



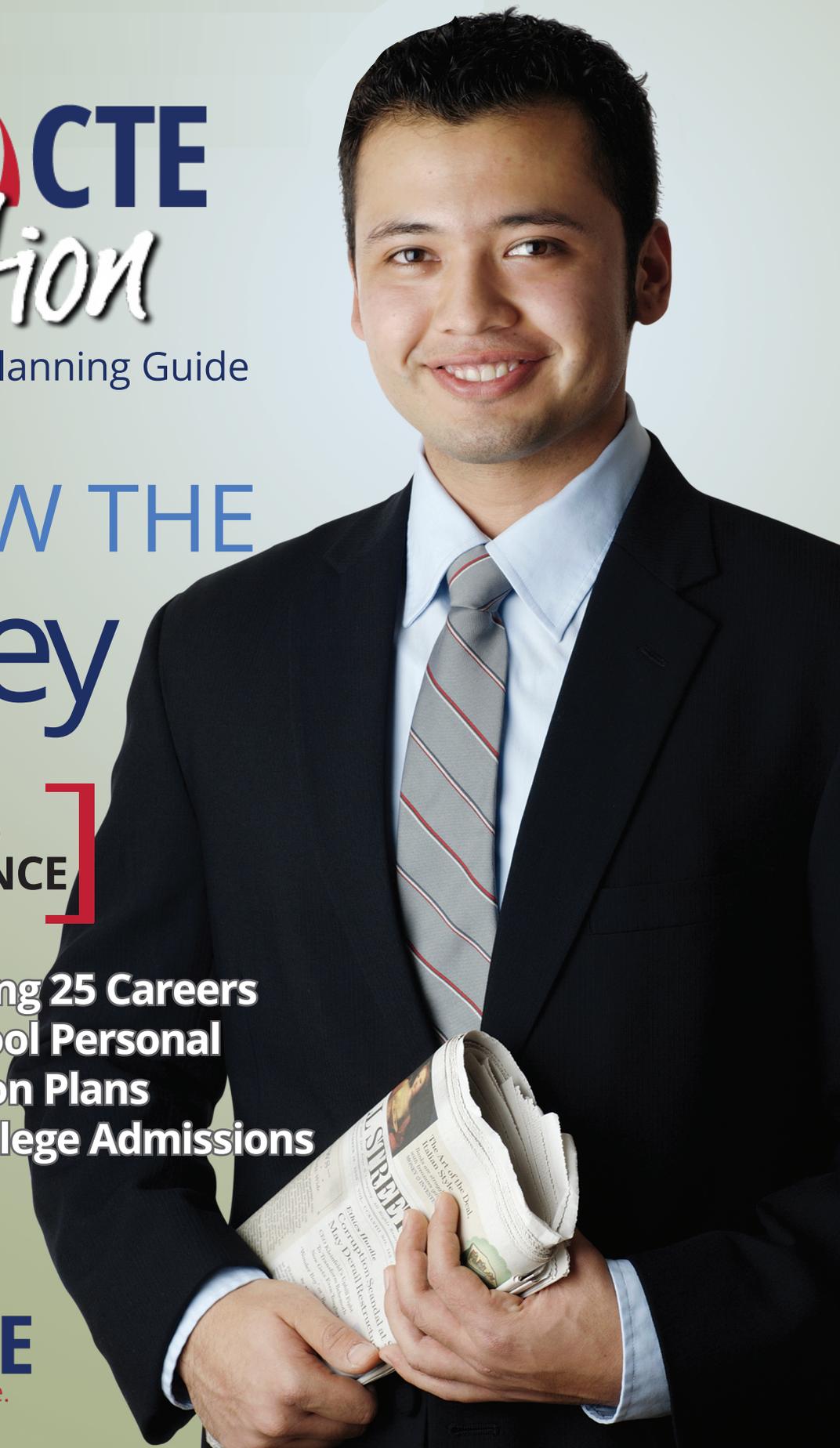
# TEXAS CTE *In Action*

A College and Career Planning Guide

## FOLLOW THE Money

**YOUR GUIDE to  
CAREERS in FINANCE**

- Showcasing 25 Careers
- High School Personal Graduation Plans
- Inside College Admissions



# Dear Texas Student,

**Y**ou are probably tired of people asking, “What do you want to be when you grow up?” Some students know exactly what they want to do, but most haven’t got a clue. The idea of choosing a career is intimidating, and it feels like it’s far in the future. There’s little time in the commotion of classes, activities, sports, work, and fun to think about what career you want to pursue after graduation from high school or college.

It pays, though, to take the time to think about your future career. The truth is that you’ll save a lot of time and money if you have a direction in life, as opposed to just finishing high school and worrying about it later. It’s really a matter of dollars and sense. If you choose a career direction now, you can select classes and activities that will make you highly marketable—and highly paid—when you look for work. And it only makes sense to have an idea of what you want to do rather than just wandering aimlessly through school.

Nobody wants that. Not your parents. Not your teachers. Not your friends. They want you to be somebody. They want you to use your talents, follow your interests, and pursue your ambitions to become great at what you love to do in life. That’s what you should want, too.

So the time is right to take charge of your life and think about the future. You need a plan of action for how to get from where you are today to where you want to be in a few years: starting out on a personally and professionally rewarding career.

**YOU’VE HEARD  
THAT ‘INFORMATION  
IS POWER.’ WELL,  
THIS GUIDE IS  
POWER. IT PUTS YOU  
IN CHARGE OF YOUR  
FUTURE.**

That’s what Texas CTE is all about. The guide you are holding is one of 16 guides to different career clusters. It is designed to help you make smarter decisions about your education and career options.

You’ve heard the phrase, “Information is power.” Well, this guide is power. It puts you squarely in charge of your future, from creating High School Personal Graduation Plans (see page 5) to choosing college or some other form of education or training after high school. Work with your parents, teachers, and counselors to make decisions, but remind everyone that it is your future at stake and that you are taking charge of it.

Get information. Get a plan. Get a clue about your career direction. It’s alright if that direction changes; choosing a direction now is better than having no direction at all. Just promise yourself that you’ll make smart choices about where to focus your time, energy, and passion.

We’re proud that you are taking steps to plan your career direction, and we pledge that your school, teachers, and counselors will do all they can to help you make wise choices on your plans for success. We wish you the best of luck on your journey.



The background of the entire page is a close-up photograph of numerous stacks of US coins, including pennies, nickels, dimes, and quarters, arranged in a grid-like pattern. The lighting is dramatic, highlighting the metallic textures and the intricate details of the coin designs.

# Bank on It

MONEY MAKES THE WORLD GO ROUND—AND THERE IS PLENTY OF IT IN TEXAS. In fact, if our state were its own country, it would be the 10th-largest economy in the world, ranking right between Spain and South Korea. There are about 750 banks in Texas and thousands more brokerage, financial-service, insurance, and accounting firms. Professionals who work in these companies manage investments and make loans, pay for storm damage, sell bonds and stock ATMs with cash, and more. If you are good at numbers, want to play the stock market, or enjoy working with the public, then Finance could be the right career cluster for you.

COMMERCIAL BANKS  
IN TEXAS EMPLOY  
MORE THAN  
**57,000**  
FINANCE  
PROFESSIONALS.

## HOT Career Areas

Texas has launched a strategic plan that targets state efforts on six industry clusters that economists say will be the engines of economic growth in Texas. As you plan your future, think about a career in one of these new and emerging sectors.

- Advanced Technologies & Manufacturing
  - Molecular technologist
  - Sensor/robotics engineer
- Aerospace & Defense
  - Aerospace engineer
  - Unmanned autonomous vehicle engineer
- Biotechnology & Life Sciences
  - Bioinformatics specialist
  - Biocontainment technician
- Information & Computer Technology
  - System integrator
  - Computer game developer
- Petroleum Refining & Chemical Products
  - Petrochemical engineer
  - Refinery process design engineer
- Energy
  - Wind/solar energy engineer
  - Geophysical (oil and gas) prospector

THE FIRST STEP toward success is making smart decisions about your education and career options.

# Plan for Success



When I was in high school," says Sheryl Kovach, a senior human resources generalist with IKON Office Solutions in Houston, "the only job that I even knew about was receptionist work. I didn't aspire to be a manager or entrepreneur because I really didn't know about those disciplines. I was just looking forward to graduating. That was it. I really didn't know what it was I wanted to do."

Sound familiar? You, too, may not have a clue about what to do with your life.

Don't worry, though. Help is right here in your hands. This magazine is your guide to education and career choices that can shape your future. It's one of 16 career cluster guides published by Texas CTE ([www.txcte.org](http://www.txcte.org)). This edition is all about Finance.

Let's start with some basic steps you should take to get organized, plan for the future, and start on the road to success.

## Assess Your Talents and Abilities

First, you need to figure out some things about yourself. This step can be as simple as writing down a list of your interests (like video games or rock climbing), your hopes and dreams (like helping others), your talents (like writing or math ability), and your weaknesses (if you're squeamish at the sight of blood, for example, you might not want to be a doctor).

Follow up on this informal exercise by taking some formal assessments to determine your interests and abilities. Common assessments include Texas Genuine ([www.texasgenuine.org](http://www.texasgenuine.org)) and CareerTech ([www.careertech.org](http://www.careertech.org)).

Ask your principal or counselor about the career assessments available at your school.

THERE ARE  
**MORE THAN 1,200**  
BANKING FIRMS, CREDIT UNIONS, AND  
OTHER SAVINGS AND DEPOSITORY  
INSTITUTIONS IN TEXAS.



ASSETS IN  
TEXAS BANKS  
TOTALLED  
**\$203.3  
BILLION**  
IN 2013.

### Research Your Career Options

Once you've learned about yourself, learn more about your career options. There are thousands of occupations out there of which you may never have heard, and others that do not yet exist because the technologies have not been developed. Fortunately, there are plenty of resources (see inside back cover) for you, and they are as close as the nearest computer.

One of the most helpful is the Texas Career Check from the Texas Workforce Commission. It is a vast database of information about hundreds of professions. You can find Texas Career Check at [www.texascareercheck.com](http://www.texascareercheck.com). Another good place to start is O\*NET ([www.onetcenter.org](http://www.onetcenter.org)).

Gather information about what you can earn in the careers in which you are interested. Find out whether the careers you are considering have a promising future—are they adding or losing jobs? Check out the education you'll need to enter those careers.

The chart on pages 10–11 presents data on 25 possible professions. Remember, though, that these are just a sampling of careers available in the cluster. Go to Texas Career Check, O\*NET, or another resource to investigate other careers.

