Science, Technology, Engineering & Math

Can you imagine YOURSELF here?

CHEMICAL TECHNICIAN

Projected number of jobs in Texas by 2028:

7,300

Typical credentials:

Associate's Degree

Typical starting pay:

$36,293

Average pay:

$60,900

Explore your future with THE FOUNDATION HIGH SCHOOL PROGRAM

FOUNDATION HIGH SCHOOL PROGRAM (FHSP)

A plan of 22 credits you and all your classmates will have to earn to graduate high school. (See page 5)

ENDORSEMENT

An option you can add to your high school transcript to show your knowledge and skills gained in one of five areas: STEM, Arts & Humanities, Business & Industry, Public Services, and Multidiscilpinary Studies.

You must complete specific courses approved by your district.

ENDORSEMENT QUESTIONS?

Talk to your school counselor!

FIGURING OUT WHAT YOU WANT TO DO
when you grow up is a challenge, but it's worth it!

With the Foundation High School Program's endorsement options, you have the opportunity to explore classes that interest you today so you can find your dream job tomorrow. In many of these courses, you will even get to experience what it's like to work in the jobs that interest you.

Remember: you have options, probably more than you have ever considered. Maybe you're interested in the medical field, but not sure if you want to be a medical doctor. You could also consider being a registered nurse, medical lab technologist, or nutritionist.

Did you know some medical field jobs only require a two-year college degree and certification? Yep, like a cardiovascular technologist, veterinary technician, diagnostic medical sonographer, and physical therapy assistant, just to name a few.

ARCHITECT

Jobs projected in Texas by 2028:

12,701

Typical credentials:

Bachelor's Degree

Typical starting pay:

$50,449

Average pay:

$94,028

APP DEVELOPER

Jobs projected in Texas by 2028:

89,736

Typical credentials:

Bachelor's Degree

Typical starting pay:

$73,327

Average pay:

$107,939

So go exploring! Research your endorsement and career interest options before deciding which paths to pursue. The decisions you make about your education today will affect how well you enjoy your job in the future, how much money you earn, your future lifestyle, and so much more. So think it through, plan your future, and have fun!

VISIT
texasworkforce.org/labormarket
to see which products best suit your needs

For more information on jobs in STEM:

GO TO
texascareercheck.com &
click "Explore Careers"

CALL
1-800-822-PLAN (7526)
Career Info Hotline

So, you think you might want to select the Foundation High School Program's STEM endorsement option? Awesome! Browse through some of the data for Science, Technology, Engineering and Math job titles in this booklet to help you decide if this is the right educational and career path for you.

We hope that by learning all you can about potential careers in the fields that interest you, you will be empowered to find a career that you love, and that also pays for you to live the way you want once you are living on your own. So enjoy this booklet, explore some options, and don't hesitate to talk to your parents, family, friends, teachers, counselors, and us at the Texas Workforce Commission if you have questions about your career goals.

Information Technology
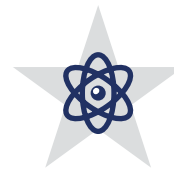
Health Science

Human Services

Architecture & Construction

Manufacturing

Education & Training

STEM

Agriculture, Food & Natural Resources

Transportation, Distribution & Logistics

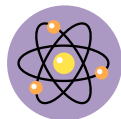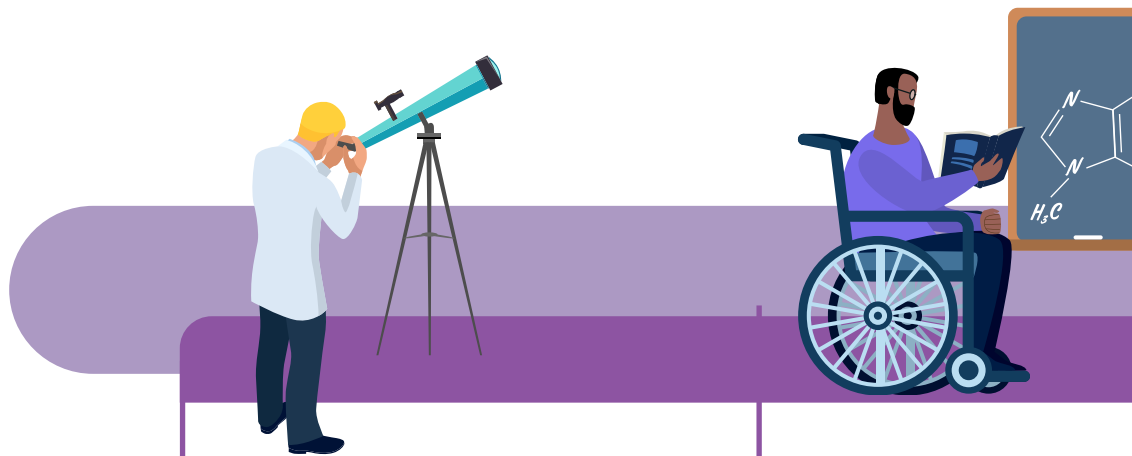**Arts, A/V Technology & Communications**

