**Did You Know?**

New Engineers were among the highest paid in their graduating class of 2013!

- According to the U.S. Bureau of Labor statistics the field of engineering is expected to grow by 10 percent in the coming decade.
- More than half of the people who have an engineering degree work in other areas like medicine, law, investment banking, and consulting.

Imagine what life would be like without pollution controls to preserve the environment, lifesaving medical equipment, or low-cost building materials for fighting global poverty. All this takes engineering. In very real and concrete ways, engineers save lives, prevent disease, reduce poverty, and protect our planet.

**Engineering Trivia Time!!!**

- Engineers solve practical problems by applying mathematical and scientific knowledge.
- The word engineer comes from a Latin word meaning ‘cleverness’.
- The Hoover Dam, built along the Colorado River between 1931 and 1936 reaches 726 feet in height (221 meters).

**Highlights on Students!**

**2014 Burlington Northern Santa Fe Technology Day**

**Contest Awards**

- **Website Design Contest**
  1st – Jazmin Escamilla (Toshiba Laptop)
  2nd – Jennifer Roca (iPad Mini)
  3rd – Bevanna Cardona (Kindle Fire HDX)

- **Photography Contest**
  1st – Umber Hayat (iPad)
  3rd – Iqra Ameen (Camera w/ Accessories)

- **Financial Aid Essay Contest (9th/10th Graders)**
  1st – Madison Ratliff (Toshiba Laptop)
  3rd – Olivia Marx (Google Nexus 7)

- **Financial Aid Essay Contest (11th/12th Graders)**
  3rd – Kassandra Sanchez (Kindle Fire HDX)
  Honorable Mention – Jennifer Roca (Beats by Dr. Dre)

11 other UTA UBMS students attending also received assorted door prizes that ranged from tablets and AT&T phones to gift cards from Best Buy and Wal-Mart.

**GATES-MILLENNIUM SCHOLARSHIP** finalists are Jennifer Roca and Marla Baltazar (2014 year)

**CAREERS IN ENGINEERING**

- **Bioengineering** - As a biomedical engineer, you’ll make a real difference in the lives of others. You might develop artificial lenses that restore sight to the blind, radiation treatments that fight cancer, or incubators that keep premature babies alive.

- **Petroleum Engineering** - Energy is at the center of our daily lives. As an oil and gas engineer, you’ll work in the United States of America and abroad on discovering new gas and oil sources, researching new technologies to efficiently extract more gas and oil, building out new oil and gas fields, and streamlining production operations. In this exciting field you’ll be powering our future.

- **Electrical & Electronics Engineers**

  design, develop, test and supervise the manufacture of electrical and electronic equipment such as: Broadcast and communications systems; Electric motors, machinery controls, and lighting and wiring in buildings, automobiles, aircraft, and radar and navigation systems.

*Source: Occupational Handbook*

www.bls.gov/oco/

- The Golden Gate Bridge is a suspension bridge spanning the Golden Gate strait, the mile-wide, three-mile-long channel between San Francisco Bay and the Pacific Ocean.

  - Learn more about engineers and scientists from PBS & NOVA at: http://www.pbs.org/wgbh/nova/blogs/secretlife/video-profiles/

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**Programs**

The Upward Bound Math & Science Center consists of two (2) programs:

- **Local Program (LP)** — serving 61 students from Alvarado, Ennis, Venus, Grand Prairie, Mansfield Timberview High Schools.

- **State Program (SP)** — serving 71 students from Central, South and West Texas High Schools and others statewide.

*We will be accepting new participants for both programs through Spring.*

Contact us at: ubms@uta.edu
College Survival Tips  www.collegeboard.com

Making the Transition:
The jump to college can be stressful. You’re leaving behind your school, friends, family and home, and going off to explore a new place, make new friends, learn new things, and set your own priorities.

Many students overlook the stress involved in making so many big changes in such a brief period of time. The more prepared you are for college when you get there, the more ready you’ll be to confront any new pressures. Here are some realities to consider, and a few common sense ways to help you handle them.

The Work is Harder
Courses are at a higher level than high-school classes and the material is presented at a faster pace. Plus, professors are like to assign more reading, writing, and problem sets than you may be used to.

Your Strategy
All first year college students contend with this bend in the learning curve, so don’t think having to struggle to keep up is somehow a failing on your part, give yourself and opportunity to adjust gradually to the new academic demands. Choose a course load that includes some challenging classes and others that will be less intense.

You Make the Schedule
You are responsible for managing your time in college. If you cut classes and don’t do assignments, you are responsible for managing your time in college. If you cut classes and don’t do assignments, you are responsible for managing your time in college. If you cut classes and don’t do assignments, you are responsible for managing your time in college. If you cut classes and don’t do assignments, you are responsible for managing your time in college. If you cut classes and don’t do assignments, you are responsible for managing your time in college.