### Create Your High School Graduation Plan

Once you have a better idea of your interests and abilities, you are ready to plan for high school and beyond. The High School Personal Graduation Plan, is your plan for preparing for the career of your choice.

First, you should choose a career cluster and an endorsement, not a particular occupational goal. In the eighth grade you might choose Finance leading to a Business and Industry Endorsement and then later become interested in a narrower field such as an actuary or loan officer.

The program of study you choose—your plan—does not stop with graduation from high school. You could then pursue a Bachelor's degree as a credit analyst or a graduate degree as an economist.

You should set up a High School Personal Graduation Plan that takes you through career preparation after high school, revising your blueprint as needed as you go along. If your career plans include college study, ask your counselor about tests required for admission to college, such as the PSAT, SAT, or ACT.

### Seek Out Special Programs

Many Texas schools offer innovative programs to prepare students for specific career areas. These include career and technical education (CTE) programs, academies, and magnet schools. Once you've decided on a career direction, ask your counselor about special programs in your area that may provide related experiences in your chosen career.

Samuel Odamah, an undergraduate student in architecture enrolled at the University of Texas at Arlington, found his career calling at Dallas's Skyline Career Development Center, a high school with career programs in a number of different fields.

"Skyline is one of the few schools in the country that offer programs in architecture," Odamah says. "In some careers, Skyline students could even get professional certifications or licenses right in high school. It was a great place because you could find out whether you really wanted to enter a career."

Odamah says that the career cluster system at Skyline taught him the value of planning for his career and his life. "We learned about planning ahead," he says. "Those who plan things ahead of time don't have to catch up. It's just a matter of what a person wants out of life. Planning gives you a better platform for success."

## Finance CTSOs

One of the best ways to acquire experience in your chosen career is by joining a career and technical student organization (CTSO). In Finance, the most helpful CTSOs are:

- Business Professionals of America (BPA)  
[www.texasbpa.com](http://www.texasbpa.com)
- DECA, Texas Association  
[www.texasdeca.org](http://www.texasdeca.org)
- Future Business Leaders of America (FBLA)  
[www.fblatx.org](http://www.fblatx.org)





## WHAT ARE

# Career Clusters & Programs of Study

In Texas, High School Personal Graduation Plans will guide students' high school and college experiences (see next page). As part of this process, students focus their studies within a chosen career cluster and program of study that lead to an endorsement.

A career cluster is a group of occupations and broad industries that share certain features. The Finance cluster, for example, includes auditor and credit analyst. Texas has adopted 16 Career Clusters (see back cover), the same ones designated and developed by the U.S. Department of Education.

As the graphic below shows, within each cluster are programs of study, which are more specific groupings of similar occupations. Think of a program of study as being like a college major. In Finance, you might choose to focus on Banking or Insurance Services in high school and college.

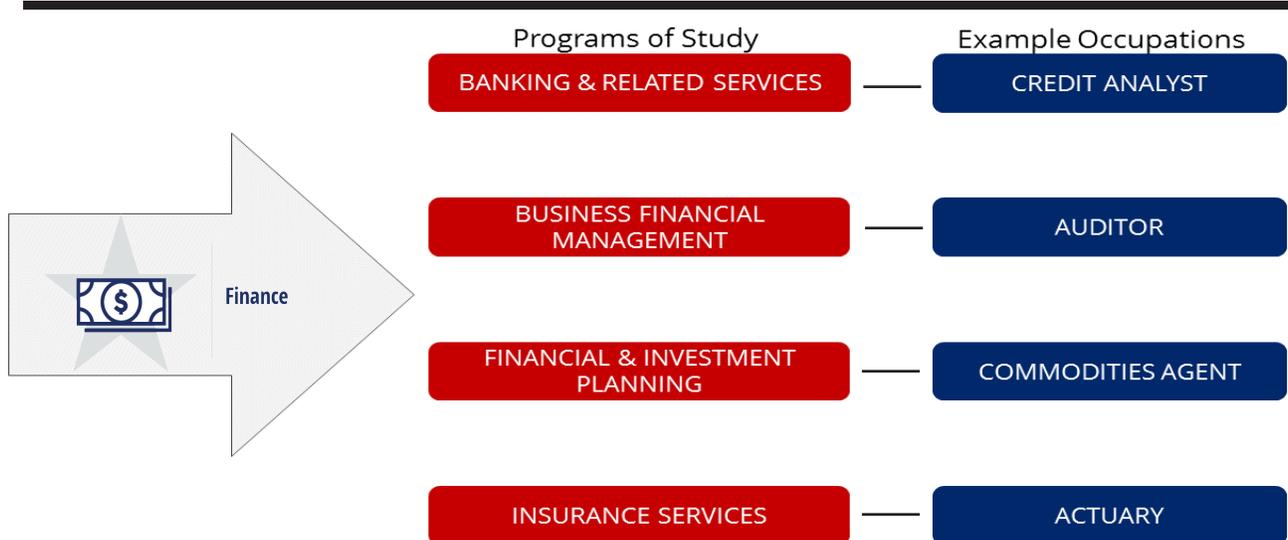
### Related Occupations

Each career pathway in a particular cluster includes a range of related occupations; an Actuary is an example of an occupation that falls within Banking and Related Services.

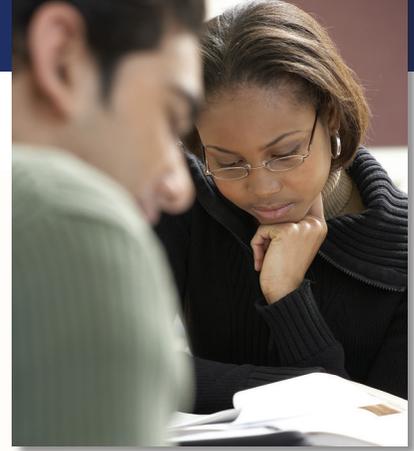
Choosing a career cluster and career pathway will help you acquire the knowledge and skills you'll need to enter your chosen career. It will allow you to follow a seamless course of study from high school into college or other postsecondary education or training. The electives you choose can complement your core academic classes to prepare you for the challenges of the real world of work

### Review Your High School Personal Graduation Plan Each Year

Don't get locked into a cluster and program of study you don't like. You should reexamine your 4-year plan at least once a year and change programs or clusters if your interests have changed. Choosing a cluster and program of study, even if it changes later, means that you'll have a direction in life. The idea is to be aware of what's going on in your life and take control of your future. When you know where your education is going and why, your classes will become more meaningful. You'll make contact with students, teachers, and employers who share your interest in a particular career area. You'll have experiences that are fun and exciting. You'll be on your way to success in school, in a career, and in life.



# WHAT IS A High School Personal Graduation Plan ?



It's a smart idea to create a High School Personal Graduation Plan, or 4-year plan, to guide your studies through high school and into college or other postsecondary education or training. Your 4-year plan represents your chance to take control of your education and career choices. Working with your parents/guardians and guidance counselor, you can pick the cluster on which you want to focus your studies as well as your career and

postsecondary education goals. Don't worry. You aren't locked into your choices. You should revisit your 4-year plan at least once a year to update it. You can change clusters, programs of study, and career and postsecondary goals as your interests and ambitions change. Having a plan—even if it changes—is smarter than having no idea of what you want to do and why you are attending school. Here's how to fill out your 4-year plan.

**CHOOSE** a career cluster on which to focus your high school and college or postsecondary studies. The idea is to offer you a seamless route to follow from high school, through college or other postsecondary education, and into a career. Not all Texas schools offer all clusters, so ask your guidance counselor which clusters are available at your school.

**LIST** basic information such as your name and school.

**PICK** a program of study within the cluster. There are four programs within the Finance cluster (see page 12).

**CHOOSE** one or more occupations for which you would like to prepare. Use resources such as Texas Career Check ([www.texascareercheck.com](http://www.texascareercheck.com)) to research your options.

**PLAN** for what you want to do after high school. Your goal may be to attend a four-year university or two-year college, join the military, or enter an apprenticeship program. Your postsecondary goal should influence the classes you take in high school; for example, you will need certain course credits to qualify for admission to a college.

**SKETCH** out your schedule of classes for your high school years. You will spend time completing requirement for the Foundation High School Program including electives to earn your endorsement in Business & Industry (26 credits). Planning your 4-year plan will help you get the education and experience you need to start your postsecondary and career goals.

**PICK** extended learning activities that complement your classes (see page 14). Work on community service projects. Plan for paid and unpaid career learning experiences, such as job shadowing and internships. All these extracurricular activities can give you experience that will help you get into college or land a job.

### High School Personal Graduation Plan

Name: Taylor Jones, West High School  
 Endorsement: Business & Industry  
 Cluster: Finance  
 Program of Study: Financial & Investment Planning  
 Career Goal: Financial Manager  
 Postsecondary Goal: Bachelor's Degree in Financial Management and Services

| Foundation High School Program Requirements (22 Credits)   | Business and Industry Endorsement Requirements (26 Credits)  |
|--|--|
| <ul style="list-style-type: none"> <li>English Language Arts (4 Credits)                             <ul style="list-style-type: none"> <li>• English I</li> <li>• English II</li> <li>• English III</li> <li>• Advanced English Course</li> </ul> </li> <li>Mathematics (3 Credits)                             <ul style="list-style-type: none"> <li>• Algebra I</li> <li>• Geometry</li> <li>• Advanced Mathematics Course</li> </ul> </li> <li>Science (3 Credits)                             <ul style="list-style-type: none"> <li>• Biology</li> <li>• IPC or Advanced Science Course</li> <li>• Advanced Science Course</li> </ul> </li> <li>Social Studies (3 Credits)                             <ul style="list-style-type: none"> <li>• U.S. History</li> <li>• U.S. Government (one-half credit)</li> <li>• Economics (one-half credit)</li> <li>• World Geography or World History</li> </ul> </li> <li>Physical Education (1 Credit)</li> <li>Languages Other Than English (2 Credits in same language)</li> <li>Fine Arts (1 Credit)</li> <li>Career Related Electives (5 Credits)</li> <li>Proficiency in Speech (Determined locally)</li> </ul> | <p style="text-align: center;"><b>EXAMPLE CAREER RELATED ELECTIVES</b></p> <ul style="list-style-type: none"> <li>Principles of Business, Marketing &amp; Finance</li> <li>Business Information Management I</li> <li>Banking and Financial Services</li> <li>Money Matters</li> <li>Accounting I</li> <li>Business Law</li> <li>Securities and Investments</li> <li>Practicum in Business Management</li> </ul> <p style="text-align: center;"><b>DISTINGUISHED LEVEL OF ACHIEVEMENT</b></p> <ul style="list-style-type: none"> <li>4 Credits in Mathematics (Must complete Algebra II)</li> <li>4 Credits in Science</li> <li>Requirements for at least the Business and Industry Endorsement</li> <li>Remaining requirements</li> </ul> <p style="text-align: center;"><b>Performance Acknowledgement</b></p> <ul style="list-style-type: none"> <li>Outstanding performance</li> <li>in a dual credit course</li> <li>in bilingualism and biliteracy</li> <li>on an AP test or IB exam</li> <li>on the PSAT, the ACT-Plan, the SAT, or the ACT</li> <li>Earning a nationally or internationally recognized business or industry certification</li> </ul> |

Curricular Experiences: Business Professionals of America (BPA), DECA, Future Business Leaders of America (FBLA)  
 Extracurricular Experiences: Academic Decathlon, Math Tutor, Performing Arts, School Newspaper, University Interscholastic League, Yearbook  
 Career Learning Experiences: Career Preparation—Paid and Unpaid, Internships, Job Shadowing  
 Service Learning Experiences: Boy Scouts of America, Community Service Volunteer, Girl Scouts of the U.S.A.