Business, Marketing & Finance

TO THE RIGHT

are some sample occupations under the STEM endorsement. Not all STEM-related occupations are included here (there are hundreds), and some of those listed may also fall under other endorsements.

VISIT

TWC's Autocoder website at www. Bit.Ly/autocoder to find other job titles that may interest you! Just enter a job title or description in the search field and common titles will populate. Upon selecting one, a catalog of other closely related job titles will appear.
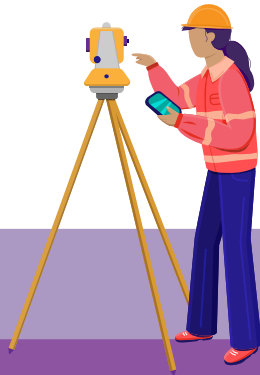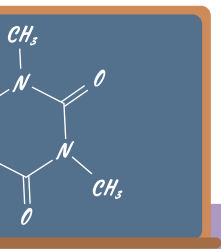
SCIENCE

- Astronomer
- Biochemist/ Biophysicist
- Biomedical Researcher
- Cellular Biologist
- Chemist
- Environmental Scientist
- Food Scientist
- Forensic Scientist
- Forester
- Geneticist
- Hydrologist
- Meteorologist

TECHNOLOGY

- App Developer
- Computer Engineer
- Computer Hardware Engineer
- Computer Network Architect
- Computer Network Specialist
- Computer Programmer
- Computer Research Scientist
- Computer Systems Analyst
- Database Administrator
- Graphic Designer
- Information Security Analyst
- Multimedia Animator

MATH

- Accountant
- Actuary
- Auditor
- Biostatistician
- Budget Analyst
- Cartographer
- Credit Analyst
- Economist
- Financial Manager
- Loan Officer
- Mathematician
- Surveyor

HEALTH SCIENCE

- Anesthesiologist
- Chiropractor
- Dental Hygienist
- Family Practitioner
- Health Service Manager
- Medical Lab Technician
- Medical Records Technician
- Medical Sonographer
- Nutritionist
- Optometrist
- Pharmacist
- Physical Therapist

ENGINEERING

- Aerospace Engineer
- Automotive Engineer
- Chemical Engineer
- Civil Engineer
- Drafter
- Electrical Engineer
- Industrial Engineer
- Marine Architect
- Mechanical Engineer
- Mining Engineer
- Nuclear Engineer
- Petroleum Engineer

FHSP GRADUATION REQUIREMENTS

This table shows what every Texas student needs to graduate. Every student must earn the 22 credits under the "FHSP" column. Your parents or guardians will need to give the school district written permission to allow you to waive earning an endorsement. Otherwise, you must pick an endorsement and earn the total 26 credits to graduate. Remember that your school district has the authority to establish requirements in addition to those listed here. Check with your school counselor for more information.

Courses Required for FHSP Credits	FHSP Credits	FHSP Credits + Endorsement Credits	Distinguished Credits
ENGLISH English I, II, and III Advanced English course	4	4	4
MATH Algebra I Geometry Advanced Math course	3	4 all Foundation-Only +1 advanced Math	4 all Foundation-Only +Algebra II
SCIENCE Biology Integrated Physics & Chemistry Advanced Science course	3	4 all Foundation-Only +1 advanced Science	4 all Foundation-Only +1 advanced Science
SOCIAL STUDIES U.S. History U.S. Government (1/2 credit) Economics (1/2 credit) World History or Geography	3	3	3
PHYSICAL EDUCATION	1	1	1
LANGUAGES OTHER THAN ENGLISH 2 credits in the same language or 2 credits from Computer Science I, II, & III	2	2	2
FINE ARTS	1	1	1
ELECTIVES Classes available for electives may be based upon the endorsement options selected by the student	5	7	7
SPEECH Demonstrated proficiency	0	0	0
TOTAL CREDITS	22	26	26

Students can earn one or more performance acknowledgments in addition to their high school graduation plan. There are several different areas in which students can earn these performance acknowledgments, shown below.