Your Strategy
Buy a calendar and make sure you write down when and where your classes meet, when assignments are due, and when tests will take place. Give yourself ample time to study rather than waiting until the last minute and pulling an all-nighter.

More Independence — and Responsibility
You may not have the same day-to-day support system as you do now. For example, how will you manage your money and debt, especially when credit card companies are bombarding you with offers? Who is around to make sure you’re not getting sick or run down? Factors like stress, late-night parties, and generally pushing yourself too hard can take a toll.

Your Strategy
Don’t always do what’s easiest at the time. Make smart decisions. For example, when it comes to your money, stick to a budget and use credit cards wisely. When it comes to your health, get enough sleep, eat well and pay attention to what your body tells you. You’ll need energy for all that college has to offer.

COLLEGE PLANNING CHECKLISTS: Help you with college planning for Juniors and Seniors:

Take a look at what you need to do:
http://www.actstudent.org/college/checklist/junior.html
http://www.actstudent.org/college/checklist/senior.html

UPWARD BOUND MATH SCIENCE—STATE

OTA TUTORING (Tuesday—Thursday)  
Apr 8th—10th  Apr 30th—May 2nd

UBMS—State Online Tutoring  
Tutoring in most subjects: Online 6-7:00 pm

ICCP DUE DATES:
March 28th  April 25th

Video Conferencing Sessions (VC)
Live Sessions: Apr. 15th, May 15th

1-on-1 phone sessions:
Monday-Wednesday Time: 5:00–7:00 pm (CST)  March 24th–26th

Summer Residential Institute: Jun 8—Jul 19

Testing Dates
SAT: May 3, June 7
ACT: Apr 12, June 14
AP: May 5–9, May 12–16

UPWARD BOUND MATH SCIENCE—LOCAL

Tutorial Times: Nov 19–22, Dec 10–12
Ennis HS : Tuesday 4:00–6:00 PM
Alvarado HS: Thursday 3:30–5:30 PM
Venus HS : Wednesday 3:40–6:00 PM
Timberview HS: Thursday 3:00–5:00 PM

Saturday Pick-Up Schedule:
Ennis HS : 8:15–8:30 AM
Alvarado HS: 8:45–9:00 AM
Venus HS : 8:45–9:00 AM
Timberview HS: 9:15–9:30 AM

E-3 : April 12 & 16; May 3

PROGRAM STATISTICS:
78% participants have taken or scheduled to take the SAT/ACT in preparation for college.

UBMS OFFICE STAFF
Lisa Thompson  Sr. Director, Trio Pre-College
Richard Raleigh  UBMS Director
Chinh Cao  Local Program Coordinator
Fidel Zapata  Bridge Coordinator/Cnsfr
Gloria Solorzano  Support Specialist II
Vivicia Outlaw  Education Specialist
Enrique Delgado  Technology Specialist
Ryan Hilton  Tech Asst/Tutor
Stephen Sandoval  Tutor/Work Study
Melanie Mendez  Tutor
Lizzeth Barcenas  Tutor

After becoming a UT Arlington UBMS (UTA-UBMS) Alumni, he attended New Mexico State University in the Fall of 2007 studying Mechanical Engineering. He later worked for the Co-Op for the Army at White Sands Missile Range during the remainder of college. After graduating in the Fall 2012, he earned a Bachelor’s degree in Mechanical Engineering. He began a career with the Army as a Test Officer for the Army Test and Evaluation Acquisition Core at White Sands Missile Range, NM working jointly for military, foreign, and student research programs. He is currently pursuing a Master’s degree in Industrial Engineering at New Mexico State University. Enrique stated that without the UTA-UBMS, he would not have had the foundational work ethic to produce exceptional college level work, and social skills required to effectively communicate research ideas and achieve results from his courses. He gives back by being a 4B resident advisor and assisting grade school students in STEM fields at New Mexico State University.

He would like to thank all the Upward Bound Math & Science Center staff and participants for making him the person he is today!

Enrique P. Torres, Test Officer, U.S. Army, White Sands Missile Range. He was a participant from New Mexico in the UT-Arlington UBMS (SP) through 2005-2006 and Bridge Program in 2007.

Melanie Mendez Tutor  Ryan Hilton Tech Asst/Tutor  Enrique Delgado Technology Specialist  Vivicia Outlaw Education Specialist  Richard Raleigh UBMS Director  Chinh Cao Local Program Coordinator  Enrique P. Torres Test Officer, U.S. Army, White Sands Missile Range.

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TRIO Pre-College Program