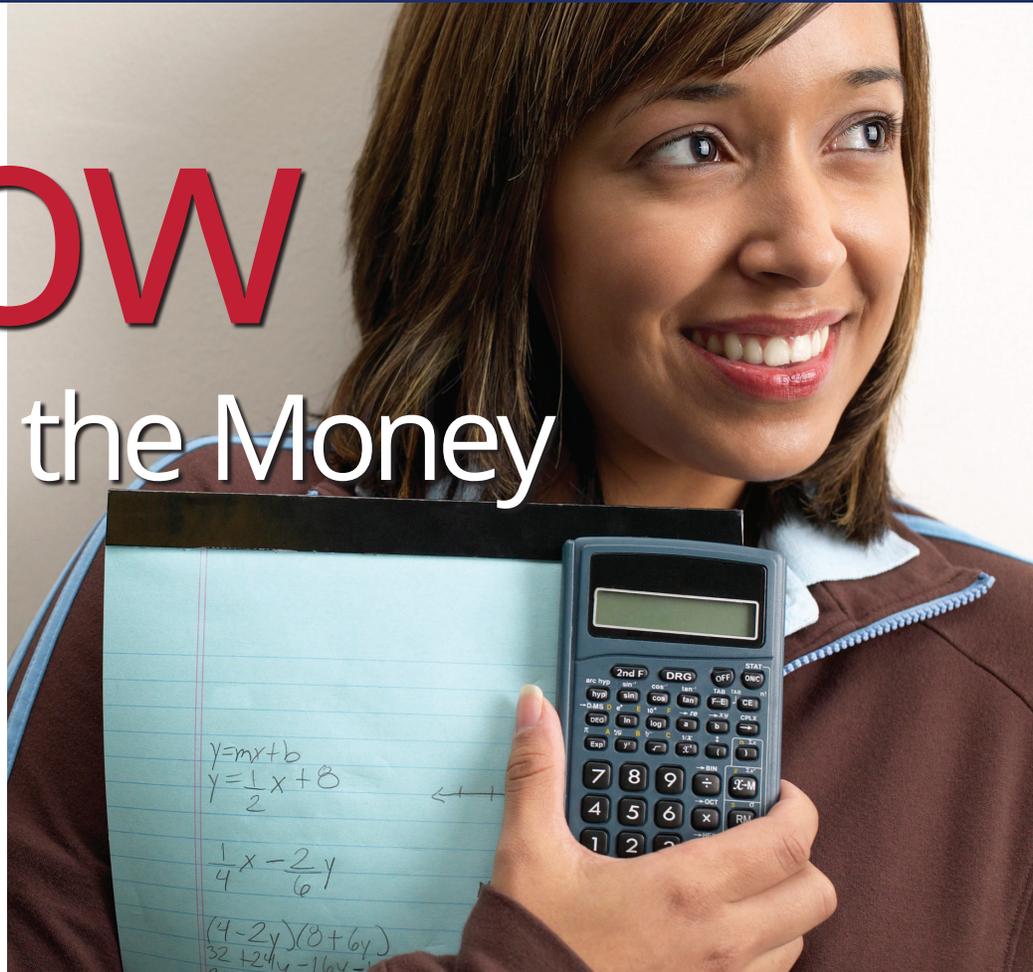
A CAREER PORTFOLIO (see page 15) is a good way to organize information about your educational experiences, record results of career interest and abilities assessments, and hold examples of your best work. Include a 4-year plan in your portfolio.

# Show Me the Money

Choose a CAREER IN FINANCE from a wide variety of well-paying fields.

There's an old stereotype that the richest man in town will be the banker. Is it true? Are the money handlers the real moneymakers?

"That may not necessarily be true, since it usually refers to the bank owner, not the teller," says Alexander May, director of financial reporting/gas operations for CenterPoint Energy of Houston. "But I can tell you that there has never been a better time to be in finance and accounting. Because of all the government scrutiny to do with financial mismanagement of large companies, people in this profession are in high demand to ensure the controls are in place for proper financial management."



### High Growth, High Demand

When it comes to job opportunities, Finance is a high-growth cluster. According to the U.S. Bureau of Labor Statistics, 898 new jobs will be created in the industry nationally between 2012 and 2022. The Texas Workforce Commission says that in Texas alone, positions for financial managers and analysts, accountants, and auditors will increase almost 23 percent in that same 10-year period. Positions for compensation and benefits specialists

are expected to increase more than 17 percent. Why the boom?

"Every single company needs an accountant," says Holly Sparkman, chief financial officer for Cedra Corporation, a biotechnology company in Austin. "That broadens opportunities, because employees can work for any company size in any industry. Personally, I've worked in every size company from small, privately held entrepreneurial companies to large, publicly held corporations, as well as for political

## QUIZ

Is Finance the right cluster for you?

Take this quiz to find out. Answer "yes" or "no" to the following questions.

- |                       |                             |                                   |                    |                                      |   |   |  |                                     |   |
|-----------------------|-----------------------------|-----------------------------------|--------------------|--------------------------------------|---|---|--|-------------------------------------|---|
| 1.                    | 2.                          | 3.                                | 4.                 | 5.                                   | 6.  | 7.  | 8.   | 9.                                  | 10.   |
| Are you good at math? | Do you have a bank account? | Do you love working with details? | Are you organized? | Do you enjoy working with computers? | Do you like being responsible for the outcome of your work? | Do you like to follow clearly defined instructions? | Do you love solving puzzles and brain teasers? | Are you conscientious and reliable? | Do you read the financial pages of the newspaper? |

If you answered "yes" to five or more of the above questions, Finance may be the right cluster for you. To get a more specific and scientific measurement of your attitudes and abilities, ask your guidance counselor or teacher about taking a career assessment test or interest inventory.

## 10 Fast-Growing Careers

| Occupation  | Growth Rate (2012–2022) | Avg. Annual Openings (2012–2022) |
|---|-------------------------|----------------------------------|
| Actuaries   | 35%                     | 55                               |
| Personal Financial Advisors                       | 29%                     | 700                              |
| Credit Counselors                                 | 27%                     | 145                              |
| Accountants & Auditors                            | 24%                     | 5,685                            |
| Credit Analysts                                   | 24%                     | 265                              |
| Financial Analysts                                | 22%                     | 935                              |
| Securities, Commodities & Financial Services Sale | 20%                     | 1,150                            |
| Loan Officers                                     | 20%                     | 1,030                            |
| Bill & Account Collectors                         | 20%                     | 1,865                            |
| Tax Preparers                                     | 19%                     | 235                              |

This is a projection of 10 fast-growing careers in Finance in Texas from the year 2012 to 2022 and the number of average annual openings in each occupation. Note that whereas the percentage of growth in jobs may be high, the actual number of jobs created may be low. Source: Texas Workforce Commission.

consultants and medical research facilities.”

May concurs. “Finance and accounting are the basis of a company’s success,” he says. While the company may make a great product that sells very well, “there has to be someone who can keep the pennies in the bank.”

### Variety on the Job

“Some students think they’ll have to sit at a desk working with numbers all day,” says Alison Benton, principal and director in Houston at UHY Advisors, a national tax and business consultant firm. “But there’s more variety in this field than I ever thought—work most people would never consider as Finance.”

In her position, Benton negotiates deals for companies. “For instance, if a company is expanding,” she says, “I might help them get government funding for training or a new facility. This lets me use my legal experience from business law classes and my human communications skills in addition to finance experience.” Benton suggests students consider combining their personal interests with finance skills to find a good career fit.

Finance offers some unusual choices. Careers students may not know about include foreign exchange dealer, debt settlement negotiator, personal shopper, and forensic litigator.

“Forensic litigation has taken off in the last three years,” Benton explains. “This is where people investigate financial fraud and track down undercover computer transactions when someone has been funneling funds to accounts overseas. That’s a very cool job for someone with strong computer skills.”

### Top Pay

Although not everyone in Finance can become the chief financial officer (CFO) for a major corporation, professionals in the cluster are well paid, depending on the career choice and industry.

According to the Texas Workforce Commission, financial managers’ starting salaries in Texas are more than \$72,859 and rise as high as \$158,279, with the average being \$129,806 across all industry segments. Wages for actuaries are even better, averaging \$114,724 and topping out at about \$138,805. Financial analysts’ highest salaries are also excellent, at approximately \$107,867, with the average salary being \$89,602. On the other hand, credit counselors’ wages are significantly lower, averaging \$46,065, as are those of claims adjusters, examiners, and investigators, who average \$62,978.

### Good Education

Careers with higher salaries generally require more education.

“Typically, companies want to hire someone with at least four years of college,” says Deborah Ropelewski, director of education for the Professional Liability Underwriting Society, a national nonprofit organization that supports career development in liability insurance. “They want people who are serious about continuing their education, especially those interested in becoming professional brokers or insurance agents, who need to meet continued education requirements to maintain their licenses.”

“We look for graduates with finance and accounting degrees,” says CenterPoint’s May. “We require people to be trained in a certain way of thinking, and we want them to learn it in college, because there are so many other skills that they need to learn once they’re on the job.”

