



A Student's Guide to Professional Career Themes and CTE Programs

**Human Services,
Education, and
International
Studies**

**Medicine,
Health,
and the
Environment**

**Business
and
Information
Technology**

**Engineering
(Aeronautics,
Architecture,
Construction, and
Manufacturing)**

**Communication,
Media,
and Arts**



5-STAR SCHOOLS PROFESSIONAL CAREER THEMES

Five New Keys for Unlocking Your Future

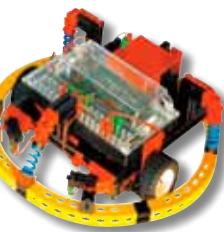


There's no foolproof way to predict who's going to win the NCAA Basketball Championships next year, whether you will have grandchildren, even what you're going to have for dinner next Thursday. But that doesn't mean the future is beyond your reach.



That's because the future is not just something that happens to you—it's something you build yourself. In fact, whether you know it or not, you've been working on this project ever since you first started figuring out what things you did well and how you liked to spend your time.

Those personal likes and dislikes go into deciding what work you want to do when you get out of school. The easiest way to get a handle on your future is to wake up to the fact that you control it now, that what you do at work and at play is all part of building your own personal story, and that you can start now to steer your life in the direction you want it to go.



Your school district, Jefferson County Public Schools (JCPS), wants to help you take this important step. To position each high school student to pursue high-skill, high-wage professional careers needed in Louisville, we are offering five Professional Career Themes across our high schools.

This book is designed to introduce you to the 5-Star Career Themes and help you begin building your own future. In it, you will learn:

- How what you learn in school can change your life.
- How to decide what career is best for you.
- How to plan a path through school that will lead to the future you want.

**Want to
learn more?
Read on.**



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A Letter From Superintendent Donna Hargens

Dear JCPS Student,

“Wow! I wish they’d offered those classes when I was in school.” That’s what a lot of adults say when they learn about the exciting classes in the Professional Career Theme Programs at JCPS 5-Star Schools. These classes give you the chance to learn more—a lot more—about your favorite subjects. And the learning is hands-on. You get to use professional tools and master valuable skills while you work on interesting real-world projects.

But here’s the best part: The classes aren’t just an enjoyable way to spend the school day. They offer solid preparation for your future. To develop the programs, JCPS worked with local and regional businesses to make sure the classes help you get ready for today’s—and tomorrow’s—most rewarding college and career opportunities.

Because local companies, community organizations, colleges, and universities partner with JCPS schools to support the programs, you get guidance from professionals who are experts in their fields. And, because many courses offer college credit as well as job shadowing, professional certification, co-ops, internships, and/or apprenticeships, you’ll graduate with a credentialed diploma that gets noticed by colleges and employers.

Overall, JCPS schools offer more than 100 Career and Technical Education Programs (CTE) that help prepare students for a vast range of careers—everything from engineering, law, and computer science to television production, sports medicine, and graphic design. Our 5-Star Schools enable each student to personalize a pathway toward a credentialed diploma and a postsecondary school degree aligned with a professional career needed by our region.

This book will help you pick the most promising and prosperous path for your future. The first step is selecting a school and a program. The classes you take in your chosen field will give you a head start toward your personal and professional goals. I offer you my best wishes and much success as you begin your journey.

Donna M. Hargens, Ed.D.
Superintendent
Jefferson County Public Schools



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Planning

It all starts with a plan. To make your way from the here and now to career success and satisfaction in the future, it helps to map out the steps that can take you where you want to go. This book will give you an idea of what that map can look like and explain the new and exciting tools available to you in JCPS to help you find your way. Here are some steps for drawing up a plan for your future.



What Do You Like to Do?

To find out where you want to go with your life, you need to know where you are right now. What do you like to do for fun? Play basketball, build things, or go to the library and read? Hang out with a bunch of friends, or have a quiet talk with just one person you feel close to? Be the center of attention, or watch someone else put on a show?

Certain written tests called “interest inventories” can help you pinpoint your interests. Two good ones are Career Cruising and the Armed Services Vocational Aptitude Battery (ASVAB). Your school counselor can help you find out more about these and other interest inventories. (To check out some of them yourself, see “Resources” on the inside back cover.)

Of course, what you like to do has to fit with what you do best, so pay attention to which classes you do well in and what things you do skillfully outside school.

JCPS

TIMELINE FOR SUCCESS

Sixth Grade and Seventh Grade

Using the Career Cruising Web site (www.careercruising.com/ilp), you begin to identify your interests and talents and to explore the world of careers.



Eighth Grade

Using Career Cruising’s interest and skills assessments, career profiles, and interviews with real people in different occupations, you prepare to complete an ILP online for your educational and career future. (See “Your ILP” on page 4.)

AUGUST–OCTOBER

The Showcase of Schools

In October of your eighth-grade year, the Showcase of Schools at the Kentucky International Convention Center in downtown Louisville gives you and your parents a chance to learn about the high schools in your part of Jefferson County and about the career programs they offer.

NOVEMBER–DECEMBER

Open Houses

After the Showcase of Schools, the schools in your area will hold open houses. You and your parents can visit and get a better feel for the schools and their programs.

There's more than just one possible dream job for you.

How Can You Get Paid to Do What You Like?

Once you've researched yourself, you can start researching careers, with an eye to finding one that best fits who you are. Keep in mind that there's not just one dream job possible for you. If you love playing football, you won't necessarily find a job playing football as an adult. Even if you don't end up playing football for a living, though, you can find a job that, like football, involves teamwork and physical activity.

A great resource for finding careers in the Louisville area that match your talents and interests is Kentuckiana Occupational Outlook at www.kentuckianaworks.org/outlook. This Web site describes numerous careers, including the skills and education required, salaries paid in this area, and prospects for growth.

How Can You Prepare for the Career You Choose?

This is where the good news comes in. JCPS has created the 5-Star Professional Career Theme Schools, in addition to traditional and magnet schools, to make it easier for high school students to prepare for the world of work. High schools offer five broad Professional Career Themes. (See "5-Star Schools Career Themes" on page 6.)

Students going into high school will draw up Individual Learning Plans (ILPs)—including sample coursework in high school and plans for training after high school—that identify the Professional Career Themes of their choice. (See "Your ILP" on the next page.) Then, in each part of the district, students will be able to pick a school nearby that offers the Professional Career Theme Programs that suit them best.



High School

OCTOBER–JANUARY

Application

In the fall of your eighth-grade year, you apply for the Professional Career Theme and school of your choice, online by the January deadline. Your parents need a parent portal number to apply online.

After applying online, print your receipt confirming that you are part of the pool of applicants for the school. Check the school's "To Apply" section in the *Choices* book to find out other information you may need to send to the school or if you need to print this information from the Web site of the school. You may be able to receive these items from the Middle and High School personnel in each booth at the Kentucky International Convention Center. Schools sometimes ask for transcripts of your middle school grades, recommendations from teachers, and a writing sample describing why you want to attend.

