAL National Occupational Competency Testing Institute (NOCTI) Financial and Managerial Accounting Exam</p>	<p>ADVANCED CREDENTIAL A*S*K Business Institute Entrepreneurship/Management Certification</p> <p>BASE CREDENTIAL National Occupational Competency Testing Institute (NOCTI) General Management Exam</p>

OTHER CREDENTIALS

Fuel Education's Career Readiness Pathways are designed to meet many of the needs of local certification requirements.

+ Health Science



- One of the largest sectors of the U.S. economy at 17 percent of GDP*
- Expected to grow the fastest of all occupations in the U.S. through 2020—by 31 percent*

Examples of Careers in the Health Science Cluster

Medical Assistant

\$30,590 PER YEAR MEDIAN PAY (\$14.71/HOUR)**

Pharmacy Technician

\$30,410 PER YEAR MEDIAN PAY (\$14.62/HOUR)**

PATH	PATH	PATH	PATH	PATH
Therapeutic Services: Pharmacy Technician	Therapeutic Services: Nursing Assistant	Therapeutic Services: Medical Assistant	Therapeutic Services: Dental Assistant	Therapeutic Services: Sports Medicine
COURSES	COURSES	COURSES	COURSES	COURSES
<ul style="list-style-type: none"> • Business and Healthcare Explorations • Health Science II • Introduction to Medical Terminology • Anatomy and Physiology I • Anatomy and Physiology II • Pharmacy Technician I • Pharmacy Technician II • Pharmacy Technician III with Pharmacy Technician (CPhT) Certification Preparation 	<ul style="list-style-type: none"> • Business and Healthcare Explorations • Health Science II • Introduction to Medical Terminology • Anatomy and Physiology I • Anatomy and Physiology II • Nursing Assisting I • Nursing Assisting II • Nursing Assisting III with Certified Nursing Assistant (CNA) Certification Preparation 	<ul style="list-style-type: none"> • Business and Healthcare Explorations • Health Science II • Introduction to Medical Terminology • Anatomy and Physiology I • Anatomy and Physiology II • Medical Assisting I • Medical Assisting II • Medical Assisting III with Certified Medical Assistant (CMA) Certification Preparation 	<ul style="list-style-type: none"> • Business and Healthcare Explorations • Health Science II • Introduction to Medical Terminology • Anatomy and Physiology I • Anatomy and Physiology II • Dental Assisting I • Dental Assisting II • Dental Assisting III 	<ul style="list-style-type: none"> • Business and Healthcare Explorations • Health Science II • Introduction to Medical Terminology • Anatomy and Physiology I • Anatomy and Physiology II • Sports Medicine I • Sports Medicine II

The course sequence is designed to prepare students for these nationally recognized certification exams:

ADVANCED CREDENTIAL Pharmacy Technician (CPhT) Certification	ADVANCED CREDENTIAL Certified Nursing Assistant (CNA) Certification	ADVANCED CREDENTIAL Certified Medical Assistant (CMA) Certification	ADVANCED CREDENTIAL Dental Assisting National Board (DANB)
BASE CREDENTIAL No base credential, continue to prepare for CPhT	BASE CREDENTIAL National Occupational Competency Testing Institute (NOCTI) Health Assisting Exam	BASE CREDENTIAL National Occupational Competency Testing Institute (NOCTI) Medical Assisting Exam	BASE CREDENTIAL National Occupational Competency Testing Institute (NOCTI) Dental Assisting Exam

OTHER CREDENTIALS

Fuel Education’s Career Readiness Pathways are designed to meet many of the needs of local certification requirements.

 **Hospitality and Tourism**



- Has outpaced job growth nationwide for more than 14 years*
- Projected to add between 2.1 million and 3.3 million jobs by 2021*