## 10 Top-Paying Careers

| Occupation                                       | Average Wage | Entry-Level Wage | Experienced Wage |
|--|--------------|------------------|------------------|
| Financial Managers                               | \$62.41      | \$35.03          | \$76.10          |
| Actuaries  | \$55.16      | \$32.00          | \$66.73          |
| Economists                                       | \$49.10      | \$23.50          | \$61.90          |
| Securities, Commodities, Financial Services Sale | \$43.33      | \$15.62          | \$57.18          |
| Financial Analysts                               | \$43.08      | \$25.52          | \$51.86          |
| Personal Financial Advisors                      | \$42.45      | \$16.81          | \$55.28          |
| Financial Examiners                              | \$39.68      | \$23.12          | \$47.95          |
| Accountants & Auditors                           | \$35.39      | \$20.55          | \$42.80          |
| Credit Analysts                                  | \$34.02      | \$20.63          | \$40.71          |
| Loan Officers                                    | \$33.67      | \$18.06          | \$41.48          |

This is a chart of hourly wages for 10 of the top-paying careers in the Finance cluster in Texas. Note how entry-level wages are often much lower than pay for the average worker and experienced workers in each profession. Source: Texas Workforce Commission.

## What Employers Want

### EDUCATION

"A four-year degree is not a requirement, but nine-tenths of the time, if someone has a degree, it's a competitive factor," says Myron Kyser, a recruiter for State Farm Insurance in Dallas. "Financial services classes are also helpful, especially those that prepare you for financial planner certification. That signifies job candidates are qualified to handle financial matters."

Rosie Ramirez, senior vice president and director of human resources for IBC Bank of Laredo, likes to see specific coursework on an applicant's resume and the grades he or she received.

"When hiring for professional positions, we request school transcripts be provided"—not only to analyze the candidate's course of study but also to review the grades and the length of time it took the candidate to obtain his or her college degree, Ramirez says. This is particularly important if the applicant is a full-time student. "We find that a review of the student's transcripts may reveal certain levels of aptitude and dedication to work during their years of study."

### EXTRACURRICULAR EXPERIENCE

"The more extracurricular activities a job candidate participated in, the more flexible I am on the GPA," says Kyser. "I want to see students who are involved—and that's something they can do even in high school."

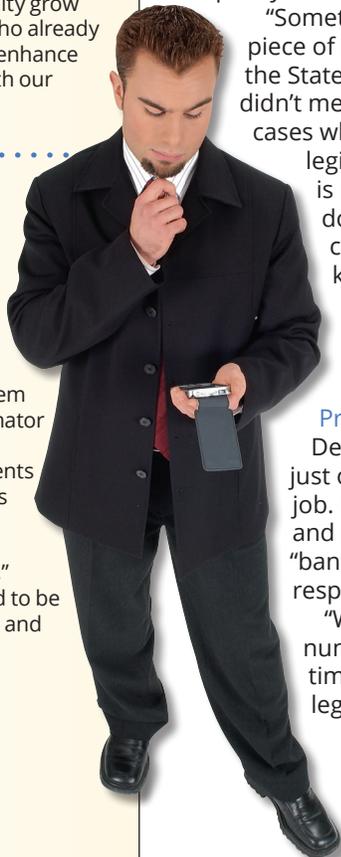
"We encourage community involvement with all of our employees," says Ramirez. "We think it allows us to become better leaders and to help our community grow and prosper. Hiring applicants who already have those values can only help enhance their continued development with our organization."

### PROBLEM-SOLVING SKILLS

The Texas Comptroller's Office in Austin evaluates the likely financial effects of bills introduced in the State Legislature. "I look for signs that an applicant is a good problem solver," says Chief Revenue Estimator John Heleman.

The Comptroller's Office presents potential employees with a series of questions to determine their problem-solving skills.

"It's especially important here," Heleman says, "because we need to be able to read a piece of legislation and understand its financial impact."



# Take It to the Bank

## COUNT ON A CAREER in Finance to deliver rewarding work.

Imagine walking up to a Texas state legislator and telling him or her to rewrite a bill. Well, that's not exactly what John Heleman does in his job as chief revenue estimator for the Texas Comptroller's Office—the state's bookkeeper and tax collector—but it's pretty close.

"Sometimes a legislator authors a piece of legislation that would cost the State money when he or she didn't mean to," says Heleman. "In cases where it is unclear, I visit the legislator to determine if that is intentional. If the legislator does not intend to incur the costs in the bill, I let him or her know that he or she may need to restate portions of the document to eliminate the excessive spending."

### Protecting the State

Dealing with legislators is just one part of Heleman's job. Understanding Texas law and protecting the State's "bank account" is his major responsibility.

"While I spend time crunching numbers, I also spend a lot of time at the Capitol, meeting with legislators and their staffs," he

says. "As a state employee, I'm not allowed to favor one bill or another, however. I'm there as a resource, to explain the technical details of a given bill and possible financial consequences."

### Selling Yourself

Heleman has reached one of the top positions in Finance, but his daily duties working with both numbers and people are typical of those at every level of job responsibilities in the cluster.

"There are two facets to my job," explains Charles Tuggle, who works as a financial associate with a major national brokerage firm in Houston. "I have analytical skills for understanding securities and how they work, but first and foremost, this is a sales job. I have to convince people that, first, they need to invest for the future and, second, that they need to invest with us."

As part of the sales process, Tuggle makes telephone calls, attends networking events and seminars, and registers a lot of "face-to-face time." In addition, he spends many hours doing paperwork, because Finance is a highly regulated industry.

There's also customer service work to be done, such as maintaining accounts, reporting gains and losses for taxes, and recommending changes to financial portfolios so that his clients' investments remain as sound as possible. New clients

## YOUNG TEXAS SAVES

PROMOTES SETTING FINANCIAL GOALS,  
SAVING MONEY, AND BUILDING WEALTH.

rarely come through the door seeking a broker, so sales is a primary skill in Tuggle's Finance career.

Part of being a good salesperson is caring about clients. For Tuggle, that means helping people save for retirement and other important life events.

"For example, a friend of mine once called me for help because she needed to finance her son's education," he says. "She had some money saved, but could see it wouldn't go very far." Tuggle worked with her, explaining different saving and investment options until they agreed on a plan that she could afford. "Based on what we did, this plan should pay for four years at a private college, assuming he keeps his grades up and keeps getting scholarships."

### Training Students

Whereas Tuggle generally works

with older people, April Howe, branch manager of Associated Credit Union in Clear Lake, generally serves a younger clientele.

"I run a small branch located inside a grocery store," says Howe. "My staff and I provide loans for customers high school age and up. One of my favorite parts of the job is lending, especially to young people, because I can help them start building their credit without requiring their parents to co-sign a loan."

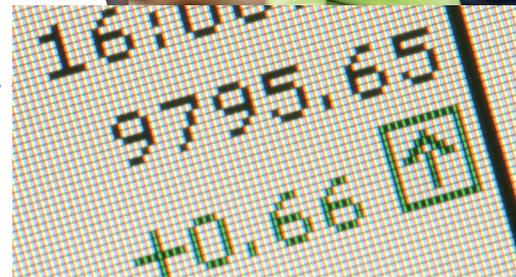
Howe has been involved with helping young people learn about saving and credit and other financial matters for years.

"I helped open the first credit union in a high school in Texas and had the opportunity to train students to run it," she says proudly. "Many of the students have pursued careers in the finance industry. Some even stayed with the

credit union and advanced."

So what is a typical day at her credit union branch?

"It's always busy," she says. "People are standing in line, the fax machine is busy, and the phone is ringing. And I couldn't love it any more. I enjoy the pressure."



## 5 Cool Careers

CHECK OUT THESE EXCITING CAREERS IN FINANCE.

1.

### STOCKBROKER

The securities brokerage profession is the highest-paying industry in Finance, with average annual wages of \$165,000, according to the U.S. Department of Labor Bureau of Labor Statistics. Stockbrokers sell or buy stock for their clients. Professionals in the industry also manage investments and provide financial advice. Most have at least a bachelor's degree. The industry superstars are good with numbers and have a keen interest in investing.

2.

### ECONOMIST

As expert researchers, economists have their fingers on the pulse of the marketplace. They understand how factors such as energy costs, inflation, interest rates, and employment interact, and they predict how that will affect a society's prosperity. Successful economists are considered invaluable in deciding how and when to invest, so when they speak, people listen. Some economists become so highly regarded that their opinions reported in the media can make the stock market rise or fall.

3.

### PERSONAL FINANCIAL ADVISOR

As the number of individual investors rises, personal financial advisors are in high demand. These financial experts must be good with numbers and thoroughly knowledgeable about investment options, but they need good people skills as well. Once they devise an ingenious strategy for paying for college or retirement, they must have the communications skills needed to explain it clearly to their clients.

4.

### INTERNATIONAL BANKER

This is definitely a job for those who like to travel. International bankers examine the economies of nations worldwide, manage international currencies, and help governments develop strategies for maintaining their prosperity. They may advise nations on how to invest their wealth or help different countries partner in strategic projects.

5.

### FINANCIAL INVESTIGATOR

Sometimes the key to unraveling big-time corporate fraud can only be found by investigators with accounting expertise. Financial investigators may have to serve as expert witnesses and convince juries that their analysis is sound.

# Finance

Listed below are 25 careers you might consider in the Finance cluster. These are not all the career options in the cluster. Turn to the "Online Info" on the inside back cover to research all career options in the cluster of your choice and decide.

**SOC:** Stands for Standard Occupational Code, which organizations like the U.S. Department of Labor use to categorize career information. Sometimes you can find data on a career faster by searching for its SOC.

**GROWTH:** This is the projected annual growth in Texas for the career between 2012 and 2022. Fast-growing occupations may offer greater career opportunities for young adults.

**OPENINGS:** This is the projected number of job openings for the career in Texas each year. Even though a career may be fast growing, there may not be a lot of positions available. Careers with more openings will give an entry-level worker a better chance of getting a job and greater job security.

