

# Tyler ISD Career and Technical Education

## Career Clusters & Programs of Study












*CTE, Putting Student Achievement First!*







# The Career Clusters of Tyler ISD

## *Achieve Texas*

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

	<p>The production, processing, marketing, distribution, financing, and development of agricultural commodities and resources including food, fiber, wood products, natural resources, horticulture, and other plant and animal products/resources.</p>
	<p>Careers in designing, planning, managing, building and maintaining the built environment.</p>
	<p>Designing, producing, exhibiting, performing, writing, and publishing multimedia content including visual and performing arts and design, journalism, and entertainment services.</p>
	<p>Business Management and Administration careers encompass planning, organizing, directing and evaluating business functions essential to efficient and productive business operations. Business Management and Administration career opportunities are available in every sector of the economy</p>
	<p>Planning, managing and providing education and training services, and related learning support services.</p>
	<p>Planning, services for financial and investment planning, banking, insurance, and business financial management.</p>
	<p>Planning, managing, and providing therapeutic services, diagnostic services, health informatics, support services, and biotechnology research and development.</p>
	<p>Hospitality &amp; Tourism encompasses the management, marketing and operations of restaurants and other foodservices, lodging, attractions, recreation events and travel related services.</p>
	<p>Preparing individuals for employment in career pathways that relate to families and human needs.</p>
	<p>Building Linkages in IT Occupations Framework: For Entry Level, Technical, and Professional Careers Related to the Design, Development, Support and Management of Hardware, Software, Multimedia, and Systems Integration Services.</p>
	<p>Planning, managing, and providing legal, public safety, protective services and homeland security, including professional and technical support services.</p>

 <p><b>Manufacturing</b></p>	<p>Planning, managing and performing the processing of materials into intermediate or final products and related professional and technical support activities such as production planning and control, maintenance and manufacturing/process engineering.</p>
 <p><b>Marketing, Sales &amp; Service</b></p>	<p>Planning, managing, and performing marketing activities to reach organizational objectives.</p>
 <p><b>Science, Technology, Engineering &amp; Mathematics</b></p>	<p>Planning, managing, and providing scientific research and professional and technical services (e.g., physical science, social science, engineering) including laboratory and testing services, and research and development services.</p>
 <p><b>Transportation, Distribution &amp; Logistics</b></p>	<p>Planning, management, and movement of people, materials, and goods by road, pipeline, air, rail and water and related professional and technical support services such as transportation infrastructure planning and management, logistics services, mobile equipment and facility maintenance.</p>

## Goals of Achieve Texas' Career Clusters and Programs of Study

- ✿ Career Clusters and Programs of Study (POS) are an integral part of the Texas education system.
- ✿ Every student prepares a personalized graduation plan in middle school to plan for grades 9–16 and beyond. The student chooses a Career Cluster and POS to guide his or her learning in the context of personal career interests. Plans are evaluated and updated annually.
- ✿ Clusters span all grades (P–16+). Career awareness begins in elementary school and transitions into career exploration in middle school. Career concentrations in high school help students transition into career preparation in postsecondary. All participants experience career advancement in employment.
- ✿ The education system is seamless between high school and postsecondary institutions. Students have opportunities in a POS to earn dual credit and articulated credit that flows seamlessly into postsecondary education or training.
- ✿ Partnerships are in place throughout the system. Partnerships are established statewide and locally between business and education. Educational institutions form meaningful partnerships.
- ✿ Academics are woven throughout the P–16+ curriculum. There is an integration of academic and technical knowledge and skills within the curriculum. Interdisciplinary teaching takes place and academics are taught in context. Curriculum alignment occurs between secondary and postsecondary education.
- ✿ Career guidance is dramatically enhanced. All students have access to quality assessment and career information resources. Career counseling is provided with a strong emphasis on career and college readiness.
- ✿ All students take part in extended learning opportunities. Every student chooses extended learning experiences such as service learning, internships, apprenticeships, and work-based learning.
- ✿ Professional development supports the cluster system. Professional development is a critical part of the teacher's career. Schools of education train teachers for the cluster system.