Examples of Careers in the Hospitality and Tourism Cluster

Lodging Manager

\$49,720 PER YEAR MEDIAN PAY (\$23.91/HOUR)**

Chefs and Head Cooks

\$41,500 PER YEAR MEDIAN PAY (\$19.95/HOUR)**

PATH	PATH	PATH
<p>Food Science and Nutrition</p> <p>COURSES</p> <ul style="list-style-type: none"> • Nutrition and Wellness • Skills for Health • Introduction to Culinary Arts • Food Production I • Food Production II 	<p>Food Service and Hospitality</p> <p>COURSES</p> <ul style="list-style-type: none"> • Restaurant Management • Introduction to Culinary Arts • Food Production I • Food Production II 	<p>Travel and Tourism</p> <p>COURSES</p> <ul style="list-style-type: none"> • Intro to Hospitality and Tourism • Entrepreneurship I • Entrepreneurship II • Marketing I • Advertising and Sales Promotion • International Business
<p>The course sequence is designed to prepare students for these nationally recognized certification exams:</p>		
<p>BASE CREDENTIAL</p> <p>NOCTI Commercial Foods</p>	<p>BASE CREDENTIAL</p> <p>NOCTI Hospitality Management—Food and Beverage</p>	<p>BASE CREDENTIAL</p> <p>NOCTI Hospitality Management—Lodging</p>

OTHER CREDENTIALS

Fuel Education’s Career Readiness Pathways are designed to meet many of the needs of local certification requirements.

Information Technology

- Projected to be the fastest growing Career Cluster through 2018*
- IT jobs pay more than double the national average*

Examples of Careers in the Information Technology Cluster

Computer Programmers

\$79,530 PER YEAR MEDIAN PAY (\$38.24/HOUR)**

Multimedia Artists and Animators

\$63,970 PER YEAR MEDIAN PAY (\$30.76/HOUR)**

PATH	PATH	PATH
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Information Support and Services

COURSES

- IT and Manufacturing Explorations
- A+ Computer Management I
- A+ Computer Management II with A+ Certification Preparation
- Network+ Guide to Networks I
- Network+ Guide to Networks II with Network+ Certification Preparation
- Security+ I (optional)
- Security+ II with Security+ Certification Preparation (optional)

Programming and IT Support: Java

COURSES

- IT and Manufacturing Explorations
- Introduction to Computer Science
- Programming Logic and Design
- Java Programming I
- Java Programming II

Programming and IT Support: Python

COURSES

- IT and Manufacturing Explorations
- Introduction to Computer Science
- Programming Logic and Design
- Python Programming

The course sequence is designed to prepare students for these nationally recognized certification exams:

ADVANCED CREDENTIAL

CompTIA A+, Network+, and Security+ Certifications

BASE CREDENTIAL

National Occupational Competency Testing Institute (NOCTI) Information Support and Services Exam

PROJECT PORTFOLIO

Java® Project Portfolio

BASE CREDENTIAL

National Occupational Competency Testing Institute (NOCTI) Computer Programming Exam

PROJECT PORTFOLIO

Python® Project Portfolio

BASE CREDENTIAL

National Occupational Competency Testing Institute (NOCTI) Computer Programming Exam

OTHER CREDENTIALS

Fuel Education's Career Readiness Pathways are designed to meet many of the needs of local certification requirements.



PATH	PATH	PATH	PATH
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Programming and IT Support: C++

COURSES

- IT and Manufacturing Explorations
- Introduction to Computer Science
- Programming Logic and Design
- C++ Programming

Programming and IT Support: Web/HTML

COURSES

- IT and Manufacturing Explorations
- Introduction to Computer Science
- Programming Logic and Design
- HTML5/CSS3 Prog

Web and Digital Communications: Adobe

COURSES

- IT and Manufacturing Explorations
- Digital Arts I
- Digital Arts II
- Adobe Photoshop® with Adobe Certification Preparation
- Adobe Illustrator® with Adobe Certification Preparation
- Adobe InDesign® with Adobe Certification Preparation
- Adobe Dreamweaver® with Adobe Certification Preparation

Web and Digital Communications: Game Design

COURSES

- IT and Manufacturing Explorations
- Digital Arts I
- Digital Arts II
- Game Design I

Available in Spring 2018:

- Game Design II
- 2D Animation
- 3D Modeling

The course sequence is designed to prepare students for these nationally recognized certification exams:

PROJECT PORTFOLIO
C++® Project Portfolio

BASE CREDENTIAL
National Occupational Competency Testing Institute (NOCTI) Computer Programming Exam

PROJECT PORTFOLIO
HTML5/CSS3® Project Portfolio

BASE CREDENTIAL
National Occupational Competency Testing Institute (NOCTI) Computer Programming Exam

ADVANCED CREDENTIAL
Adobe Certified Associate (ACA) Certifications

BASE CREDENTIAL
National Occupational Competency Testing Institute (NOCTI) Web Design Exam

OTHER CREDENTIALS

Fuel Education’s Career Readiness Pathways are designed to meet many of the needs of local certification requirements.