**WAGES:** This is the amount the average person in the career earns in Texas per year. Naturally, entry-level wages are lower than the average, and those for workers with years of experience are generally higher.

| SOC     | Occupation  | Growth | Openings | Wages     | Education                               |
|---------|---|--------|----------|-----------|---|
| 19-3011 | Economist   | 31%    | 50       | \$102,127 | Master's degree                         |
| 19-3021 | Market Research Analyst                                     | 41%    | 1,315    | \$69,993  | Master's degree                         |
| 19-3022 | Survey Researcher   | 18%    | 60       | \$51,418  | Master's degree                         |
| 15-2011 | Actuary   | 35%    | 55       | \$114,724 | Bachelor's plus experience              |
| 11-3031 | Financial Manager   | 22%    | 1,195    | \$129,806 | Bachelor's plus experience              |
| 13-2052 | Personal Financial Advisor                                  | 29%    | 700      | \$88,303  | Bachelor's degree                       |
| 13-2051 | Financial Analyst   | 22%    | 935      | \$89,602  | Bachelor's degree                       |
| 13-2011 | Accountant and Auditor                                      | 24%    | 5,685    | \$73,604  | Bachelor's degree                       |
| 41-3031 | Securities, Commodities, and Financial Services Sales Agent | 20%    | 1,150    | \$90,123  | Bachelor's degree                       |
| 13-2061 | Financial Examiner  | 18%    | 85       | \$82,529  | Bachelor's degree                       |
| 13-2041 | Credit Analyst  | 24%    | 265      | \$70,753  | Bachelor's degree                       |
| 13-2081 | Tax Examiner, Collector, and Revenue Agent                  | 8%     | 185      | \$54,233  | Bachelor's degree                       |
| 13-2053 | Insurance Underwriter                                       | 7%     | 205      | \$68,067  | Bachelor's degree                       |
| 13-2071 | Credit Counselor  | 27%    | 145      | \$46,065  | Bachelor's degree                       |
| 13-2072 | Loan Officer  | 20%    | 1,030    | \$70,037  | Bachelor's degree                       |
| 41-3021 | Insurance Sales Agent                                       | 17%    | 2,020    | \$57,277  | Bachelor's degree                       |
| 43-4141 | New Accounts Clerk  | 9%     | 300      | \$32,381  | Work experience in a related occupation |
| 13-1031 | Claims Adjuster, Examiner, and Investigator                 | 17%    | 760      | \$62,978  | Long-term on-the-job training           |
| 13-1032 | Insurance Appraiser, Auto Damage                            | 8%     | 45       | \$60,077  | Long-term on-the-job training           |
| 13-2082 | Tax Preparer  | 19%    | 235      | \$40,276  | Moderate-term on-the-job training       |
| 43-9041 | Insurance Claims and Policy Processing Clerk                | 20%    | 1,025    | \$36,365  | Moderate-term on-the-job training       |
| 43-3031 | Bookkeeping, Accounting, and Auditing Clerk                 | 21%    | 3,880    | \$36,305  | Moderate-term on-the-job training       |
| 43-3051 | Payroll and Timekeeping Clerk                               | 23%    | 700      | \$38,038  | Moderate-term on-the-job training       |
| 43-3011 | Bill and Account Collector                                  | 20%    | 1,865    | \$32,276  | Short-term on-the-job training          |

Source: Texas Workforce Commission (TWC)

Note: This chart is a sampling of careers in the cluster, not recommendations from TWC or any other agency or organization. Always do thorough research and consult with your parents/guardians before making a career choice.

ster—they are just a sampling showing the variety of occupations available to you at different education levels. de on the ones that best fit your talents and ambitions. Here’s an explanation of the kind of information presented in each column.

**EDUCATION:** This is the minimum preferred level of educational attainment for people working in the career in the United States. This can range from short-term on-the-job training to a doctoral degree taking several years of college.

**EDUCATION LEVELS:** The color bars show the mix of education levels attained by people actually working in the profession in Texas (see bars at right). If a bar features mostly one color, that means that level of education is likely the one you’ll need to reach to work in the profession. Look at economist, for example, and you’ll see that nearly everyone in the field has a college degree or better. If the three colors in the bar are roughly equal in size, that means that there are opportunities in the profession for people of all education levels. For example, about 24 percent of the people working as auto damage insurance appraisers have a high school diploma, while 32 percent have some college, and 44 percent have four-year degrees or better.

| High School  | Some College   | College or Better  |
|--|--|--|
| Percentage of people in the occupation who have at most high school diplomas | Percentage of people in the occupation who have some college | Percentage of people in the profession who have a four-year college degree or better |

**JOB DESCRIPTION:** These are brief descriptions of each career from O\*NET Online ([online.onetcenter.org](http://online.onetcenter.org)).

| Education Levels | Job Description  |
|------------------|--|
|                  | Conduct research, prepare reports, or formulate plans to aid in solutions to economic problems arising from production and distribution of goods and services. May collect and process economic and statistical data using econometric and sampling techniques.  |
|                  | Research market conditions in local, regional, or national areas to determine potential sales of a product or service. May gather information on competitors, prices, sales, and methods of marketing and distribution. May use survey results to create a marketing campaign based on regional preferences and buying habits. |
|                  | Design or conduct surveys. May supervise interviewers who conduct the survey in person or over the telephone. May present survey results to client.  |
|                  | Analyze statistical data, such as mortality, accident, sickness, disability, and retirement rates, and construct probability tables to forecast risk and liability for payment of future benefits. May ascertain premium rates required and cash reserves necessary to ensure payment of future benefits.                      |
|                  | Plan, direct, and coordinate accounting, investing, banking, insurance, securities, and other financial activities of a branch, office, or department of an establishment.   |
|                  | Advise clients on financial plans utilizing knowledge of tax and investment strategies, securities, insurance, pension plans, and real estate. Duties include assessing clients' assets, liabilities, cash flow, insurance coverage, tax status, and financial objectives to establish investment strategies.                  |
|                  | Conduct quantitative analyses of information affecting investment programs of public or private institutions.  |
|                  | Examine, analyze, and interpret accounting records for the purpose of giving advice or preparing statements. Install or advise on systems of recording costs or other financial and budgetary data.  |
|                  | Buy and sell securities in investment and trading firms, or call upon businesses and individuals to sell financial services. Provide financial services, such as loan, tax, and securities counseling. May advise securities customers about such things as stocks, bonds, and market conditions.                              |
|                  | Enforce or ensure compliance with laws and regulations governing financial and securities institutions and financial and real estate transactions. May examine, verify correctness of, or establish authenticity of records.   |
|                  | Analyze current credit data and financial statements of individuals or firms to determine the degree of risk involved in extending credit or lending money. Prepare reports with this credit information for use in decision making.   |
|                  | Determine tax liability or collect taxes from individuals or business firms according to prescribed laws and regulations.  |
|                  | Review individual applications for insurance to evaluate degree of risk involved and determine acceptance of applications.   |
|                  | Provide guidance to prospective loan applicants who have problems qualifying for traditional loans. Guidance may include determining the best type of loan and explaining loan requirements or restrictions.   |
|                  | Evaluate, authorize, or recommend approval of commercial, real estate, or credit loans. Advise borrowers on financial status and methods of payment. Includes mortgage loan officers and agents, collection analysts, loan servicing officers, and loan underwriters.  |
|                  | Sell life, property, casualty, health, automotive, or other types of insurance. May refer clients to independent brokers, work as independent broker, or be employed by an insurance company.  |
|                  | Interview persons desiring to open bank accounts. Explain banking services available to prospective customers and assist them in preparing application form.   |
|                  | Review settled claims to determine that payments and settlements have been made in accordance with company practices and procedures, ensuring that proper methods have been followed. Report overpayments, underpayments, and other irregularities. Confer with legal counsel on claims requiring litigation.                  |
|                  | Appraise automobile or other vehicle damage to determine cost of repair for insurance claim settlements and seek agreement with automotive repair shop on cost of repair. Prepare insurance forms to indicate repair cost or cost estimates and recommendations.   |
|                  | Prepare tax returns for individuals or small businesses. Those in this position do not have the background or responsibilities of an accredited or certified public accountant.  |
|                  | Process new insurance policies, modifications to existing policies, and claims forms. Obtain information from policyholders to verify the accuracy and completeness of information on claims forms, applications and related documents, and company records.   |
|                  | Compute, classify, and record numerical data to keep financial records complete. Perform any combination of routine calculating, posting, and verifying duties to obtain primary financial data for use in maintaining accounting records.   |
|                  | Compile and post employee time and payroll data. May compute employees' time worked, production, and commission. May compute and post wages and deductions. May prepare paychecks.   |
|                  | Locate and notify customers of delinquent accounts by mail, telephone, or personal visit to solicit payment. Duties include receiving payment and posting amount to customer's account; preparing statements to credit department if customer fails to respond; and keeping records of collection and status of accounts.      |



HERE ARE the programs of study available within the Finance cluster in Texas high schools.\* The State has created descriptions of each of these programs of study. These documents detail high school classes you might take, extended learning opportunities, and postsecondary programs.

#### BANKING AND RELATED SERVICES

Employees in this field work with individuals and companies to hold money; pay interest; and provide loans, credit, and payment services.

#### BUSINESS FINANCIAL MANAGEMENT

Business Financial Managers use general accounting systems to prepare financial reports. They also use information to help businesses make financial decisions.

#### FINANCIAL AND INVESTMENT PLANNING

Professionals in this area help businesses and individuals make decisions about their investments.

#### INSURANCE SERVICES

Employees in the insurance industry provide financial protection to individuals and businesses. Specialists in insurance include actuaries, clerks, underwriters, and salespeople.

\* Not all schools offer all programs of study or clusters. Ask your counselor which programs are available at your school.

# High School High Finance

## INVEST IN THE FUTURE by studying Finance in high school.

In Laredo, there's a place where people study the financial news as it comes in, wondering how the latest statements from the secretary of the treasury may affect the hundreds of thousands of dollars they have invested in the stock market. A stock ticker streams an endless series of numbers on a television overhead, tracing the upward or downward movement of the day's most active stocks on the New York Stock Exchange.

This isn't a trading floor or a stockbroker's office, however—it's a classroom at John B. Alexander High School.

#### Following the Stock Market

An increasing number of Texas high schools are bringing the world of Finance into the classroom. Students get a taste of what that business world is like—and the skills needed to succeed.

A prime example is the Virtual Finance course Cecilia Santos teaches at John B. Alexander. "It's an innovative class open to juniors and seniors from all four high schools in our district," she explains. "Students learn about banking and investing—the history of money, the role of the Federal Reserve Bank, and annual reports."

The centerpiece of the course, though, is the Stock Market Game, a program sponsored by the Foundation for Investor Education (see "Virtual Finance," page 13).

The game simulates an online investment account, teaching students the basics of investing by asking them to put "virtual" dollars into real stocks, and to follow their progress. "At the end of the course, the students prepare a PowerPoint presentation, a report, and present to a panel of businesspeople from the local community—bankers, accountants, stockbrokers—and defend their investment strategies," Santos says.