Performance Acknowledgments Can Be Earned With The Following:

1 A nationally (or internationally) recognized business/industry certification or license

2 Advanced Placement or International Baccalaureate exam performance

3 PSAT, ACT Aspire, SAT, or ACT score

4 Bilingualism and biliteracy

5 Dual credit courses

If you are interested in earning one (or more!) of the above performance acknowledgements in addition to your high school graduation plan, have a conversation with your parent or guardian about which options are best for your future. Reach out to a counselor at school to find out more about specific guidelines concerning performance acknowledgments at your institution.

Students may earn one or more endorsements as part of their high school diploma. This means students interested in earning the STEM endorsement have options. Please see the information below for more detailed information on endorsements.

- **An endorsement consists of a sequence of courses that are grouped together by interest or occupational skill. They provide students with in-depth knowledge of a subject area or a high-wage, high-skill, and in-demand occupation.**

- **Every career and technical education (CTE) Program of Study leads to an endorsement. Use this link to see how CTE Programs of Study align to different endorsements: www.Bit.Ly/2YF42Uq**
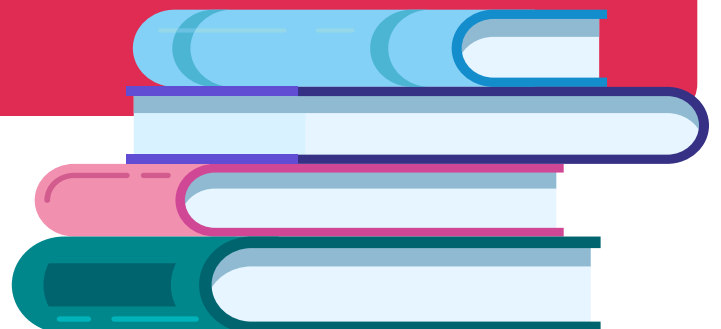
- **Students earn an endorsement by:**
  - o Completing four credits in math
  - o Completing four credits in science
  - o Earning two additional elective credits, and
  - o Completing the curriculum requirements for the endorsement.

- **To earn the STEM endorsement, students must complete a sequence of courses in one of the following areas, or a combination of courses from no more than two areas:**
  - o CTE STEM courses or an approved STEM-related Program of Study
  - o Mathematics
  - o Science

Keep In Mind

The career titles listed here are just a fraction of all the possible occupation opportunities available in the STEM endorsement area, so be sure to visit TWC's AutoCoder website to find other job titles that may interest you: www.Bit.Ly/autocoder.

VETERINARIAN

Jobs projected in Texas by 2028:

6,871

Typical credentials:

Doctoral Degree

Typical starting pay:

$68,487

Average pay:

$125,276

AUDITING CLERK

Jobs projected in Texas by 2028:

152,300

Typical credentials:

High School Diploma

Typical starting pay:

$27,930

Average pay:

$41,924

ENVIRONMENTAL SCIENTIST

Jobs projected in Texas by 2028:

5,296

Typical credentials:

Bachelor's Degree, Master's preferred

Typical starting pay:

$49,201

Average pay:

$77,428

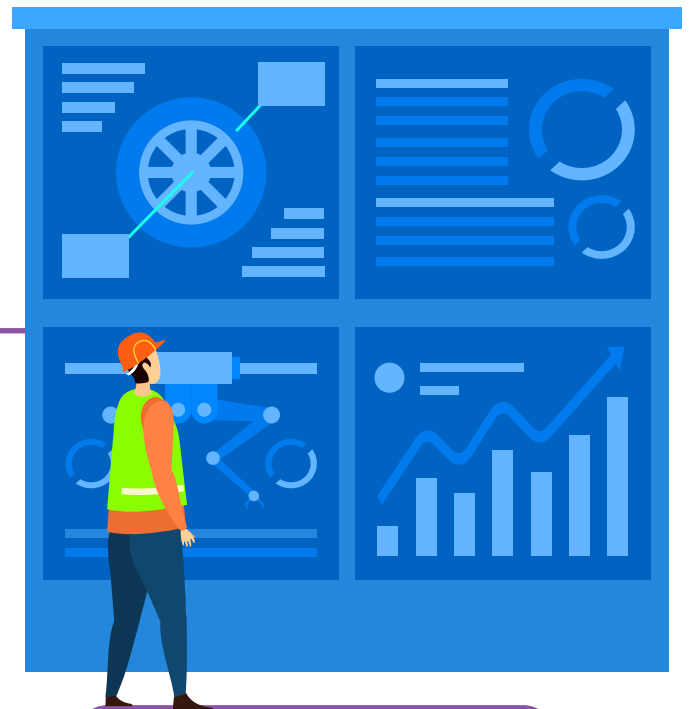## Using Labor Market Statistics to Filter Through Career Options

It is important to think about how much money you'll earn in any given occupation. But you should consider several other factors to help you make informed choices. Check out the information and numbers below for a few jobs in the Science, Technology, Engineering and Math fields to see other important statistics you can discover on the Texas Career Check website, www.TexasCareerCheck.com. Use this information to help you determine what's important to you in a career.

YOU WILL:

Plan, design and oversee construction and maintenance of structures and facilities like roads, railroads, airports, bridges and more.

A bachelor's degree is sufficient for most starting positions, but some research positions may require a graduate degree. Starting salaries are among the highest of all college graduates.

Continuing education is needed for engineers to keep up with technological advancements.

CIVIL ENGINEER

Jobs projected in Texas by 2028:

29,137

Typical credentials:

Bachelor's Degree

Typical starting pay:

$56,943

Average pay:

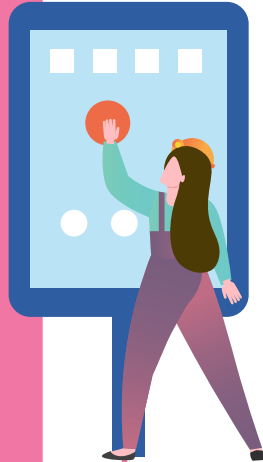**$96,483**

YOURSELF HERE?

COMPUTER-CONTROLLED MACHINE OPERATOR

Jobs projected in Texas by 2028:

Typical credentials:

Typical starting pay:

Average pay:

YOU WILL:

Assess patient health problems and needs, plan and administer nursing care to ill, injured, convalescent, or disabled patients, and more.

The largest healthcare occupation, with 2.7 million jobs nationwide. About 60 percent of jobs are in hospitals. Licensing or registration required. Depending on specialization, may require as little as an Associate degree or as advanced as a Master's.

Excellent opportunities, may vary by employment and geographic location.

YOU WILL:

Operate computer-controlled machines or robots to perform one or more machine functions on metal or plastic work pieces.

Manufacturing industries employ almost all of these workers. Workers learn in apprenticeship programs; informally on the job; and in secondary, vocation, or postsecondary schools.

Expect stiff competition for these jobs.

REGISTERED NURSE

Jobs projected in Texas by 2028:

252,330

Typical credentials:

Associate's Degree

Typical starting pay:

$56,063

Average pay:

$74,539

DENTAL HYGIENIST

Jobs projected in
Texas by 2028:

19,144

Typical credentials:

Associate's Degree

Typical starting pay:

$61,824

Average pay:

$76,490

PHARMACIST

Jobs projected in
Texas by 2028:

23,660

Typical credentials:

Professional Degree

Typical starting pay:

$100,164

Average pay:

$127,316

NUCLEAR TECHNICIAN

Jobs projected in
Texas by 2028:

263

Typical credentials:

Bachelor's Degree

Typical starting pay:

$51,706

Average pay:

$78,604

TEXAS WORKFORCE COMMISSION
Education Outreach
101 E. 15th Street, Room 354, Austin, TX 78778-0001
Hotline: 800-822-7526 (toll free) | Fax: 512-961-4861
Email: careerinformation@twc.texas.gov

Equal Opportunity Employer/Program. Auxiliary aids and services are available upon request to individuals with disabilities. Relay Texas: 800-735-2989 (TTY) and 711 (Voice).

www.lmci.twc.texas.gov | www.texasrealitycheck.com | www.twc.texas.gov