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Why Study Abroad?

- We must realize that
 - The world is large and globalized!
 - Africa must be a partner and bigger player in the world
 - The future of Africa (YOU)
 - Must widen the horizon
 - Ambitious and be prepared take on any challenges from anyone!
 - Learn to work with people from other cultures
- When an opportunity presents itself, you must take it!
- You also must create your own opportunity!

Where is USA?



The World
POLITICAL

August 5, 2012

Univ. of Texas Arlington

Where is Texas?



Where Mavericks Call Home!



The Dallas / Fort – Worth Metroplex

- 4th largest metro area in the United States
- Has one of the highest concentrations of corporate headquarters in the United States
- Contains the largest Information Technology industry base in the state
- Cultural center rich in the arts, as well as sports centers

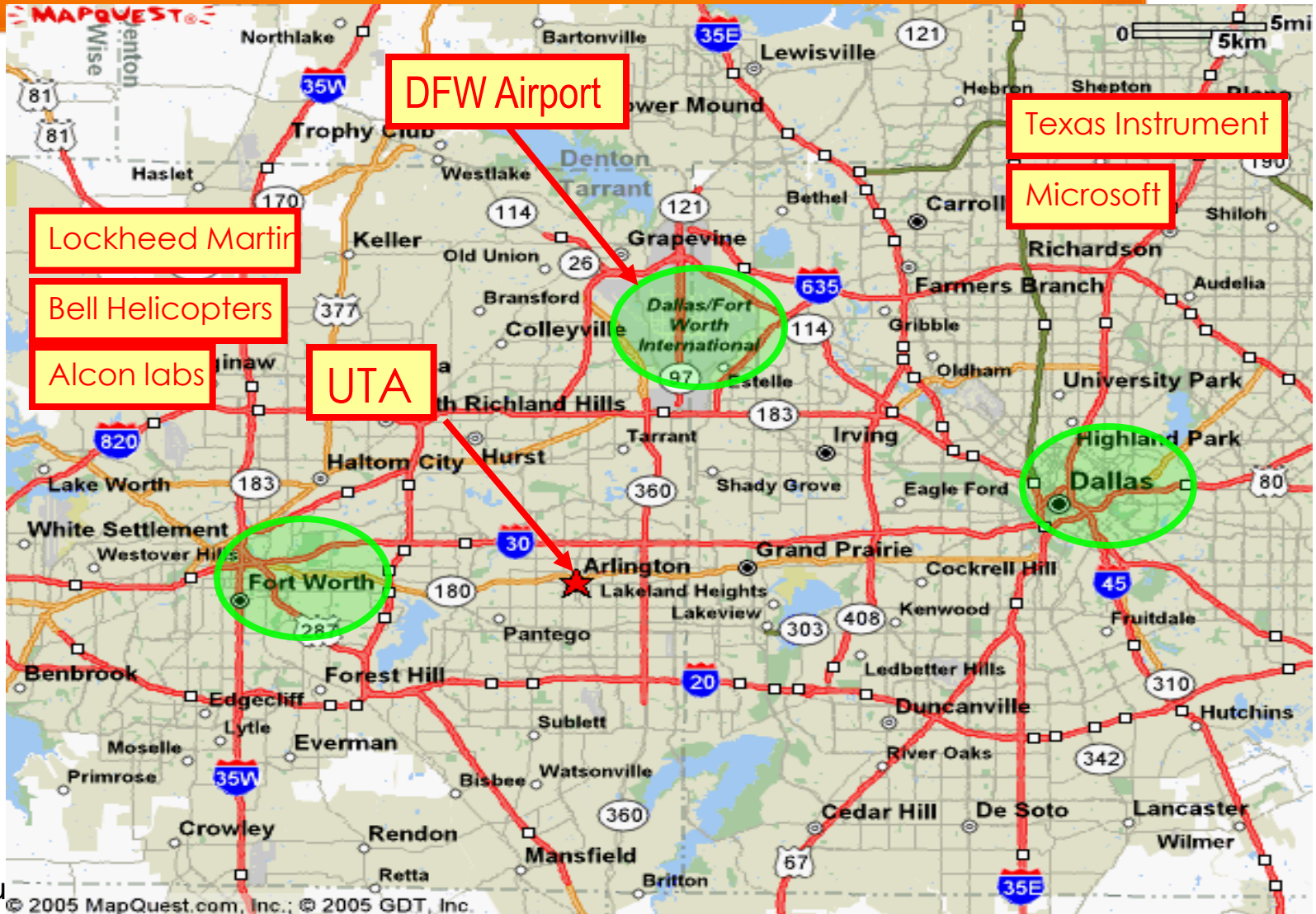
Where UT Arlington is Located



The City of Arlington

- Arlington's population is ~370,000
- Located between Dallas and Fort Worth, ~20 min. driving from either
- 15 min. south of DFW International Airport
- Within a 3 hour drive of these regional cities:
 - Austin (Texas) 320 km
 - Houston (Texas) 425 km
 - Oklahoma City (Oklahoma) 430 km
 - Shreveport (Louisiana) 330 km

What's around UTA?