#### Get with the Program

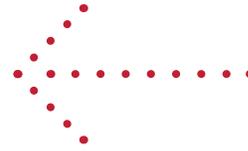
The Finance cluster includes four programs of study (see "Program Profiles" at left).

The Financial & Investment Planning program of study includes careers such as financial manager, brokerage clerk, and tax preparer. Students in this program of study should take electives such as Accounting, Financial Planning, Banking and Financial Systems, Database Programming, Database Fundamentals, Business Management, and Business Ownership.

Classes offered in the Finance cluster vary by school. In Dallas, for example, high school students can get a feel for property business through a Principles of Real Estate course at the Dallas Independent School District (ISD) magnet school for business and management.

"Students gain an appreciation for the mathematics in a real estate firm," says Jennifer Sanders, who created and

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teaches the course.

Dallas ISD offers an extensive range of business courses.

"Our school offers two programs of study," Sanders says. "I teach banking and real estate. We study mortgage lending for a semester, accounting for a year, and real estate for a year.

"The other program students can take is the academy of finance, which covers banking and accounting, but also includes courses on economics and international finance."

#### Writing and Math Needed

What skills are needed to pursue a Finance-related career? Start with a strong foundation in English and math.

"While working at a public corporation, I saw that good writing skills were essential, especially

if you wanted a promotion to upper management," Sanders says. "Furthermore, from a finance standpoint, mathematics is essential. Employees need to be able to interpret and analyze, to understand the numbers and explain them, to project and estimate—all the skills necessary for higher-level thinking.

"I recommend taking accounting," she says. "It's often offered for dual credit in high school, so students can get a college-level experience. I also recommend economics, which is offered for dual credit in various places, and a banking course. That's so students get a general understanding of the financial field."

Mariana Sanchez-Ramon, a branch manager and assistant vice president for Amegy Bank in Houston, also

stresses the need to master the math used in the business world.

"In finance, employees need to have a good grasp of numbers," she says. "Students need about 12 hours of accounting. It's very competitive now—for entry-level positions, employers require a good background in accounting. Employees need to be able to understand a balance sheet, so that they're able to talk to clients."



## SPOTLIGHT

### VIRTUAL FINANCE

The Online Stock Market Game Delivers Real Learning

Now anyone who would like to get \$100,000 to invest in the stock market, in any way they choose? They can, but there's a catch: the money isn't real. The lessons are, though.

Since 1977, thousands of American students have played the Stock Market Game, a program sponsored by the Foundation for Investor Education. It's an online simulation of a stock investment account, like those offered by major brokerage firms. The program is open to grades 4 through 12, and about 29,000 Texas students play each school year, according to Debbie Mackey, game liaison for the Texas Council on Economic

Education.

"Students receive a 'virtual' \$100,000 that they can invest over a 10-week period," Mackey says. "It gives them a chance to research companies and learn about how the market works. There are awards ceremonies that recognize teams that have increased the value of their portfolios.

"It provides teachers with the perfect opportunity to introduce their students to careers that are often overlooked in the world of finance," adds Mackey. "The program encourages teachers to invite area professionals into the classroom to discuss investing and careers in the field."

"We've had outstanding results with the Stock Market Game," says Cecilia Santos, an instructor at Laredo's John B. Alexander High School. "We've had quite a few students who have been offered positions based on their performance. A bank officer saw one senior student's presentation and told me, 'Give her my business card. I want to hire her.'"

"I've had other students who were offered internships and positions with investment firms," Santos continues. "They tell students, 'We'll work around your college schedule and help you with tuition and books.' They're very interested in helping students get their foot in the door."

# Learn to

# Earn



To find out **WHAT GOES ON** in the world of Finance, it's best to experience it firsthand.

It just depends on what students are interested in," says Rosanna Guerrero, programs manager for Junior Achievement of Central Texas. "We do the best we can to match everybody with the kind of professional he or she wants to job shadow. One group of students wanted to see a nonprofit, so we took them to the Lance Armstrong Foundation; another group of students went to Whole Foods."

Guerrero is involved in organizing Groundhog Job Shadow Day every

February for Junior Achievement. She helps students experience life in the world of Finance by following professionals at work. More than 100,000 businesses and a million students nationwide participate. Guerrero makes sure the students make the most of the event.

"An in-school curriculum that happens before the event gives students background information on job skills they have and careers they're interested in seeking," Guerrero says. "Students create a resume and research different careers."

### Job Shadowing

Job shadowing is just one type of extended learning experience that takes place outside the classroom. As the name implies, students spend a day "shadowing" someone employed in business, asking questions, and observing what's involved in a typical day at work.

The professionals that students shadow "talk about what they do, but

they also give students advice and tips on how to develop their skills and the education to seek," says Guerrero. "They will show students projects they've done in the past and review the students' resumes. It's a good opportunity for students to connect learning with earning, to find out what education they need to pursue a particular career field."

### Internships

While job shadowing, students are observing, not doing. They learn a lot in a short time, but they don't have any job responsibilities. Another type of extended learning—internships—gives students a more accurate indication of what a career entails.

In the Dallas Independent School District's finance academy, for instance, "students take a six-week internship between their junior and senior years," says Amy Matthew, director of the academy.

Students work at several companies related to the Finance industry. They might be assigned to a single department or rotated through various parts of the company. Either way, they get valuable experience—and get paid for it, too.

THE TEXAS BANKERS ASSOCIATION WEBSITE—

**WWW.TEXASBANKERS.COM**

—LISTS ALL THE CURRENT JOB OPENINGS IN THE TEXAS FINANCIAL SERVICES INDUSTRY.



## FIVE TEXAS COLLEGES

OFFER BOARD-CERTIFIED CFP (CERTIFIED FINANCIAL PLANNER) UNDERGRADUATE PROGRAMS—ANGELO STATE UNIVERSITY, BAYLOR UNIVERSITY, TEXAS STATE UNIVERSITY AT SAN MARCOS, TEXAS TECH UNIVERSITY, AND THE UNIVERSITY OF NORTH TEXAS.

### Work-Based Learning Classes

The biggest springboard to the real world available to high school students is the cooperative, or “co-op,” class.

Juniors and seniors in cooperative education programs split their days between the classroom and a job.

“Students are matched with community partners, businesses that have a history of sponsoring students,” says Christopher Cashin, who teaches in Houston at John H. Reagan High School’s business academy. “The students go to work, just like a regular job, typically in the latter part of the day. They’ll go to class from, say, 8:30 in the morning until noon, and then they’ll go to a paid job, and they’ll earn high school credit.

“Teachers go to the job sites and make sure the students are reporting to work,

and check on the quality and progress of their work experience,” Cashin says.

It doesn’t hurt for students to earn paychecks while still in school, but the experience they earn is worth a lot more in years to come. “Students get a paycheck, but more important than that, they acquire real-life experience,” says Cashin. “Some of the co-op students have gone on to intern while they’re in college, and attain professional careers with these companies.”

Matthew tells a similar story. The Dallas finance academy has placed co-op students at Deloitte & Touche, one of the world’s largest business consulting firms.



## CREATE a Career PORTFOLIO

One valuable tool that can help you get ready for college and beyond is a career portfolio—a collection of items that document your achievements both in and out of school, assembled in one convenient package.

A career portfolio is not simply a resume, although it can certainly include one. So what should go in a career portfolio? A variety of things, depending on your own personal experiences. It could include transcripts and grades; writing samples; letters of recommendation from teachers, mentors, or employers; awards you’ve received; and items that document other activities, such as internships and job shadowing experiences.

“You need to be specific—dates, how many years, any awards, what they meant, and who you received them from,” says Grace Brauchle, who helps students put their portfolios together as the career center coordinator for Lehman High School in Kyle.

Brauchle says portfolios come in handy when students apply for jobs or admission to college. “First impressions are a very big thing,” she says, “and you want to be the one whose papers get passed around the office. You want to be the one where the admissions counselors say, ‘Wow, look at this one!’”

## SPOTLIGHT

### PLANNING TO WIN DECA Competitors Master Skills in Finance

There’s a lot more to starting a business than most people realize. A business plan—a detailed blueprint that lays out how a business will work and how it will make a profit—is quite complicated. Students in Finance must learn how to create a plan for selling a product in overseas markets or tackle the math involved in financial planning.

In DECA, students can test their professional abilities by competing with other students from across the nation.

DECA is a national nonprofit association of students “interested in marketing, management, and entrepreneurship,” says Lori Hamff, state advisor for Texas DECA. With chapters in high schools across the state, the organization helps prepare students for the world of Finance by giving them the skills, leadership abilities, and understanding they need to get ahead in business.

“Our competitive events put students in real-world situations,” Hamff says. “They’re developing business plans, international marketing plans, or financial accounting plans for starting a business.”



The competitions cover 37 different areas, such as financial accounting, entrepreneurship, and international marketing. Texas’s 10 districts hold competitive events each January, with judges recruited from business professions that use the talents and knowledge being tested. District winners advance to compete in state and national events.

Many state and national competitors have received scholarships, and some even get job offers. “The judges are so impressed that they tell the kids to contact them,” says Hamff. But for all the students who compete, “the real benefit is the experience, the networking, and the opportunities to be with their peers, learning the industry.”

COMPLETE your career education with postsecondary studies in Finance.



**E**arl Smith is Houston Community College's chair for banking, finance, and law. He has a problem with students who want to pursue careers in Finance; he can't find enough of them.

"I have banks coming to me saying, 'I need employees!'" Smith says. "I can't fill their positions fast enough. All these banks are being built, and there's no one to staff them. It's just insane."

Now is a great time to embark on a Finance career. Postsecondary education, ranging from short on-the-job-training to graduate studies at a university, can put students on the right path to rewarding futures.



#### Get Started in Business

There are many ways to get started in the business world, and not all require a college degree. Smith's college, for instance, offers a training course for bank tellers that requires seven weeks of classroom instruction, followed by a paid internship at an area bank. "If I had 100 teller graduates, I could place them tomorrow," Smith says.

Although teller salaries generally are low, it's a good way to begin a career in Finance. "If employees start as a teller and work their way up, in five years, if they're not a branch manager, they're doing something wrong—and that position starts at about \$50,000 a year," he says.