# Choosing a Career Pathway

## *Career Clusters, Programs of Study, & Bridges*

Jobs in the twenty-first century will require both high academic and technical skills because of ever-changing technology. Society will see many new job titles and work areas added each year. That makes it especially important for students to begin thinking early about what types of occupations they might want to pursue and then plan a rigorous high school program that will give them more opportunities for success.

The Tyler ISD Achieve Texas' Career Clusters and Career Pathways initiative is a customized program designed to help students plan their future. The Achieve Texas Career pathways is incorporated and aligned into our Bridges career planning system. The application of the Bridges program encourages students to pursue rigorous instruction, regardless of their grade level or intellectual ability. The Tyler ISD instructional program is structured much like society is at large. A key component of the concept is to set high, but realistic expectations. The Achieve Texas Pathway initiative incorporated into the Bridges program allows students to connect school-based and work-based learning. This process helps makes education more relevant to youth and encourages students to remain in school and graduate. A major goal of the District is to assure relevancy and meaning in the delivery of basic skills, especially math, science, social studies, and English.

## Programs of Study

### *Career Pathways for Personalized Education Plans*

An Achieve Texas Career Pathway includes course work within a Program of Study that is academic, technical, and occupational in nature. Career exploration within Programs of Study may lead either to job placement or to the realization that additional knowledge and skills are needed to enhance a student's employability or future educational goals. Studies show that students with career goals have significantly higher self-concepts and life successes than do students without career goals.

The purpose and objectives of this program are accomplished by providing all students in the Tyler Independent School District with numerous ways to be successful in their endeavors to prepare for their journey from school-to-work. Some of the objectives that the Career Pathways concept helps students to develop are as follows:

- Explore the correlation and relevancy between academic preparation and career planning
- Analyze their abilities, aptitudes, and interests as related to career development
- Examine how society's needs influence the nature and structure of work
- Develop individual academic and career goals that are based on the relationship between educational achievement and career planning
- Select courses oriented toward career goals
- Develop skills to locate, evaluate, and interpret career information
- Develop skills to seek, obtain, maintain, and change careers
- Develop an awareness of the need for a positive attitude towards work

# Achieve Texas Clusters

Tyler ISD offers 15 Career Clusters which are organized around broad career fields. The 15 Career Clusters of Tyler ISD are:

- Agriculture, Food & Natural Resources
- Architecture & Construction
- Arts, A/V Technology & Communications
- Business, Management & Administration
- Education & Training
- Finance
- Health Science
- Hospitality & Tourism
- Human Services
- Information Technology
- Law, Public Safety, Corrections and Security
- Manufacturing
- Marketing, Sales & Service
- Science, Technology, Engineering & Mathematics
- Transportation, Distribution & Logistics

With careful consideration and discussion, each student can identify a specific and individualized cluster and then a “path.” There are several individual career pathways options in the 14 career clusters. Students are urged to carefully consider the questions at the beginning of each cluster/pathway. When one or more cluster/pathway appears interesting, students should look carefully at the possible degrees, careers, and working conditions associated with these area(s). Then, students should consider the related high school elective courses that will help them prepare for each pathway. Students will need to study their elective options. The final selection of each pathway presents related community and school activities that will benefit the student if he/she chooses to participate in such activities.

Each student in grades 8-12 is given a password to access the Bridges program in order to access their individualized student portfolio. Their portfolio contains their assessment results, four-year plans, activities, career choices, journal reflections, post-secondary college plans, scholarship opportunities and other career/educational data. In addition, parents are strongly encouraged to explore their student’s portfolio. Parents will be able to obtain information about their student’s career interest/goals and selection of high school courses. Parents will be able to assist their student with long range educational and career goals.