 **Manufacturing**



- Provides about one in six private-sector jobs*
- 3.5 million manufacturing jobs will need to be filled by 2025*

Examples of Careers in the Manufacturing Cluster

Machinists and Tool & Die Makers

\$42,110 PER YEAR MEDIAN PAY (\$20.55/HOUR)**

Quality Control Inspector

\$36,000 PER YEAR MEDIAN PAY (\$17.31/HOUR)**

PATH	PATH
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Manufacturing Production Process Development

COURSES

- IT and Manufacturing Explorations
- Fundamentals of Manufacturing
- Manufacturing Systems
- Manufacturing Product Development
- Lean Manufacturing and Automation
- Advanced Manufacturing Applications I
- Advanced Manufacturing Applications II
- Manufacturing Process Development I
- Manufacturing Process Development II

The course sequence is designed to cover all standards assessed in the certification exam.

**Coursework covers safety, quality, manufacturing and maintenance parts of the certification standards. Does not include green at this time.*

Production

COURSES

- IT and Manufacturing Explorations
- Fundamentals of Manufacturing
- Manufacturing Systems
- Manufacturing Product Development
- Lean Manufacturing and Automation
- Precision Machining Technology

Subject to availability, upon registering for the certification exam, students will receive sample exams and preparation materials from NIMS.

The course sequence is designed to prepare students for these nationally recognized certification exams:

ADVANCED CREDENTIAL

Manufacturing Skill Standards Council (MSSC) Certified Production Technician*

BASE CREDENTIAL

National Occupational Competency Testing Institute (NOCTI) Manufacturing Technology Exam

ADVANCED CREDENTIAL

National Institute for Metalworking Skills (NIMS) Machine Level 1

BASE CREDENTIAL

National Occupational Competency Testing Institute (NOCTI) Precision Machining Exam

OTHER CREDENTIALS

Fuel Education’s Career Readiness Pathways are designed to meet many of the needs of local certification requirements.

Pathway Pluses

Our expansive curriculum includes ways for students to gain additional expertise they can stack onto the knowledge and skills they're building in their chosen pathway.



WORLD LANGUAGES

Whether in the realm of business, health care, tourism or beyond, the **ability to communicate in multiple world languages** is an increasingly valuable skill both at home and abroad.

Fuel Education offers online world language curriculum that's been developed with leading pedagogical methods to enable students to achieve language fluency and broader cultural knowledge.

We offer world language courses in:

Spanish | French | Chinese | German



MICROSOFT OFFICE

Computer software fluency is a world language all its own. No matter the chosen career, tomorrow's workers will need to know the fundamentals of word processing, spreadsheets, databases, and presentations.

We offer thorough training courses for the Microsoft Office Suite 2013 and Office Suite 2016/365, including:

Microsoft Word | Microsoft Excel | Microsoft PowerPoint
Microsoft Access

We combine this training with **comprehensive exam preparation for the Microsoft Office Specialist (MOS) certification exam.**



ADDITIONAL CTE ELECTIVES

In addition to the Career Readiness Pathways courses, we offer more than **30 CTE exploratory electives** for other pathway interests. These FuelEd Online Courses are well-suited for use in online, blended, or traditional classroom environments, and they are delivered through PEAK, our personalized learning platform.

Visit our [Course Finder on fueleducation.com](https://www.fueleducation.com) to see a list of these CTE electives.

Your Partner in Preparing Students for the Future

JUMPSTART THE FUTURE

Online and blended learning offers an ideal solution for districts looking to transform their schools and expand their CTE offerings quickly, affordably, and comprehensively. FuelEd's Career Readiness Pathways enables districts and schools to overcome budget limitations and teacher shortages and open the door to a whole new world of CTE pathways for students eager to jumpstart their futures.

We're dedicated to continuing to buildout strategic pathways in every national cluster so your students can pursue promising opportunities in every corner of the economy

For more information, visit fueleducation.com/careerpathways.



fueleducation®

CALL 855.402.3533

WEB fueleducation.com

* All economic statistics cited from the Association for Career and Technical Education and the National Center for Education Statistics. For more information, see actonline.org/factsheets and nces.ed.gov.

**All income statistics cited from Bureau of Labor Statistics, U.S. Department of Labor, Occupational Outlook Handbook, 2016-2017 edition.

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