#### Classes in the Community

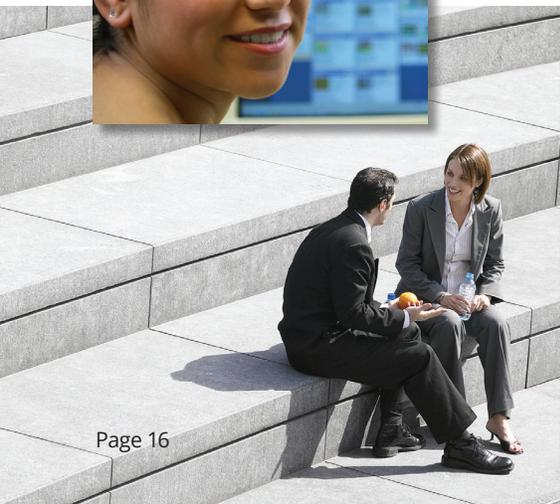
Community colleges throughout the state offer two-year programs in a wide variety of business disciplines. Community colleges in the Dallas/Fort Worth area, for instance, offer certificates and associate's degrees in accounting, management, business administration, international business and trade, and real estate and property management.

Some of these programs lead directly to jobs, but keep in mind that most professions require four-year degrees. In accountancy, for instance, "we offer the 10 classes the State Board of Public Accountancy requires for people to sit for the certified public accountant exam, but the person must have already gotten a bachelor's degree," says Joe Cahill, chair of the business department at Tomball College.

#### 2+2 Programs

Many two-year programs at community colleges feed directly into a four-year program at a university, through course transfers or 2 + 2 agreements. These agreements are money-savers, since community colleges generally have much lower tuition rates than universities. Since the state has more community colleges than universities, a 2+2 option may allow students to live at home their first two years.

In some cases, these agreements even allow a student to earn a four-year university degree at a community college. If students live in San Antonio, for example, they can earn a bachelor's



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degree in business administration from Texas A&M University-Kingsville at Palo Alto College, a member of Bexar County's Alamo Community College District. The students would attend Palo Alto for two years and then transfer to the Texas A&M University-Kingsville System Center-San Antonio facility located on Palo Alto's campus to take upper-level courses.

## Start With the Basics

Jean Walker, director of the West Texas Center for Economic Education at West Texas A&M University in Canyon, recommends that students begin four-year business or finance degree programs by focusing on academic courses such as English and history. The freshman year, and the often-difficult transition to college life, is challenging enough without dealing with finance courses. "Most freshmen don't want to jeopardize their college record by posting low grades in accounting and economics," Walker says.

Besides, academic courses are important to future success. Cahill recommends classes in science, for a "broader perspective," as well as a course in journalism. "Writing and oral communications skills are extremely important in the workplace," he says.

## Advanced Studies

A focus on business and finance should then begin in the second year of college, Walker advises. At West Texas A&M University, which offers four-year and graduate degrees in business, sophomores "need to take two basic accounting courses, microeconomics, macroeconomics, and two courses in business math," Walker says.

"In their junior year, students interested in a bachelor of business administration degree should take business finance as well as beginning courses in marketing, management, statistics, and business law," she continues. "For a senior, we require 10 additional courses—seven finance courses, two electives in accounting, economics, or finance, and one required

accounting course. If students don't understand accounting, they will not understand finance."

## Expand The Options

Graduate school after a bachelor's degree can expand a student's options, particularly in highly skilled and highly paid fields such as investment banking. An advanced degree will help students develop the skills employers want most, such as the ability to think analytically, strategically, and to communicate knowledge effectively. To enter a business-related graduate program, students most often need to take the Graduate Management Admission Test (GMAT), a test about 2,000 business schools across the nation use to evaluate candidates.

West Texas A&M University offers both a master of business administration (MBA) degree and a master of science in finance and economics (MSFE) degree. The MBA is more appropriate for management and marketing positions, while the MSFE might be better suited for someone who wants a career on Wall Street, Walker says.

Texas has a wealth of excellent four-year and graduate business programs across the state. Business Week magazine ranks four-year programs at five universities—the University of Texas at Austin, Southern Methodist University, Texas Christian University, Texas A&M University, and the University of Texas at Dallas—in the top 50 nationwide. UT Austin's MBA program is No. 20 in the country.

## Paying The Way

Remember that many Texas companies are willing to help employees pay for continuing education in Finance.

"Most banks pay for additional education as part of their benefits packages. Even if it takes five to seven years to complete a four-year degree while working, students won't be loaded down with student loan debt when they graduate from school," says Smith.



## Get the CREDIT You Deserve

Dual credit in Texas is a great way to earn college credits toward a postsecondary degree while you're still in high school. Dual credit programs center on "articulation agreements," contracts between the student, his or her high school, and postsecondary institutions the student would like to attend. While most students take basic core courses such as English, history, math, science, and social science, coursework may include areas in Career and Technical Education.

Dual credit courses cover the same material as the equivalent college course, allowing the student to receive credit toward the college degree. It's like a bank account. The credit is banked for you at the college, and you withdraw it when you enroll.

Ask your counselor about advanced placement, dual credit, or articulated courses and other opportunities to earn college credit.

ACCEPTED!

## SIX THINGS Texas students should know about getting into college

Applying to college is a lot like looking for a job or trying out for a team. You choose something that interests you, and then try your best to convince whoever is in charge that you have what it takes to be part of their organization. But whereas there might be only a few spots open on your high school's varsity football squad, there are thousands of places available in hundreds of colleges each year. Whether you are the first in your family to apply to college or both of your parents have advanced degrees, going through the admissions process can be stressful. Fortunately, there are plenty of free resources available for Texas college-bound students. The best is College for All Texans ([www.collegeforalltexas.com](http://www.collegeforalltexas.com)), which features a list of all the state's colleges and universities, a checklist for selecting a school, and a link to the online Texas Common Application. To help you get started on your own college search process, here are six steps you should take.

### 1. Make School Your Job

The first thing college admissions officers look for on your application is your grade point average. It's simple—you have to make the grades in high school to earn your spot in a college. The easiest way to do that is to think of school as your job, starting in your first year. If you show up late for work, slack off, and talk back to the manager, you'll get fired faster than you can say, "Do you want fries with that?" But if you always arrive on time, work really hard, and try to learn from management, then pretty soon you'll probably get a raise or a promotion.

What works on the job works in the classroom, too. Take challenging courses. Turn in all your work on time. Pay attention in class. Contribute to discussions. Ask for help when you don't understand something. By treating school as a career, you'll have a better shot at earning the grades and teacher recommendations that you need to move to the next level.

### 2. Get Involved in Activities

Colleges don't accept students to fill seats. They look for students who will add to the entire college community by playing on sports teams, performing on stage, volunteering for service projects, and so on. Look at the clubs and teams available at your school and sign up for the ones that interest you. In addition to showing school spirit, being part of an organization is a great way to build teamwork and leadership skills—two traits that can really help your college application stand out from the pack.



### 3. Build a Resume Portfolio

What if you had to take a final exam on the last three years of a subject and didn't have any notes to study? Well, that's exactly what it's like trying to complete a college application if you haven't kept an ongoing file of all your activities, honors, and employment.

Start your first year and build a career portfolio (see page 15). It's also smart to create a computer file called "college resume" and add to it each time you participate in a service project, win an award, get a new job, and so on. Use technology to create a resume format or ask your parents or guidance counselor for help. When you sit down to complete your college applications, review your career portfolio and call up the resume—all the information you need will be right at your fingertips.

### 4. Prep for Tests

Most colleges use scores from the SAT, SAT II, or ACT tests in making their admissions decisions. Check which tests the schools you're interested in require and sign up to take them in time to include the scores in your application. College for All Texans ([www.collegeforalltexas.com](http://www.collegeforalltexas.com)) also has a free ACT, SAT, and GRE prep course.

Spend time preparing for the tests before you walk into the room with your No. 2 pencils and calculator. Go through sample SAT questions at [www.collegeboard.org](http://www.collegeboard.org) or ACT tests at [www.actstudent.org](http://www.actstudent.org). There are also dozens of test-prep books you can buy, some including software that tracks your progress as you go through sample exams.

Remember: If you don't do well on a test the first time, you usually can take it again and try to improve your score.



# Inside College Admissions

### 5. Make a List of Colleges

Do you want to stay in Texas for college or see another part of the country? Would you be more comfortable at a big university or a small college?

Think about what you would like to study and what matters most to you (like location, size, or religious affiliation), and then start developing a list of colleges that fit your criteria.

Use online tools like [www.collegeforalltexas.com](http://www.collegeforalltexas.com) or [www.collegeboard.com](http://www.collegeboard.com) to learn more about each school and take online campus tours. Buy or borrow from the library some of the many college guides available. If possible, schedule visits to the schools you are interested in, or, through the school's admissions office, arrange an interview with a recent grad who lives in your area so you can ask questions about courses, faculty, or anything else.

By the fall of your senior year, narrow the list down to the top five or six choices. While some online applications are free, it can cost up to \$70 per school to apply, so be realistic about how much you can spend on applications.

### 6. Submit Polished Applications

Once you send in an application to a college there's no taking it back, so make sure you get it right the first time. Double-check your spelling. If you use the same essay for multiple schools, remember to change the name of the school to fit each application. Make sure you have any required standardized test results (ACT, SAT, SAT II) sent to each school.

Be neat and complete, and meet every deadline. Make copies of each application before you hit the send button or pop it in the mail. If you don't receive an email or postcard confirming that your application was received, contact the college to make sure it arrived. Items can get lost or misdirected, especially when thousands of students are sending in applications at the same time. By having copies, you can easily submit again.

**EVEN IF** you get accepted to college, you'll never be able to pay the bill, right? Wrong! There's financial aid available if you know where to look.

College isn't cheap. With tuition and room and board at private schools often topping \$40,000, and even in-state, public schools costing several thousand dollars a year, you may wonder why you should even apply.

Well, don't worry. Every Texas student can afford to go to college.

"Access and affordability of higher education can be intimidating to students and parents; however, there are numerous resources available to walk you through the process and into an exciting future," says Heather V. Crowson, vice president for enrollment management at Sam Houston State University.

The secret to getting the aid you need to go to school is in filling out the necessary forms, getting good grades, and applying to schools that offer generous financial aid packages. (A financial aid package consists of need- or merit-based scholarships and grants plus work-study jobs and low-interest student loans.)

Here's a quick overview of steps you can take to get the financial aid you need to continue your studies after high school. For more information about the aid available at a specific college or university, go to the school's website and click on the "Admissions and Financial Aid" link. Many schools provide an online form you and your parents can fill out that will give you the estimated financial aid package you might receive if accepted to that school.