In High School and Beyond

As you carry out your plans, you should record and monitor your progress on Career Cruising. Make sure to regularly revisit your ILP, and revise it if necessary. Your plan should not be set in stone. As you learn more about yourself and your Professional Career Theme, you might find that you need to change your plans. Make sure your plan continues to reflect what is best for you. As you enter the profession, this should continue to be your main concern—it is your life, and you should always make sure that what you are doing is right for you.



Create an ILP for your education and career.

The Career Cruising ILP is a great tool for online career exploration and planning. You can store your best classroom work and scan artwork in the My Documents section of the ILP; take interest inventories and save the results; document your work experience, extracurricular activities, and hobbies; and create and update a resumé. Perhaps most important, the ILP Education Tool lets you lay out a plan for your high school education. This makes the ILP your own up-to-date, revisable blueprint for career preparation.

Your Education Plan

When you draw up your education plan, you will find that you have a group of core classes—such as English, math, and science—that everyone has to take to graduate and extra elective classes, which you choose based on what you would like to study.

Because electives are tailored to individual students, they are where students tend to focus their individual professional career preparation. So, in addition to organizing high school professional career programs into the 5-Star Professional Career Themes, the JCPS District has recommended that schools switch to a trimester schedule that lets students schedule more electives.



Most schools have traditionally scheduled 7 classes a day for 2 semesters, for a total of 14 classes a year. If schools divide their year into 3 trimesters, rather than 2 semesters, and schedule 5 longer class periods each day, rather than 7 shorter ones, students can take 15 classes rather than 14 each year. This may not seem like a big change, but over the course of four years, it adds four classes, and that means four more opportunities to schedule Professional Career Theme classes.

Here's what a typical trimester education plan might look like:

Choose a more specialized School of Study under the Career Theme.

List one of the 5-Star Professional Career Themes (see page 6). This broad area should match your interests and talents.

How do you want to make a living?

How will you continue to prepare for your professional career after high school?

When you draw up your plan on a trimester schedule, you list 15 courses for each year. Courses taught in a series, one section in each trimester, are labeled 1-A, 1-B, and 1-C. Be sure to review your plan with your counselor and parent/guardian.

Name: Kelly Williams
School: Southern High School
Career Theme: Business and Information Technology
School of Study: Business Multimedia
Career Major: Graphic Designer
Preparation after High School: Bachelor's Degree in Graphic Design

Ninth Grade	Tenth Grade
English 1-A	English 2-A
English 1-B	English 2-B
English 1-C	Geometry A
Algebra 1-A	Geometry B
Algebra 1-B	Integrated Science 1B-A
Algebra Lab	Integrated Science 1B-B
Exploring Civics A	World Civilizations A
Exploring Civics B	World Civilizations B
Integrated Science 1A-A	Foreign Language 2-A
Integrated Science 1A-B	Foreign Language 2-B
Computer Applications A	Health
Computer Applications B	Physical Education
Foreign Language A	Microsoft Office Specialist A
Foreign Language B	Microsoft Office Specialist B
Visual Art 1	Visual Art 2

Eleventh Grade	Twelfth Grade
English 3-A	English 4-A
English 3-B	English 4-B
Algebra 2-A	Senior Composition Seminar A
Algebra 2-B	Senior Composition Seminar B
Algebra 2-C	Senior Composition Seminar C
Biology A	College Prep Algebra A
Biology B	College Prep Algebra B
U.S. History A	Chemistry A
U.S. History B	Chemistry B
Humanities A	Sociology/Psychology A
Humanities B	Sociology/Psychology B
Multimedia Publishing A	Advanced Multimedia A
Multimedia Publishing B	Advanced Multimedia B
Drawing and Painting 1	Advanced Multimedia C
Ceramics and Sculpture 1	Drawing and Painting 2

**Career and Technical Student Organization (CTSO)—
Technology Student Association**

List high school student organizations that can help you prepare for the career of your choice.

Career and Technical Education

Getting into the high school program of your choice is just the start of your career adventure. No matter what your choice of career, it is almost guaranteed that you will need some kind of education or training after high school to be ready to go to work. Many careers require at least a four-year college degree, whereas others require a two-year degree or certification in particular technical skills. Whatever the case, there's a great system called Career and Technical Education (CTE) that links high schools with colleges, universities, and businesses to give you a smooth path for launching your professional career. Here's how it works.

CTE Professional Career Pathways

CTE links education at different levels—high school, community college, university—to make sure you have a clear shot at success.

Here are some of the ways these connections can work:

- **4+2:** Four years of high school followed by two years of career-specific education or training, usually at a community college, resulting in an associate's degree.
- **4+2+2:** Four years of high school CTE courses, plus two years of education or training at a community college, followed by two more years of education and a bachelor's degree from a college or university.

Of course, students can prepare for careers by taking the traditional route of four years of high school and four years of college leading to a bachelor's degree. But even students preparing for law school can follow the 4+2+2 route to their bachelor's degree and can benefit from CTE's close coordination of coursework at every level with a clear-cut goal of career success.

CTE for Everyone

The point of education is that it's for every one of us, because we all have to prepare ourselves for our future. Everybody has a different learning style, and the great thing about CTE is that it works no matter how you work.

For some people, traditional academic studies come easy. The CTE system continues to serve those students, but it also draws in students who appreciate more hands-on learning styles.

Tim Williams, a senior studying computer technology, describes how it works for him. Studies in his computer repair class, he says, open up his drive to succeed across the board. "Not that this is the only reason I come to school, but I love my computer repair class," Williams says. "I pride myself on it, and it spills over into every other class, and I want to do well."



College Credit at UPS

UPS, which operates its international air freight hub in Louisville, gives high school students valuable work experience as package handlers while they earn college credit in a Jefferson Community and Technical College (JCTC) course taught twice a week in a UPS classroom.

Students enrolled in the UPS School-to-Work Program receive starting pay of \$8.50 an hour and the opportunity to continue their studies at Metro College, a program created by UPS in partnership with the University of Louisville (UofL) and JCTC.

Metro College, which is designed to recruit workers needed for expansion of the UPS hub, offers students free tuition and the opportunity for full-time employment at UPS when they graduate.





CTE—the way you learn about what profession you might want in the future and how you begin to prepare for that career—has always been important in JCPS.



Until recently, eighth-grade students getting ready for high school had been able to choose among the different high schools in the district on the basis of the different CTE Programs they offer. Sometimes, though, the CTE Programs that students were interested in were offered at only one school far from their homes.

That's one reason the JCPS District has reorganized CTE into five broad Professional Career Themes. The 5-Star Professional Career Themes, listed below, cover almost all the different kinds of careers you might want to pursue.