Tourist Destination



The City of Arlington – Featured Attractions

- Dallas Cowboys Stadium , home of “ America's Football Team”, a \$1.15 billion stadium in Arlington.

World's largest HD quality video board

Largest retractable end zone doors in the world

- Rangers Ballpark in Arlington, hoe of Texas Rangers baseball team
- Six Flags Over Texas is a mammoth theme park

- **University of Texas at Arlington**
 - Founded in 1895
 - 2nd largest unit among the 14 universities in the University of Texas System
- **Faculty - 1,658**
- **Students (Fall 2011) – 33,449**
 - Graduate: 8,002 (6959 Master + 1043 Ph.D)
 - Undergraduate: 25,447
 - From 49 states and 150 countries
- **Degree programs**
 - 11 colleges & schools
 - 80 Baccalaureate
 - 74 Master's
 - 30 Doctoral



Degrees Offered

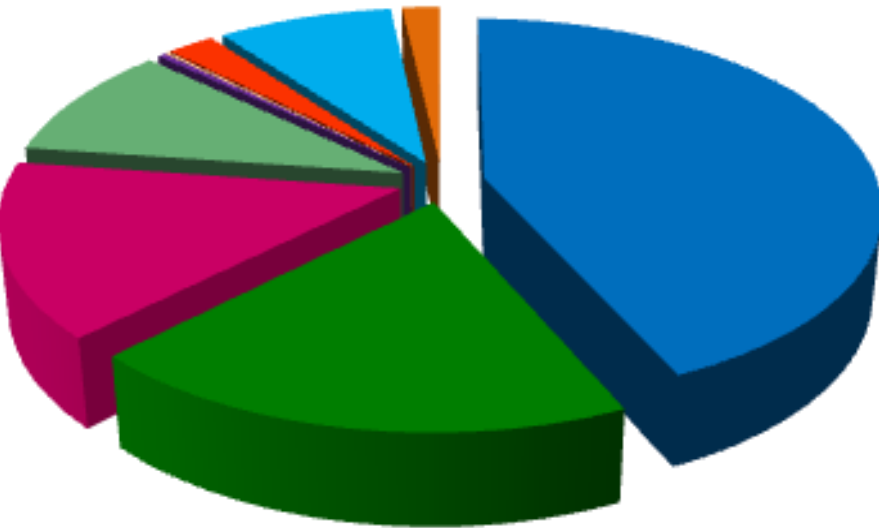
- 80 Bachelor's
- 74 Master's
- 1 Professional
- 30 Doctoral

11 Colleges and Schools

- School of Architecture
- College of Business
- College of Education and Health Professions
- College of Engineering
- College of Liberal Arts
- College of Nursing
- College of Science
- School of Social Work
- School of Urban and Public Affairs
- Honor's College
- The Graduate School

Student Demographics (cont.)

Ethnicity



- White: 43.32%
- Hispanic: 19.17%
- Black: 14.75%
- Asian: 9.75%
- Native American: .36%
- Native Hawaiian/Pacific Islander: .19%
- Multiracial: 2.26%
- International: 8.40%
- Unknown/not reported: 1.8%

~50% student population is under-represented groups.