**Apply:** You definitely won't get any financial aid if you don't apply. To figure out how much grant money (which you don't pay back) and loans (which you do pay back) you'll need to afford school, colleges use a formula that factors in your parents' income and investments, your income, the number of kids in the family who will be in college at the same time, and other financial information. Families of all income levels may receive aid, so fill out the forms.



# Financial Aid

## BASICS



All schools require the Free Application for Federal Student Aid (FAFSA), which determines eligibility for federal aid, such as work-study, Pell grants, and the Stafford loan program; and for college grants and, sometimes, merit scholarships. Complete the application as soon as possible at the beginning of October your junior year. FAFSA forms and instruction booklets are available in your guidance counselor's office, or you can complete the form online at [www.fafsa.ed.gov](http://www.fafsa.ed.gov).

Most private schools also require applicants to complete a school financial aid application and, in some cases, the CSS/Financial Aid Profile form (<https://student.collegeboard.org/css-financial-aid-profile>) which is used to award nonfederal student aid funds. Carefully read each college's application to determine financial aid deadlines and what forms you will need to submit.

**Study In-state:** Whether you choose a public or a private school, staying in-state for college will cut your costs considerably. Plus, since Texas covers 267,339 square miles, you can "go away" to college without ever leaving the state.

To help ensure that qualified Texas high school graduates with financial need can go to college, the State Legislature established the TEXAS (Towards Excellence, Access, and Success) Grant Program. Grants can be used to study at any public college or university in the state and are equal to the student's tuition and required fees. In 2012-2013, approximately 33,100 students received TEXAS Grants. To apply, fill out the FAFSA.

Another way to score some serious state aid is to get good grades in high school. Texas students who are in the top 10 percent of their graduating class are eligible for automatic admission to any public university in the state. With that automatic admission comes the opportunity to apply for merit scholarships and special programs available at each school.

### Take Two at a Community College:

The first two years of many college programs are filled with core courses that could easily be taken at a local community college for a lot less money. If you fill out all the forms, do the math, and still can't afford a four-year school, enroll in a community college for the first two years, then transfer to a four-year school.

By living at home, working part-time, and getting required courses out of the way, you could save tens of thousands of dollars in tuition and room and board, and be able to afford to attend the college of your choice for junior and senior years. For a complete list of the state's community colleges, go to the Texas Association of Community Colleges website at [www.tacc.org](http://www.tacc.org).

**Target Your Search:** Applying to a couple of colleges where your grades and talents put you near the top of the typical talent pool makes it more likely you'll qualify for merit aid and other special school scholarships and grants. Do a little research on college websites to find schools where your standardized test scores and grade point average rank you in the top 25 percent or so of the most recently accepted first-year class. Colleges want to attract the best and brightest students available, and often will offer attractive scholarship/grant/loan packages to convince those students to come to their school.

There are also more than 1 million local, national, and college-specific scholarships available each year. The trick is to find and apply for scholarships that best fit your strengths and talents. FastWeb ( ) is a free college scholarship search source. Register online and you will start receiving email notices about scholarships, internships, and other opportunities that fit the profile information you submit.



LOOK IT UP! Here are key words and phrases used in this guide that you may not already know.



# what does that mean?

**Articulation agreements:** formal agreements between or among educational organizations (high schools, community colleges, and universities) that align courses and majors in a way that allows students to transition from one institution to another without loss of course credit or time.

**Associate's degree:** a two-year degree awarded by a community or technical college.

**Bachelor's degree:** a four-year degree awarded by a university.

**Career and technical student organizations (CTSOs):** curricular organizations for students that offer activities and competitions related to particular careers.

**Career cluster:** a way of organizing curricula, instruction, and assessment around specific occupational groups (for example, Information Technology or Health Science) that offers students core academics, coursework related to specific occupations, and extended learning experiences.

**Master's degree:** a degree awarded by universities for study beyond a bachelor's degree.

**Career guidance:** structured developmental experiences presented systematically from kindergarten through 12th grade that help students analyze and evaluate abilities, skills, and interests.

**Career portfolio:** a collection of student work indicating progress made in subjects, activities, or programs. In career cluster systems, portfolios are often used to assess student performance in extended learning experiences.

**Doctoral degree:** a degree awarded by universities for study beyond a master's degree. Also referred to as a Ph.D. or professional degree.

**Dual credit:** credit given in both high school and college for college-level courses taken while in high school.

**Extended learning experiences:** participation in career and technical student organizations, extracurricular activities, job shadowing, internships, or service learning.

**Financial aid:** scholarships, grants, loans, and work-study funds awarded to students to pay for college expenses.

**Internship:** an extended learning experience in which students work temporarily at entry-level jobs in careers that interest them.

**Job shadowing:** an extended learning experience in which students observe professionals in particular careers as they go through a day on the job.

**Postsecondary education:** education beyond high school. Middle school and high school are referred to as secondary education, so postsecondary means after high school.

**Program of study:** a way of organizing the curricula and educational activities within a career cluster related to a student's specific academic and career goal.

**Service learning:** an extended learning experience in which students do volunteer work related to their career goals.

**Targeted industry clusters:** six industry clusters that have been identified by Texas as high-demand, high-growth sectors paying high wages. As they are developed by the State, these may be hot areas in which to build a rewarding career.

**Program of Study:** an education plan suggesting the high school courses a student should take to prepare successfully for graduation and transition into postsecondary education. The vision for Texas CTE is that eighth graders, in consultation with their parents/guardians, counselors, and teachers, will select a program of study and create a plan. Plans are to be reviewed and revised at least once each school year.





# Online Info

Explore these Internet resources for more about your education and career options.

### America's Career InfoNet

[www.acinet.org/acinet](http://www.acinet.org/acinet)

This is the place to search for occupational information, industry information, and state-specific labor market information.

### College for All Texans

[www.collegeforalltexans.com](http://www.collegeforalltexans.com)

Here is everything a Texan needs to know about preparing for, applying for, and paying for college or technical school. And it's all in one up-to-date, easy-to-navigate mega-site almost as big as the state itself. Remember: \$4 billion is available every year to help Texans attend college.

### Employability Skills Framework

<http://cte.ed.gov/employabilityskills/>

Employability skills are general skills that are necessary for success in the labor market at all employment levels in all sectors. The Employability Skills Framework is a one-stop resource for information and tools to inform the instruction and assessment of employability skills.

### My Next Move

[www.mynextmove.org/](http://www.mynextmove.org/)

This is a career planning resource for students, parents, career changers, and career advisors.

## TEXAS CAREER CHECK

The State of Texas has created a special website for students and others researching careers. It's called Texas Career Check. Texas Career Check lets you explore higher education options by looking at detailed information by school and program of study, AND you can explore careers, occupational information, and postsecondary education options. You'll find a wealth of information about hundreds of career choices. To explore Texas Career Check, go to [www.texascareercheck.com](http://www.texascareercheck.com).

### O\*NET

(Occupational Information Network)

[online.onetcenter.org](http://online.onetcenter.org)

Also available in schools and libraries, O\*NET provides full information on occupations, including compensation, employment prospects, and skill matching for students. Information on compensation is available on a state-by-state basis.

### U.S. Department of Labor Occupational Outlook Handbook

[www.bls.gov/home.htm](http://www.bls.gov/home.htm)

This nationally recognized resource offers information on job responsibilities, earnings, working conditions, and job prospects for the future.

# Take a Reality Check

The Texas Workforce Commission has created an online resource called Reality Check to help you understand how much money you'll need to live on your own after high school or college and how you can earn it. There are three ways to explore careers, expenses, and earnings. For the first option, which is called "Get a Reality Check," you choose an area you'd like to live in, such as Austin. You then go through a series of screens with real-world costs for items such as housing, clothing, transportation, health care, and personal expenses. The site automatically adds up your estimated monthly expenses, then uses salary information for Texas to show you careers that will make you that much money. The second option, called "Future Salary," starts with the wages you expect to earn, what education you plan to pursue, and the career cluster that interests you. Then it generates a list of careers in which you can make that amount of money. The third option, "Occupation Direct," begins with your occupational choice and the area where you want to live, then shows how your estimated expenses subtract from the salary for your chosen job. The site, which is at [www.careerwise.mnscu.edu/careers/realitycheck.html](http://www.careerwise.mnscu.edu/careers/realitycheck.html), is a great way to play "what if" when it comes to mixing your job, earnings, and expense options.



The results of Reality Check show you how expenses add up quickly when you are living on your own.

# Texas CTE Career Clusters



**Agriculture,  
Food &  
Natural  
Resources**

Processing, production, distribution, and development of agricultural commodities and natural resources



**Architecture &  
Construction**

Designing, managing, building, and maintaining the built environment



**Arts, A/V  
Technology &  
Communications**

Creating, exhibiting, performing, and publishing multimedia content



**Business  
Management &  
Administration**

Organizing, directing, and evaluating functions essential to productive business operations



**Education &  
Training**

Providing education and training services, and related learning support services



**Finance**

Financial and investment planning, banking, insurance, and business financial management



**Government  
& Public  
Administration**

Executing governmental functions at the local, state, and federal levels



**Health Science**

Providing diagnostic and therapeutic services, health informatics, support services, and biotechnology research



**Hospitality  
& Tourism**

Managing restaurants and other food services, lodging, attractions, recreation events, and travel-related services



**Human  
Services**

Providing for families and serving human needs



**Information  
Technology**

Designing, supporting, and managing hardware, software, multimedia, and systems integration



**Law,  
Public Safety,  
Corrections  
& Security**

Providing legal, public safety, protective, and homeland security services



**Manufacturing**

Processing materials into intermediate or final products



**Marketing**

Performing marketing activities to reach organizational objectives



**Science,  
Technology,  
Engineering &  
Mathematics**

Performing scientific research and professional and technical services



**Transportation,  
Distribution  
& Logistics**

Managing movement of people, materials, and goods by road, pipeline, air, rail, and water

## About Texas CTE

You may have seen the name Texas CTE on the cover of this magazine. What exactly is that?

Texas CTE is the name of Texas' college and career education initiative. The idea behind it is simple: Planning for the future so that students achieve lifelong success. As Texas CTE grows, you'll see how subjects such as English, math, science, and social studies are relevant to your personal goals and ambitions. You'll get the chance to begin a plan that gets you where you want to go in life. You'll have the opportunity to take courses and engage in extended learning experiences that give you marketable skills. Best of all, you'll be in control of your future. Read all 16 editions of Texas CTE in Action (available through your counselor) to explore Texas' career clusters and start on the road to success.