All of the identified career pathways include challenging, relevant courses that provide roadmaps to future career goals. Additionally, because all students take a “core foundation” of academic courses, career pathways overlap enough to allow the flexibility to change “paths” if interests change or new knowledge and skills are acquired. In every pathway, students will continue to take the core curriculum courses that provide all students with the courses necessary to enter most post-secondary institutions.

Student portfolios should be visited several times each year to insure that students are making progress towards obtaining their defined goals.

In addition, the school-to-careers Career Pathways Program includes the following components:

- Student's opportunity for dual credit and articulation with the community colleges
- Internships
- Career Preparation/Cooperative training opportunities
- On-the-job shadowing
- Clinical rotations
- Career fairs
- Field trips
- Career symposiums
- Business/Industry guest speakers
- Career counseling and guidance

## Career Assessment and Planning

Today, and for the future, students will need high-level workplace skills and knowledge, and they will need to use their personal resources and assets for career stability. Their economic security and financial independence may be the result of the educational or career choice they make today.

The curriculum associated with Achieve Texas/Bridges Career Pathways is broad areas of study that are flexible enough to allow students to change as they acquire new knowledge and experience. Using students' interests and aptitudes identified in the 8<sup>th</sup> grade, parents, counselors, teachers, or other district professionals can help students develop a graduation plan in an appropriate pathway.

Each 8<sup>th</sup> grader uses the Achieve Texas/Bridges Career Program to develop their long range academic and career goals. The assessment and planning features of this program gives access to an Interest Profiler that allows students to measure their occupational interest, and explore future work possibilities. They also have a Transferable Skills Checklist which helps students develop career plans as they understand activities of the worker that relate to data, people, and things. Also, students use the Work Importance/Work Values Sorter. This instrument allows students to explore job/career satisfaction issues. Finally, students are able to assess skills they can successfully perform by using the Bridges Basic Skills Survey. These assessments and planning tools help students as they prepare to move from middle school to high school.

## Workforce Skills & Competencies

A joint project conducted by the U.S. Department of Labor and the U.S. Department of Education has produced several reports intended to identify the skills that workers in the future need to bring to the workplace. The first report produced by this joint project in 1991, "What Work Requires of Schools," identified what students and workers need to know and be able to do in order to succeed in the workplace. Below are the foundation skills and the workplace competencies identified by the Secretary's Commission on Achieving Necessary Skills (SCANS) that competent workers will need as they cope with numerous changes during their adult work lives.

# Foundation Skills

**Competent workers in the high performance workplace need:**

- **Basic Skills**  
Reading, writing, arithmetic, speaking, and listening
- **Thinking Skills**  
The ability to learn, to reason, to think creatively, to make decisions, and to solve problems
- **Personal Qualities**  
Individual responsibility, self-esteem and self-management, sociability, and integrity

# Workplace Competencies

**Effective workers can productively use:**

- **Resources**  
They know how to allocate time, money, materials, space, and staff
- **Interpersonal Skills**  
They can work on teams, teach others, serve customers, lead, and work well with people from culturally diverse backgrounds
- **Information**  
They can acquire and evaluate data, interpret and communicate, and use computers to process information
- **Systems**  
They understand social, organizational, and technological systems; they can monitor and correct performance; and they can design or improve systems
- **Technology**  
They can select equipment and tools, apply technology to specific tasks, and maintain and troubleshoot equipment

The skills and competencies previously described clearly show that students should plan a rigorous high school program that will provide the foundation for continued learning beyond high school.

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It is the policy of Tyler Independent School District not to discriminate on the basis of race, color, national origin, sex, or handicap in its vocational programs, services, or activities as required by Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Education Amendments of 1972; and Section 504 of the Rehabilitation Act of 1973, as amended.

It is the policy of Tyler Independent School District not to discriminate on the basis of race, color, national origin, gender, handicap, or age in its employment practices as required by Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Education Amendments of 1972; the Age Discrimination Act of 1975, as amended; and Section 504 of the Rehabilitation Act of 1973, as amended.

Tyler Independent School District will take steps to assure that lack of English language skills will not be a barrier to admission and participation in all educational and vocational programs.