The plan makes sure that all students, no matter where they live in the district, have a chance to pursue the Professional Career Theme they want. The county is divided into three sections, and all five Professional Career Themes are offered in each section, one Career Theme at each of five different high schools in that section. (See “Where to Find the Career Themes” on the next page.)

Many schools will continue to offer a number of CTE magnet or special programs. But certain schools focusing on one of the five main Professional Career Themes means that every student in every part of the county is able to find a school nearby that offers the theme he or she wants.



Programs by Career Theme

The 5-Star Professional Career Themes offered at different high schools are divided into smaller, more specific programs, so students can concentrate on the careers that interest them most. The programs vary from school to school, so make sure you find out which programs are offered in the high schools you're interested in. Here are the 5-Star Professional Career Themes and Programs that are available. To learn more about the Professional Career Themes and CTE Programs, turn to the pages indicated.

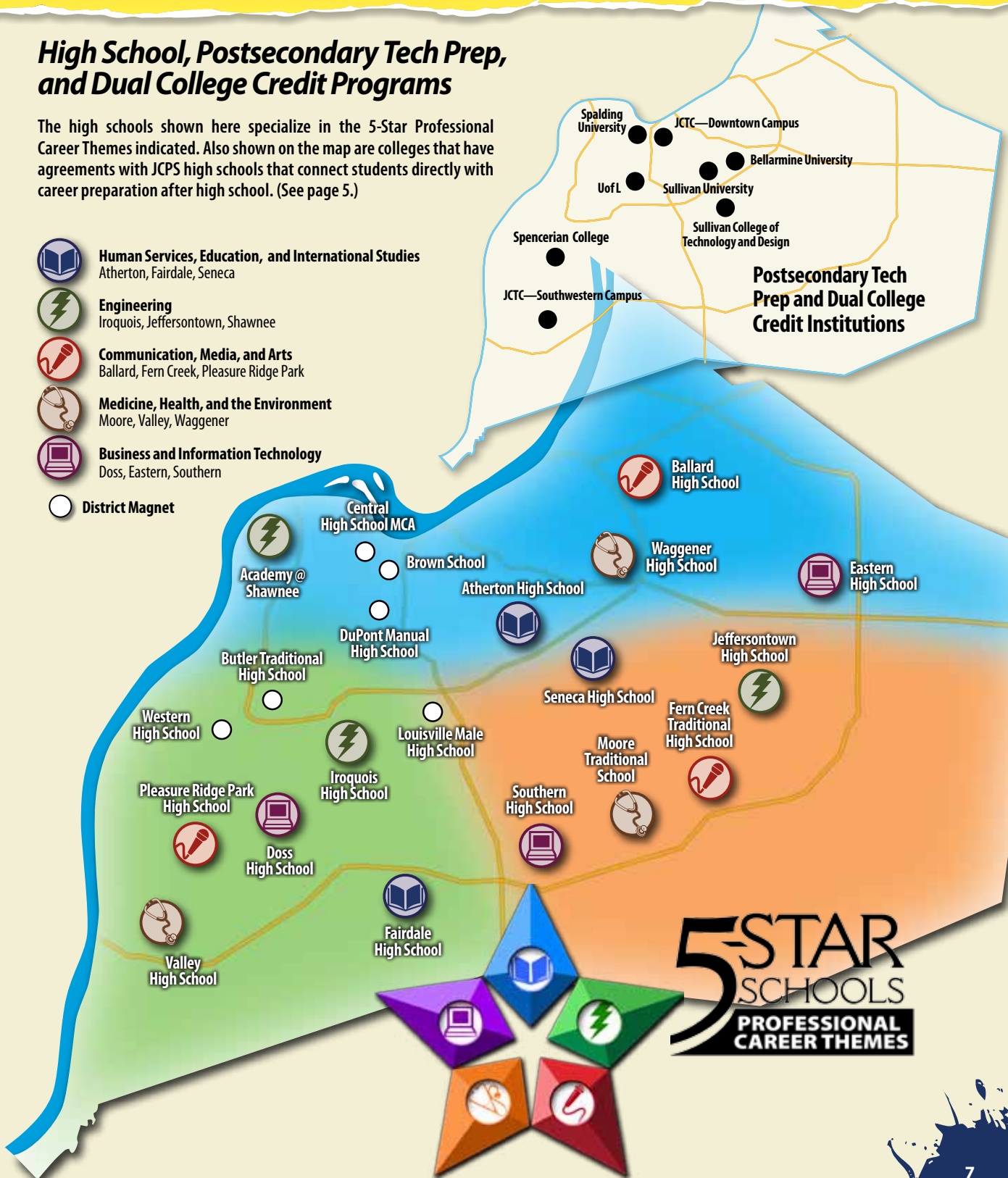
Human Services, Education, and International Studies (pages 14–15)	Engineering (pages 10–11)	Communication, Media, and Arts (pages 12–13)	Medicine, Health, and the Environment (pages 8–9)	Business and Information Technology (pages 16–17)
<ul style="list-style-type: none"> • Education • Human Services • International Studies • International Business • International Baccalaureate (IB) • Cambridge Advanced International Certificate of Education (AICE) diploma • Law Enforcement • Fire Science • Emergency Medical Services • Heavy Equipment • Pre-Law • Pre-Vet 	<ul style="list-style-type: none"> • Aeronautics • Construction • Machine Tool Technology • Pre-Engineering 	<ul style="list-style-type: none"> • Broadcast Media • Performance Arts • Visual Arts • Graphic Design and Print Technology 	<ul style="list-style-type: none"> • Allied Health • Environmental Studies • Pre-Nursing • Sports Medicine 	<ul style="list-style-type: none"> • Business • Computer Maintenance and Support Services • Computer Networking • Geographic Information Systems (GIS) • Programming

Where to Find the Career Themes

High School, Postsecondary Tech Prep, and Dual College Credit Programs

The high schools shown here specialize in the 5-Star Professional Career Themes indicated. Also shown on the map are colleges that have agreements with JCPS high schools that connect students directly with career preparation after high school. (See page 5.)

-  **Human Services, Education, and International Studies**
Atherton, Fairdale, Seneca
-  **Engineering**
Iroquois, Jeffersontown, Shawnee
-  **Communication, Media, and Arts**
Ballard, Fern Creek, Pleasure Ridge Park
-  **Medicine, Health, and the Environment**
Moore, Valley, Waggener
-  **Business and Information Technology**
Doss, Eastern, Southern
-  **District Magnet**





CAREER THEMES

Medicine, Health, and the Environment



Caring for ourselves, our neighbors, and our environment is a commitment that requires dedication and knowledge of the systems that sustain life. Biological science is the backbone of this Professional Career Theme, and if you want to pursue these careers, you have to have an interest in and an aptitude for science.

