Statistics
@ Tarleton

Hands-on Learning

Research

Study Abroad

Start working on your future today!

A Great Career

"Statisticians are slated to grow 33% by 2029 and has a median salary of $92,270 (May 2020)." – The Bureau of Labor and Statistics

IMPORTANT – Math Placement

For students wishing to start in **Calculus 1** (MATH 2413) placement is by

- qualifying score on the NextGen AAF (a mathematics placement exam), or
- college credit for Trigonometry (MATH 1316), or
- college credit for Precalculus (MATH 2412).

Take the NextGen AAF math placement!
It's free at the **Center for Academic Testing**. **(254) 968-9423**

Possible Career Titles

Actuary, Business Analyst, Data Analyst/Scientist, Economist, Environmental Scientist, Investigator, Manager, Pharmaceutical Engineer, Project Manager, Quality Analyst, Researcher, Risk Analyst, Software Engineer, and, of course, Statistician
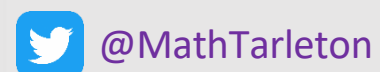
Department of Mathematics

Box T-0470 Stephenville, Texas 76402
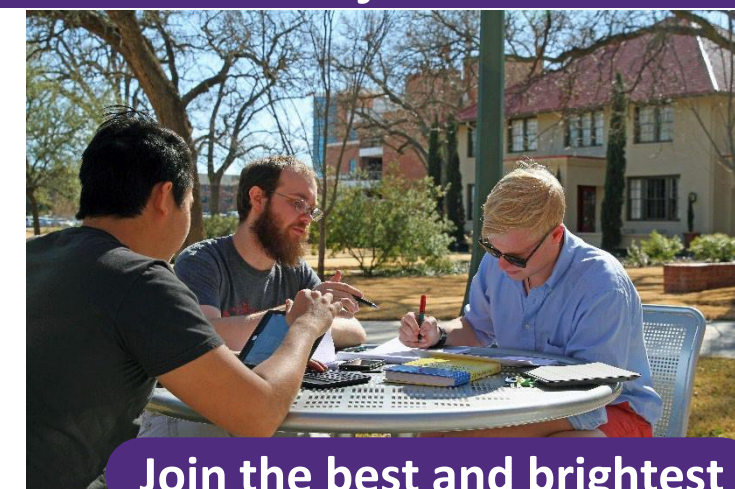Phone: 254-968-9168 | www.tarleton.edu/math

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Statistics
Major Action Plan

Discover Statistics

Statistics is utilized in many different fields including actuary, agriculture/animal science, astronomy, biology, business, census/demography, economics, education, engineering, government, health science, journalism, marketing, sociology, sports, telecommunications, and transportation. All such jobs involve the collecting, analyzing, modeling, inferring, and presenting conclusions about data.

Best STEM Jobs for 2022

"Actuarial science, data scientist, operations research analyst, and s**tatistician are in the top 15 jobs**." – US News

Join the best and brightest

"Participate in an exciting new degree, built with the modern student in mind which utilizes the cutting-edge techniques to address real world problems." - Dr. Keith E Emmert, Professor

Statistics Concentration

- **Pre-Actuarial** –The discipline that applies mathematical and statistical methods to assess risk in the insurance and finance industries. It is consistently listed by the Wall Street Journal as the "Best Job" to have in the United States.
- **Data Analyst / Scientists** – The **best job in** America, according to Glassdoor. The field is new and growing. What is it? Think artificial intelligence, self-driving cars, auto generating books, painting, music. But in simple terms, using mathematics to analyze data to find patterns and generate new insights that helps your company make money.
- **Biostatistics**– Combines Biology and Statistics. Learn how to create and analyze statistical models which can predict the spread of disease, perform endangered species modeling, or analyze DNA in our world.
- **Mathematics** – Combine Mathematics and Statistics to become even more marketable. Allows you to create and analyze mathematical as well as statistical models.
- **Business** – Could choose, marketing, finance, logistics, etc.

Learn More about Statistics

- American Statistical Association: https://www.amstat.org/
- This is Statistics: https://thisisstatistics.org/

Excellence • Integrity • Respect

Statistics Major Action Plan

How to use this MAP

Use the Columns and rows to help you navigate your engagement in your program, university, and future profession.