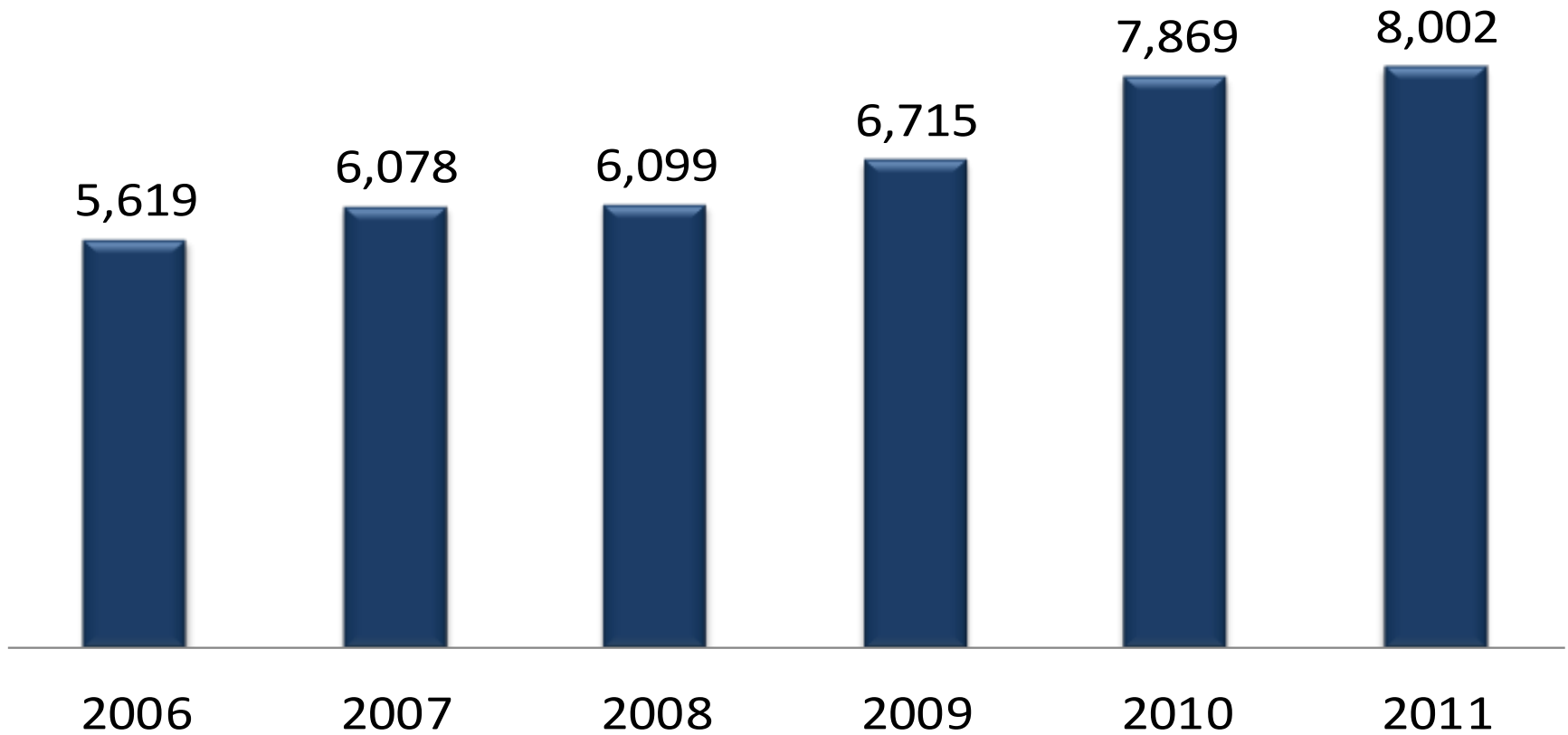
Gender



- Female: 56.05%
- Male: 43.95%

19:1 Student to Faculty ratio
 Source: IRPS UT Arlington Enrollment Comparative Analysis

Graduate Student Enrollment



- Carnegie Category:

Research University/High Activity

- Research Status FY10:

Total research expenditures - \$63.6 million

Restricted research expenditures - \$42.9 million

- Research Centers and Institutes:

More than 66 centers and institutes throughout
COLA, COS, SUPA, COE, and SOCW

Industry Interactions

Alcon Laboratories: Several faculty in math and chemistry

Nokia: Faculty in mathematics

IBM: Partnership in the Converging Biotechnology Center

Texas Instruments: Funding of the Welch Chairs

Johnson & Johnson: Collaborate in development of functional coatings

Hewlett-Packard: Plasma coatings on films and powders



- 136 students: 85 undergraduate students and 51 graduate students
 - We graduated 10 Ph.D., 9 M.S. and 22 B.S. last year!
- 21 professors (+1 to be hired soon!), 9 research professors (3 HEP) and 2 permanent lecturers
- 12 department staff and 3 planetarium staff
- Leading research department
- 100% of our students are fully supported!!
- Department web: <http://www.uta.edu/physics/>

- High Energy Particle Physics (Origin of Mass and the Universe)
 - One theorist and 5 experimentalists
 - Involved in experiments at Fermilab in the US and ATLAS at the LHC + ILC
- Astronomy: 2 theorists and 1 observer
- Space physics: 2 Theorists
- Nano-Materials physics: 2 experimentalists
- Renewable Energy: one theorist
- Condensed matter physics: 4 theorists and 3 experimentalist + one new experimentalist faculty to be hired
- Optics: 1 experimentalist + 1 endowed distinguished professor to be hired
- Nano-bio physics and Bio-physics: 2 experimentalists

Other Departments in College of Science

Mathematics Research

- Statistical Applications in Science and Engineering
- Innovative Methods for Math Education
- Algebra and Algebraic Geometry
- ...

Biology Research

- Biodiversity / Systematics / Evolution
- Aquatic Biology
- Microbial & Cellular Processes
- ...

Geology Research

- Environmental Geology/Geochemistry
- Petroleum Geology
- Structure/Tectonics
- Biostratigraphy/Paleontology
-

Chemistry Research

- Biochemical research
- Physical, analytical & electrochemical research -
Colloids and surfaces
Solar energy
-

Psychology Research

- Specialized computer labs for conducting experiments with human subjects
- Accredited animal research facility: rats, mice, lizards and birds
- ...