Along with the discipline of a scientist, you also need to have the generous heart of a caregiver. Careers in this theme can demand hard work and long hours, and to deliver on those requirements, you have to recognize the importance of what you are doing.

Many of these careers pay well, but the greatest reward for these professionals may be the fulfillment that comes from doing something for others.

Medicine, Health, and the Environment

COOL CAREER

CLINICAL LABORATORY SCIENTIST



Healing doesn't take place just at the patient's bedside or in the operating room. To diagnose and treat disease, doctors rely on information about what's going on in the patient's body. Some of that information can be obtained only through laboratory testing of the patient's blood, tissue, and other samples. More laboratory technologists and technicians are needed to keep up with the growth of the patient population. If doctors are to provide safe and effective treatment, clinical lab workers must know exactly what they are doing and maintain high standards of performance.

HIGH-PAYING CAREERS

Medicine, Health, and the Environment Professional Career Theme

Career	Median Salary*
Physicians and Surgeons	\$168,935
Podiatrists	\$165,440
Orthodontists	\$145,850
Dentists	\$115,970
Pharmacists	\$100,020
Chiropractors	\$93,130
Optometrists	\$92,680
Physician Assistants	\$80,640
Physical Therapists	\$65,400
Occupational Therapists	\$60,450

*Greater Louisville Metropolitan Area, 2008

These are ten high-paying careers in Medicine, Health, and the Environment in Louisville and 26 surrounding counties in southern Indiana and Kentucky, ranked by median salary. The median figure is the number in the middle; that is, half the people working in that particular profession earn more than the median salary and half earn less than the median salary. Source: Greater Louisville's Workforce Investment Board

FAST-GROWING CAREERS

Medicine, Health, and the Environment Professional Career Theme

Career	# of Jobs Created*	% Growth*
Veterinarians	156	50%
Pharmacy Technicians	202	36%
Surgical Technologists	186	33%
Dental Hygienists	249	32%
Radiation Therapists	30	32%
Dental Assistants	408	32%
Registered Nurses	4,783	31%
Physical Therapists	272	30%
Physician Assistants	110	30%
Home Health Aides	889	28%

*Greater Louisville Metropolitan Area (2006-16)

This is a projection of ten fast-growing careers in Medicine, Health, and the Environment in Louisville and 26 surrounding counties in Kentucky and southern Indiana from 2006 to 2016 and the number of new jobs that will be created in each occupation. Note that, although the percentage of growth in jobs may be high, the actual number of jobs created may be low. Source: Greater Louisville's Workforce Investment Board



JCPS

Student Profile

CHAD SMITH

Junior, Allied Health Program

“I first became interested in the medical field when I was in the ninth grade and required to put in volunteer hours for a class project. I chose to volunteer my time at a Health Care and Rehabilitation Center. This experience introduced me to a hospital environment dealing hands-on with the needs of the patients.

Thanks to the medical programs offered at my school, I have been able to take Emergency Procedures and Biomedical Science classes. By far, my junior year has been the most awesome. I plan on taking other medical classes my senior year to help prepare me for my career choice in paramedical medicine.”



Caring

Postsecondary Connections

These JCPS high school programs in the Medicine, Health, and the Environment Professional Career Theme offer college credit that can help you complete your career preparation.

Program	High Schools	Participating Postsecondary Institutions
Allied Health/Medical	Central, Moore, Valley, Waggener	JCTC, ATA College, Spencerian College

Engineering (Aeronautics, Architecture, Construction, and Manufacturing)



One of the greatest challenges our country faces is finding talented young people to design and build the airplanes, skyscrapers, roads, bridges, shelters, and manufactured products we need to ensure a prosperous future.

That work takes people who enjoy taking things apart and putting them back together, practical-minded people who also have the vision to imagine better ways of getting things done. Such individuals have to be able to think in three dimensions, come up with ways to turn an idea into something real, and follow through to make sure it happens.

Studying engineering is a big challenge. But, if you pursue a professional career in the engineering area, you could very well find yourself in a high-demand, well-paid, highly satisfying job.



**AEROSPACE
ENGINEER**



Some activities may not be rocket science, but aerospace engineering is. To design the vehicles and systems that deliver astronauts and scientific payloads into space, you have to have high-level training and be comfortable working on the cutting edge of advanced technology. This field also requires a knack for working with others; almost all related work is done by teams of dedicated specialists. The pay is top-notch, not to mention the kick of seeing projects you work on blast off into outer space.

HIGH-PAYING CAREERS

Engineering Professional Career Theme

Career	Median Salary*
Air Traffic Controllers	\$111,540
Nuclear Engineers	\$92,040
Chemical Engineers	\$78,150
Aerospace Engineers	\$69,820
Construction Managers	\$64,790
Airline Pilots, Copilots, and Flight Engineers	\$63,600
Civil Engineers	\$63,400
Industrial Engineers	\$61,340
Boilermakers	\$51,900
Electricians	\$41,600

*Greater Louisville Metropolitan Area, 2008

These are ten high-paying careers in Engineering in Louisville and 26 surrounding counties in southern Indiana and Kentucky, ranked by median salary. The median figure is the number in the middle; that is, half the people working in that particular profession earn more than the median salary and half earn less than the median salary. Source: Greater Louisville's Workforce Investment Board

FAST-GROWING CAREERS

Engineering Professional Career Theme

Career	# of Jobs Created*	% Growth*
Airline Pilots, Copilots, and Flight Engineers	261	41%
Locksmiths and Safe Repairers	18	32%
Surveyors	42	23%
Architects	68	21%
Surveying and Mapping Technicians	48	20%
Construction and Building Inspectors	77	18%
Civil Engineers	142	15%
Industrial Engineers	172	15%
Highway Maintenance Workers	88	12%
Air Traffic Controllers	12	10%

*Greater Louisville Metropolitan Area (2006-16)

This is a projection of ten fast-growing careers in Engineering in Louisville and 26 surrounding counties in Kentucky and southern Indiana from 2006 to 2016, and the number of new jobs that will be created in each occupation. Note that, although the percentage of growth in jobs may be high, the actual number of jobs created may be low. Source: Greater Louisville's Workforce Investment Board



Creative



JCPS

Student Profile

HILARY PAGAN

Senior, Engineering Program

Participating in Project Lead the Way (PLTW), a high school program that prepares students for further studies in the field of engineering, senior Hilary Pagan has discovered a variety of pathways within the industry. As a result, Hilary plans to focus her career in the area of chemical engineering.

This program offers an intensive project-based curriculum and the opportunity to be mentored by engineers from local industry, such as the General Electric Company. Students like Hilary agree that PLTW courses are unlike any others. The PLTW courses require students to apply math and science concepts in practical applications and provide students with examples of real-world uses for their academic knowledge. Hilary enjoys the course experiences, like the annual cardboard boat regatta and learning to use power tools to fabricate and build projects.