This MAP will

- Guide you
- Inform you
- Motivate you
- Encourage you to get involved
- Provide a plan
- Help you hone your marketable skills and prepare you for your career.

1st Year

Get Your Courses

Complete at least 30+ credit hours including
- First Year Seminar.
- Calculus 1 & 2.
- Foundations of Math.
- Procedural Programming.

See an **Advisor** to choose a concentration and file your degree plan.

Get Experience

- Visit with **Faculty** to *learn about* and *participate in* their research.
- Experience campus events.
- Use Academic Resources: **Math Clinic**, Science Clinic and Writing Center.
- **Work** as a grader or tutor in the Math Clinic.

Get Involved

- Join a club such as **Math Club** or **T.E.A.M**.
- Explore student organizations in TexanSync.
- Participate in Service Day, Tarleton Roundup and other service activities.
- Attend a local research symposium.

Get Ready

- Attend job and internship fairs.
- Update your FAFSA and Scholarship application every year.

2nd Year

Get Your Courses

- Accumulate 60+ hours.
- Important prerequisites – See your 8 semester plan.
- See an **Advisor.**
- Visit with **Faculty** for mentoring

Get Experience

- **Participate in undergraduate research with Faculty.**
- **Apply** to work as a **grader or tutor** in the Math Clinic.
- Develop your resume (Career Services).
- Apply for a Summer R.E.U. (Research Experience for Undergraduates).

Get Involved

- Be active and consider serving in a leadership role in a club such as T.E.A.M or Math Club.
- Participate in service activities.
- Attend a local research symposium or a regional conference.

Get Ready

- Update and polish your resume.
- Explore career opportunities
- Attend job and internship fairs.
- Update your FAFSA and Scholarship application yearly.
- Consider taking Exam-P (Probability) or Exam-FM (Financial Mathematics)

Explore Job Opportunities in the Math Clinic

3rd Year

Get Your Courses

- Accumulate 90+ hours.
- Important prereqs – See your 8 semester plan.
- See an **Advisor.**
- Consider graduate school opportunities.
- Visit with **Faculty** for mentoring

Get Experience

- **Participate in undergraduate research and/or an internship.**
- Work as a grader, tutor, etc.
- Polish your resume.
- Participate in Tarleton and TAMUS Career Fairs.
- Develop professional references/portfolio website.
- Apply for a Summer R.E.U.

Get Involved

- Serve in a leadership role in a club
- Consider presenting at a research symposium.
- Participate in Kaggle/ASA Competition
- Participate in professional networking activities and service activities.

Get Ready

- Plan your job-search and hone your interview skills.
- See a **Graduate Advisor** about graduate degree opportunities and internships.
- Create a **LinkedIn** profile.
- Consider taking Exam-P or Exam-FM
- **Apply for Graduation!**

Pursue Internships or Research Experiences

Final Year

Get Your Courses

- Complete your degree requirements.
- See an **Advisor** for advising.
- Visit with **Faculty** for mentoring

Get Experience

- **Participate in undergraduate research and/or an internship.**
- Work as a grader, tutor, etc.
- Update your resume.
- Participate in Tarleton and TAMUS Career Fairs.
- Develop professional references./portfolio website

Get Involved

- Plan to present at a research symposium.
- Participate in Kaggle/ASA Competition
- Join a national organization such as the Society of Actuaries, Casualty Actuarial Society, or the American Statistical Association.

Get Ready

- Complete your job/graduate school search. Watch deadlines
- See a **Graduate Advisor** about opportunities for **graduate assistantships**.
- Consider taking Exam-IFM (Investment & Financial Markets)

GRADUATE!!

Do an Internship or REU ● Apply for Graduation!

Marketable Skills

- Problem solving, design and technical skills
- Communication and interpersonal skills
- Decision making
- Teaming skills
- Enthusiasm, perseverance and commitment
- R proficiency

Career Prep

Associate of the Society of Actuaries *or* Casualty Actuarial Society Pathway
- Introductory I (Exam-P & Exam-FM) & also grants certain VEE (Validation by Educational Experience) Certifications
- Introductory II (Exam-IFM)

Data Scientist
- Kaggle Competitions
- American Statistical Association Competitions
- Portfolio Website

Grad School:

Statistics or Mathematics discipline, including Data Science, Actuarial Science, Statistics, Med School, Law School