Hilary plans to continue her studies in engineering in New York at the Rochester Institute of Technology or attend college back home in Puerto Rico. Her goal is to one day become a chemical engineer. Hilary says, "The Engineering Program helped me focus on my career goals and decide what kind of engineering I want to do."

Postsecondary Connections

These JCPS high school programs in the Engineering Professional Career Theme offer college credit that can help you complete your career preparation.

Program	High Schools	Participating Postsecondary Institutions
Engineering	Jeffersontown	Louisville Technical Institute, UofL Speed School
Aviation/Flight	Shawnee	Embry-Riddle University, JCTC, Vincennes University
Construction and Welding	Iroquois, Jeffersontown, Shawnee	Associated Builders and Contractors, Inc.; Indiana-Kentucky Regional Council of Carpenters; Mason Contractors Association of America



CAREER THEMES

Communication, Media, and Arts



How do you communicate? We all have to get our message across, but some of us can express ourselves well in a variety of ways—speaking, singing, writing, creating beautiful paintings or sculpture, playing music of all styles, performing in plays and dancing on stage, directing movies on-screen, or even building Web pages.

However you may feel the urge to communicate, you owe it to yourself to explore your talents and perfect your craft. There's no guarantee that you can become a famous writer or actor, any more than there's a guarantee you can become a successful plumber or accountant. Millions of people do build rewarding professional careers in Communication, Media, and Arts, though, and one of them could be you.

HIGH-PAYING CAREERS

Communication, Media, and Arts Professional Career Theme

Career	Median Salary*
Public Relations Managers	\$76,230
Advertising and Promotions Managers	\$70,980
Art Directors	\$69,010
Writers and Authors	\$51,960
Editors	\$48,490
Reporters and Correspondents	\$47,610
Technical Writers	\$46,440
Interior Designers	\$44,180
Multimedia Artists and Animators	\$41,610
Fashion Designers	\$41,430

*Greater Louisville Metropolitan Area, 2008

These are ten high-paying careers in Communication, Media, and Arts in Louisville and 26 surrounding counties in southern Indiana and Kentucky, ranked by median salary. The median figure is the number in the middle; that is, half the people working in that particular profession earn more than the median salary and half earn less than the median salary. Source: Greater Louisville's Workforce Investment Board

FAST-GROWING CAREERS

Communication, Media, and Arts Professional Career Theme

Career	# of Jobs Created*	% Growth*
Multimedia Artists and Animators	30	36%
Audio and Video Equipment Technicians	42	26%
Interpreters and Translators	38	26%
Musicians and Singers	42	26%
Dancers	15	20%
Interior Designers	46	19%
Actors	20	18%
Public Relations Managers	38	17%
Art Directors	24	16%
Technical Writers	26	15%

*Greater Louisville Metropolitan Area (2006–16)

This is a projection of ten fast-growing careers in Communication, Media, and Arts in Louisville and 26 surrounding counties in Kentucky and southern Indiana from 2006 to 2016 and the number of new jobs that will be created in each occupation. Note that, although the percentage of growth in jobs may be high, the actual number of jobs created may be low. Source: Greater Louisville's Workforce Investment Board

Communication, Media, and Arts

COOL CAREER

MULTIMEDIA AND ANIMATION ARTIST



It is getting harder and harder to tell the real movie actors from the ones that are computer-generated, and that's the result of the work of multimedia and animation artists. The wizards who make the impossible happen on-screen are working the same magic for television and, increasingly, in the world of computer gaming. At least two colleges in the Louisville area, Sullivan University and UofL, offer degrees in software and computer media application studies. If you have a good eye, possess a vivid imagination, and love working with computers, this could be the career for you.



JCPS

Student Profile

MALIK ALLEYNE-JONES

Freshman, Communications Program

Malik Alleyne-Jones has tinkered with technology and design since he was very young. Now the high school freshman is thinking of a career in graphic design, and he is grateful for a high school experience that will help him with his career pathway.

Malik chose to attend a JCPS 5-Star School that offers a career major in Graphic Art Technology. "I am so surprised by all of the exposure I have gotten so early in the program. I look forward to three more years." Malik competes for top honors in student organizations, he's part of the student administration of the Photo-Graphic Club, he helped redesign the school Web page, and he created the concept and marketing plan behind a school-based business enterprise.

Malik believes a school that helps you explore your curiosity can make your high school experience rewarding. "I think if you don't choose something you're interested in, you won't be as motivated." He plans to take that philosophy to college and to the world of work.

Expressive

Postsecondary Connections

These JCPS high school programs in the Communication, Media, and Arts Professional Career Theme offer college credit to high school students.

Program	High Schools	Participating Postsecondary Institutions
Communications	Ballard, Fern Creek, Pleasure Ridge Park	JCTC
Graphic Arts	Ballard, Fern Creek, Pleasure Ridge Park	Sullivan College of Technology and Design (SCTD), Vincennes University

Human Services, Education, and International Studies



Are you a people person? Do you love helping others? Do you enjoy learning about people living in different parts of town or even different parts of the world?

If so, then Human Services, Education, and International Studies may be the Professional Career Theme for you. Teachers help children and adults learn; police, firefighters, and Emergency Medical Service (EMS) workers help save people's lives; and social workers help people get what they need for a decent life. Diplomats and experts in foreign service work with people on a larger scale, helping our country maintain good relations with foreign governments.

In this Professional Career Theme, you can study education, food preparation, international studies, and more. But, whatever career you pursue, it's going to involve working with people.

HIGH-PAYING CAREERS

Human Services, Education, and International Studies Professional Career Theme

Career	Median Salary*
Education Administrators, Elementary and Secondary Schools	\$ 65,730
Social and Community Service Managers	\$ 51,310
Educational, Vocational, and School Counselors	\$ 48,640
Career and Technical Education Teachers, Middle School	\$ 47,940
Farm and Home Management Advisors	\$ 46,990
Career and Technical Education Teachers, Secondary School	\$ 46,550
Police Officers	\$ 45,570
Marriage and Family Therapists	\$ 42,990
Health Educators	\$ 42,110
Social Workers	\$ 40,370

*Greater Louisville Metropolitan Area, 2008

These are ten high-paying careers in Human Services, Education, and International Studies in Louisville and 26 surrounding counties in southern Indiana and Kentucky, ranked by median salary. The median figure is the number in the middle; that is, half the people working in that particular profession earn more than the median salary and half earn less than the median salary. Source: Greater Louisville's Workforce Investment Board

Human Services, Education, and International Studies

COOL CAREER

FORENSIC CRIME INVESTIGATOR



Interested in combining a love for science with criminal investigation? If you are, this could be the career for you. These experts often take traces of blood and other bits of evidence back to the laboratory for analysis to help find out what really happened at the crime scene. You need at least four years of college study of science to get this job, but it's one of the fastest-growing careers in law enforcement.

FAST-GROWING CAREERS

Human Services, Education, and International Studies Professional Career Theme

Career	# of Jobs Created*	% Growth*
Substance Abuse and Behavioral Disorder Counselors	135	34%
Mental Health Counselors	132	24%
Social and Human Services Assistants	384	24%
Museum Curators	11	22%
Instructional Coordinators	116	22%
Special Education Teachers, Preschool, Kindergarten, and Elementary School	214	22%
Correctional Officers and Jailers	430	20%
Kindergarten Teachers, Except Special Education	145	20%
Preschool Teachers	411	20%
Special Education Teachers, Middle School	88	20%

*Greater Louisville Metropolitan Area (2006–16)

This is a projection of ten fast-growing careers in Human Services, Education, and International Studies in Louisville and 26 surrounding counties in Kentucky and southern Indiana from 2006 to 2016 and the number of new jobs that will be created in each occupation. Note that, although the percentage of growth in jobs may be high, the actual number of jobs created may be low. Source: Greater Louisville's Workforce Investment Board



JCPS

Student Profile

BRIANNA RICE

Senior, Education Program

"Near the end of my freshman year, I learned about the Minority Teacher Recruitment (MTRP) and the Future Educators Association (FEA). I discovered that being a teacher had to be my career. During my sophomore year, I enrolled in the Education Career Academy (ECA). ECA has given me the skills and fundamentals of teaching that I can use in the future. I really enjoy the ECA. I get to work with elementary students every day. I've taught them math skills, such as rounding and estimation, and reading skills. This is great practice for hands-on learning with children. I love the feeling of a child's excitement when he or she fully understands what I've been teaching. That's why I chose the ECA.

Social

Postsecondary Connections

These JCPS high school programs in the Human Services, Education, and International Studies Professional Career Theme offer college credit that can help you complete your professional career preparation.

Program	High Schools	Participating Postsecondary Institutions
Education	Atherton, Fairdale, Seneca	JCTC, Indiana University (IU), Spalding University, UofL
Early Childhood Education	Seneca	Sullivan University and statewide agreements with postsecondary institutions
Law Enforcement	Fairdale	JCTC
Fire Science	Fairdale	JCTC
Emergency Medical Service	Fairdale	JCTC
Heavy Equipment Science	Fairdale	University of Florida
Pre-Vet and Horticulture	Seneca	JCTC
International Baccalaureate	Atherton	Most postsecondary institutions
Cambridge Advanced International Certificate of Education	Fairdale	Most postsecondary institutions
International Business	Atherton, Fairdale, Seneca	Most postsecondary institutions
Pre-Law	Central, Seneca	UofL



CAREER THEMES

Business and Information Technology



Managing a small or large business means managing information. Computers have changed the way business works, making it possible for companies with five or fewer employees to compete in many fields with much larger organizations.

If you pursue a career in business, you will have to be computer-savvy no matter what size business you manage. The same thing applies to computer experts. No matter how deep you choose to bury yourself in programming or networking, you'll probably need to know how management works, because the clients you work for most likely will be managers or administrators.

Business and information technology (IT)—in today's world, you can't really have one without the other.

HIGH-PAYING CAREERS

Business and Information Technology Professional Career Theme

Career	Median Salary*
Marketing Managers	\$92,180
Sales Managers	\$92,060
Financial Managers	\$90,290
Computer and Information Systems Managers	\$89,280
Human Resources Managers	\$83,990
Computer and Information Scientists, Research	\$77,500
Purchasing Managers	\$75,640
Transportation, Storage, and Distribution Managers	\$75,430
Network Systems and Data Communications Analysts	\$68,970
Computer Software Engineers, Systems Software	\$67,850

*Greater Louisville Metropolitan Area, 2008

These are ten high-paying careers in Business and Information Technology in Louisville and 26 surrounding counties in southern Indiana and Kentucky, ranked by median salary. The median figure is the number in the middle; that is, half the people working in that particular profession earn more than the median salary and half earn less than the median salary. Source: Greater Louisville's Workforce Investment Board

Business and Information Technology

COOL CAREER

VENTURE CAPITALIST



These daring entrepreneurs find private start-up money for new industries that can lead the way to prosperity for all of us. Venture capitalists can make a lot of money, but they also take large risks, so they have to know what they are investing in. Venture capitalists were behind the development of big business conducted on the Internet in the 1990s. The packages of cash they put together helped create Google, eBay, Amazon, Yahoo, and more. With good judgment, a lot of research, and a little bit of luck, you could help find the money that drives the next big boom.

FAST-GROWING CAREERS

Business and Information Technology Professional Career Theme

Career	# of Jobs Created*	% Growth*
Network Systems and Data Communications Analysts	473	51%
Computer Software Engineers, Applications	674	35%
Personal Financial Advisors	125	28%
Financial Analysts	232	26%
Computer Systems Analysts	538	25%
Database Administrators	117	25%
Transportation, Storage, and Distribution Managers	143	23%
Computer Software Engineers, Systems Software	268	21%
Accountants and Auditors	1,251	20%
Property, Real Estate, and Community Association Managers	116	20%

*Greater Louisville Metropolitan Area (2006–16)

This is a projection of ten fast-growing careers in Business and Information Technology in Louisville and 26 surrounding counties in Kentucky and southern Indiana from 2006 to 2016 and the number of new jobs that will be created in each occupation. Note that, although the percentage of growth in jobs may be high, the actual number of jobs created may be low. Source: Greater Louisville's Workforce Investment Board



DYNAMIC

Postsecondary Connections

These JCPS high school programs in the Business and Information Technology Professional Career Theme offer college credit that can help you complete your career preparation.

Program	High Schools	Participating Postsecondary Institutions
Business	Doss, Eastern, Southern (Atherton, Ballard, Butler, Central, DuPont Manual, Fern Creek, Iroquois, Jeffersontown, Louisville Male, Moore, Pleasure Ridge Park, Seneca, Shawnee, Valley, Waggener, Western)	ITT Institute, SCTD, UofL, Spalding University
Geographic Information Systems	Central, Doss, Southern, Western	JTC, UofL, UK
Information Technology	Doss, Eastern, Southern (DuPont Manual, Waggener, Central)	JTC, SCTD, Murray State, Western Kentucky University, ITT Technical Institute



JCPS

Student Profile

MARICAN CACULBA

Senior, IT Program

What the IT Program has done for me:

- Prepared me for postsecondary education
- Provided me with the basic skills needed to succeed in the IT field
- Provided me with the opportunity to earn college credit while still in high school
- Provided me with the opportunity to take and pass IT certification exams
- Provided hands-on experience with real-world situations

Out-of-classroom learning helps you prepare for your career and have a great time doing it.

Developing leadership abilities, building your professional career skills, and helping you learn how to compete to win—that's a short list of ways Career and Technical Student Organizations (CTSOs) are good for you and important for your journey to success. The not-so-hidden secret is that these organizations, and other career-related out-of-classroom activities, are a whole lot of fun. Below are some organizations that can give you hands-on professional career experience right in your own school with students who share your interests and enthusiasm.

Distributive Education Clubs of America (DECA):

Association of marketing students

Professional Career Theme:
Business and Information Technology

DECA is meant for business-minded students interested in marketing, management, and entrepreneurship. Competitions at the state and national levels include such events as buying and merchandising management, retail marketing research, financial literacy, and accounting applications. • www.kydeca.org

Future Business Leaders of America (FBLA)

Professional Career Theme:
Business and Information Technology

FBLA emphasizes business leadership and competitive achievement. FBLA sponsors leadership development conferences for its members and skills competitions at the state and national levels. • www.kyfblla.org

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

Professional Career Theme:
Human Services, Education, and International Studies

FCCLA promotes career and technical education in family and consumer sciences and related occupations. At the state and national levels, FCCLA sponsors Students Taking Action with Recognition (STAR) Events, in which students compete in culinary arts, entrepreneurship, early childhood education, fashion design, and more. • www.kyfclla.org

Future Farmers of America (FFA): **Association of agriculture education students**

Professional Career Theme:
Human Services, Education, and International Studies

Students in FFA are awarded degrees that document their skill in agriculture. Degrees are earned through hands-on experience and classroom learning. • www.kyffa.org

Health Occupations Students of America (HOSA)

Professional Career Theme:
Medicine, Health, and the Environment

HOSA builds leadership, teaches skills, and promotes quality of care at every level of health care. Students meet regionally and at state and national events where they compete in such categories as first aid, personal care, and human growth and development. • www.kytech.ky.gov/HOSA Kentucky Page.htm

SkillsUSA: **Trade and Industrial Students of America**

Professional Career Themes:
Human Services, Education, and International Studies; Engineering; Communication, Media, and Arts; Medicine, Health, and the Environment

SkillsUSA conducts annual competitions across a broad range of career skills in all of the 5-Star Professional Career Themes. The organization has announced that Louisville will host SkillsUSA national competitions for six years beginning in 2015. • www.skillsusa.org

Technology Student Association (TSA)

Professional Career Themes:
Engineering; Business and Information Technology

The aim of TSA is personal growth for students interested in math, science, technology, and engineering. The state and national conferences are packed with competitive events and challenging activities that help students develop as leaders and future technology professionals. • www.kentuckytsa.org



Learning After High School

To make your professional career dreams a reality, continue your studies after graduation.



High school is just the beginning of professional career preparation. In fact, career development is typically a lifelong process; people adjust to changes in their interests and changes in the economy and enter different professions. When you make the transition from high school to a college or training program, two things are going on. You are getting the higher-level preparation you need to enter a profession, and you are learning the process of ongoing career preparation that will carry you through a lifetime of career development. Below you will find introductory information about transitioning into postsecondary programs that will help you meet your career aspirations.

Two-Year Transitions

As discussed earlier in this booklet (see page 5), CTE Programs provide transition between high school and two-year college and training programs that can carry you effortlessly on to the certifications and associate's degrees necessary to start some careers.

In addition, transition agreements with JCTC and SCTD allow any senior at a Jefferson County public high school to take courses at these schools. To receive college credit for these courses, you must earn an A or B. Your high school counselor can provide details about these agreements.

Community college is a great way for any students to start a postsecondary education. Programs include everything from licensure to transition to four-year programs. Classes are usually offered at a variety of times, including evenings; take place on different campuses; and are cheaper than equivalent university courses. The Ultra Program is a partnership between JCTC and UofL that supports students who are seeking a bachelor's degree but want to start at the community college.

Four-Year Degrees and Beyond

You don't have to go far to have career and education options. Louisville is home to more than 30 accredited institutions that award degrees, diplomas, certificates, or licensures. Though many students will pursue their education further afield, you can earn postsecondary credentials in your own backyard. Louisville has everything from a top-rated research university to an excellent branch of the state's community and technical college system to specialized certificate and licensure programs.

UofL has nationally ranked programs in education and business. Spalding University offers a unique student schedule and has a nationally recognized program for creative writing. Galen, ATA, and Spencerian Colleges all offer programs that focus on nursing and other medical and technical professions. There are many more options—too many to name here. Even better news, you don't have to wait until you graduate to start earning

college credit. Read the next section to find out more information.

Dual Credit, Articulation, and Advanced Placement

There are a number of different ways to start earning college credit while still in high school. Dual-credit courses are taught in high school by either a high school teacher or a college professor, using college textbooks and lesson plans. Through an agreement between the high school and the college, students taking these courses pay college tuition for the course and earn credit both at their high school and at the college.

Schools offer a variety of dual-credit opportunities with UofL, Bellarmine University, Morehead University, and JCTC.

Articulation agreements between a high school and college award college credit for high school courses that the college judges to cover the same material with the same quality as a college course. One advantage of articulation agreements is that they often allow students to earn blocks of college credit, sometimes as many as 24 credits, while still in high school.

Advanced Placement (AP) courses are college-level courses taught by specially trained high school teachers using standards developed by the College Board. Students must earn a certain score on an AP exam in the subject to earn college credit as defined by the receiving college or university.

Financial Aid

The key to financing your studies after high school is to research aid available and apply, apply, apply. The more you apply, the better your chances of getting the money you need.

The Kentucky Higher Education Assistance Authority (KHEAA) is a state organization that administers several aid programs, including the Kentucky Educational Excellence Scholarship (KEES). If you are a Kentucky resident and maintain at least a 2.5 grade point average (GPA) in high school, you are eligible for KEES money. KHEAA also administers the Federal Family Education Loan program, the largest student loan program in Kentucky.

To be eligible for major state, federal, and college financial aid programs, you should fill out the Free Application for Federal Student Aid (FAFSA), available at www.fafsa.ed.gov. FAFSA requires information from your and your parents' income tax forms to determine income and eligibility for aid.

The KHEAA Web site, www.kheaa.com, is also a good source of information on sources of financial aid.



Glossary

Here are definitions of some of the words and phrases used in this booklet.



articulation agreements

Agreements among schools at different levels (high schools, community colleges, industry training centers, colleges, and universities) that allow students to move from one level to the next without having to repeat coursework or lose credit earned

associate's degree

A two-year degree awarded by a college

bachelor's degree

A four-year degree awarded by a college or university

professional career

The work you choose to do to support yourself in life

Career and Technical Education (CTE)

The system for preparing for a lifetime of work. In a sense, all education is career and technical education.

Career and Technical Student Organizations (CTSOs)

Organizations for high school students that enhance career and leadership development within different career and technical education programs

career cluster

A way of organizing learning around specific groups of jobs (for example, communications or health science) that offers students core academics, coursework related to specific occupations, and extended learning experiences

Career Cruising

The online tool (www.careercruising.com/ilp) that enables JCPS students to explore careers, assess their interests, store their classroom work, and create a plan for career preparation and success

career exploration

The process of learning about different careers—the responsibilities, pay, education required—in order to reach a career choice. This process begins in elementary and middle school but can continue into high school and beyond.

dual-credit courses

Courses taken by high school students that earn both high school and college credit

5-Star Professional Career Themes

Five broad categories of careers that form the basis of the reorganization of CTE in the JCPS District

Individual Learning Plan (ILP)

A section of the Career Cruising Web tool where students create, store, and revise content online. The ILP includes students' plans for education and career preparation in the classroom and in out-of-classroom learning activities.

interest inventory

A written questionnaire designed to help students pinpoint their interests and the things they like to do best

Schools of Study

A collection of CTE Programs and related academic courses. Some schools may choose to organize separate core teams of teachers to manage instruction for all students in the different Schools of Study.

trimester schedule

Organization of the school year into three equal parts, instead of the two parts of a traditional semester system



Resources

These sources of information will help you plan for a successful future.

YOUR EDUCATION

Jefferson County Public Schools
www.jcpsky.net

Kentucky Department of Education
www.kde.state.ky.us

EXPLORING CAREERS

Career Cruising
www.careercruising.com/ilp

ACT Career Planning
<http://actstudent.org/college>

Greater Louisville Inc.,
the Metro Chamber of Commerce
www.greaterlouisville.com

KentuckianaWorks,
Greater Louisville's
Workforce Investment Board
www.kentuckianaworks.org

KIX: Kentucky Indiana Exchange
<http://kix.com>

EXPLORING YOUR INTERESTS AND SKILLS

Career Cruising
www.careercruising.com/ilp

ASVAB
www.military.com/asvab

CAREER AND TECHNICAL STUDENT ORGANIZATIONS

(See page 18 for more information)

DECA
www.kydeca.org

FBLA
www.kyfblla.org

FCCLA
www.kyfccla.org

FFA
www.kyffa.org

HOSA
www.hosa.org

SkillsUSA
www.skillsusa.org

TSA
www.kentuckytsa.org



STUDIES AFTER HIGH SCHOOL

ACT College Planning
<http://actstudent.org/college>

KnowHow2GoKy
www.knowhow2goky.org

Edu-Directory for Schools in Kentucky
(continuing education, vocational schools,
trade colleges)
www.edu-directory.org

Kentucky Higher Education Assistance
Authority (KHEAA)
www.kheaa.com

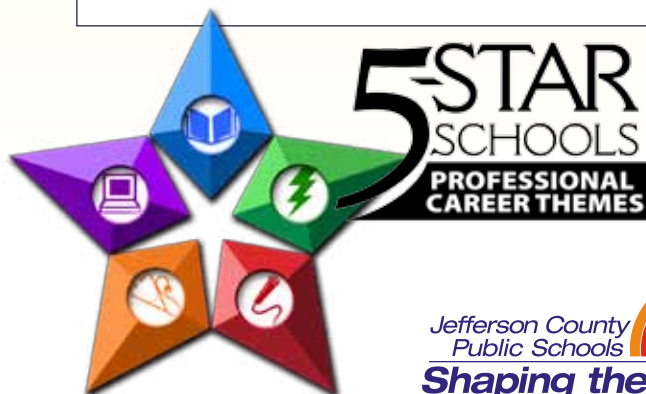
Career Cruising
www.careercruising.com/ilp



Kentucky's 14 Career Clusters

Career Clusters provide a way for schools to organize instruction and student experiences around 14 broad categories that encompass virtually all occupations, from entry through professional levels. The 14 Career Clusters and sample occupations are as follows:

 <p>Agriculture</p> <ul style="list-style-type: none"> Food Scientist Environmental Engineer Agriculture Teacher Animal Scientist Biochemist Agricultural Sales 	 <p>Education</p> <ul style="list-style-type: none"> Teacher Principal School Counselor College Professor Corporate Trainer School Librarian 	 <p>Public Services</p> <ul style="list-style-type: none"> Attorney Firefighter Police Officer Forensic Technician Paramedic Paralegal
 <p>Arts & Humanities</p> <ul style="list-style-type: none"> Actor Video Producer Journalist Audio Engineer Telecommunication Technologist Printing/Graphics Technologist 	 <p>Health Science</p> <ul style="list-style-type: none"> Pediatrician Physical Therapist Radiologic Technologist Occupational Therapist Medical Assistant Hospital Administrator 	 <p>Science & Mathematics</p> <ul style="list-style-type: none"> Chemical Engineer Mathematician Pharmacologist Electrical Engineer Biologist Meteorologist
 <p>Business & Marketing</p> <ul style="list-style-type: none"> Human Resource Administrator Administrative Support Supervisor Financial Analyst Sales Associate Entrepreneur Marketing Director 	 <p>Human Services</p> <ul style="list-style-type: none"> Social Worker Psychologist Child-Care Worker Substance Abuse Specialist Interior Designer Dietician 	 <p>Social Sciences</p> <ul style="list-style-type: none"> Legislator Social Worker Policy Budget Analyst Recreation/Parks Director State/Federal Agency Director Urban Regional Planner
 <p>Communications</p> <ul style="list-style-type: none"> Graphic Designer/Commercial Artist Telecommunications Director Electronic Engineer Architect Radio & Television Broadcaster Digital Media Specialist 	 <p>Information Technology</p> <ul style="list-style-type: none"> Software Engineer Network Administrator Web Designer/Developer Database Manager Technical Writer Multimedia Producer 	 <p>Transportation</p> <ul style="list-style-type: none"> Pilot Automotive Technician Logistics Manager Flight Attendant Warehouse Manager Truck Driver
 <p>Construction</p> <ul style="list-style-type: none"> Contractor Architect Electrician Heavy Equipment Operator Carpenter Plumber 	 <p>Manufacturing</p> <ul style="list-style-type: none"> Machinist Manufacturing Engineer Automated Process Technician Production Engineer/Technician Welding Technician Quality Technician 	 <p>EVERY CHILD SUCCEEDS</p> <p>PROSECUTOR & PLANNING FOR S U C C E S S</p> <p>Kentucky Department of Education</p>  <p>TECHNICAL EDUCATION</p> <p>DIVISION OF CAREER & TECHNICAL EDUCATION</p>  <p>Kentucky</p>



Jefferson County
Public Schools



Shaping the Future

www.jcpsky.net

Equal Opportunity/Affirmative Action Employer
Offering Equal Educational Opportunities

17954 HIS-DISS-StarBk 6/12rj

For additional information, contact:

Jefferson County Public Schools
Career and Technical Education Department
VanHoose Education Center
P.O. Box 34020
Louisville, KY 40232-4020
Phone: (502) 485-3320