Environmental Science & Engineering Research

- Multidisciplinary Program with M.S. and Ph.D.
- Integrates scientific, engineering and city and regional planning principles in the study of environmental protection, management and policy

● ...

Research Facilities – Housed in 6 building on campus

- Center for Numerical Simulation and Modeling
- Science Career and Education Center
- Grid and High-Performance Computing Center
- High Energy Physics Detector Construction Facility
- Collection of Vertebrates
- Animal Care Facility
- Converging Biotechnology Center – in progress
- Center for Nanostructured Materials
- Physics and Chemistry Building
- Center for Electron and Confocal Laser Microscopy

Chemistry & Physics Building

The new \$42 million Chemistry Physics Building houses: Faculty offices, graduate student offices, planetarium, ATLAS Tier 2 computing center, conference room, detector construction lab, and a physics machine shop.

The Chemistry and Physics Building has state-of-the-art teaching and research labs for chemistry, biochemistry and physics.



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Beyond the Stars



The UT Arlington Planetarium opened March 2006. It is the largest planetarium in North Texas, with a 60 foot dome

- Experience star gazing in a large dome!!
- Seats 170 patrons
- Simulates the view of stars and planets from earth
- Guides stargazers on virtual tours throughout the galaxy through the use of a digital projection system.

College of Engineering Profile

At a Glance

- 1,241 MS Students
- 350 PhD Students
- 178 Research & Teaching Faculty
- 233 Graduate Research Assistants
- 175 Graduate Teaching Assistants
- 91 Fellowships
- \$ 20,000,000 + Active Contracts & Grants
- \$60M new engineering and science research building



Major Engineering Research Facilities

Research Facilities

- Automation & Robotics Research Institute (ARRI)
- Nanotechnology Research and Teaching Facility (NanoFab)
- Aerodynamics Research Center (ARC)
- Regional High-Performance Computing Center
- Departmental research laboratories



Many more Engineering Departments than listed here!!

Mechanical and Aerospace Engineering Research

- Design and manufacturing
- Dynamic systems and control
- Fluid dynamics, aerodynamics, and propulsion
- ..

Computer Science & Engineering Research

- High performance and distributed computing
- Wireless networking and computing
- Database systems
- ...

Bio Medical Engineering Research

- Bioinstrumentation
- Biomaterials
- Tissue Engineering
- Biomechanics



Formula SAE Race Team

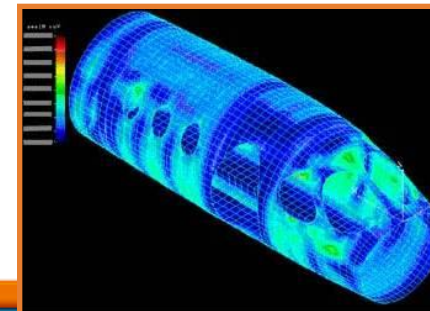


Unmanned Aerial Vehicle Team



Materials Science and Engineering Research

- Biomaterials
- Coatings and additives
- Composites
- ..





Digital Media Studio: To create professional quality graphics, animations, online courseware, videos, and software.

Reserved Group Study Rooms for students needing a quiet private place to meet.

Geographic Information Systems manages and analyze geographically referenced data.

Wireless Internet Access is available throughout the library and most buildings on campus.

Laptop check out for a 24 hour period for students wanting to work at home.

The **Maverick Activities Center (MAC)**, a \$34.5 million recreation facility, is approximately 190,000 sq. ft. and includes 20,000 Square foot weight and fitness room (80+ pieces of cardio equipment, 4 circuit training units & a free weight area).



Additional services available:

- 5 Indoor basketball courts
- 9 Volleyball courts
- Indoor soccer gymnasium
- 2 Indoor tracks — 1/16 mile and 1/9 mile
- 5 Racquetball courts
- 10 Badminton courts
- Game room and table tennis
- Internet café with juice bar
- Wellness resource center
- 2 Outdoor Volleyball Courts
- 2 Outdoor Basketball Courts
- Climbing Wall

College Park Campus



College Park Campus

- Shared vision of UT Arlington and the City of Arlington
- Square Footage: 218,000
- Cost: \$78 million
- Future home of:
 - College Park Center – a special events center
 - Green at College Park – an outdoor green space
 - A residence hall
 - Student apartments
 - Retail stores and restaurants
 - A new University welcome center
- Construction: Designed to achieve LEED Gold Certification
- Expected Opening: Late 2011
- www.uta.edu/collegetpark

Living on campus allows you instant access to libraries, research labs, study areas, food courts, and provides a safe environment to study and live.

UT Arlington offers 6 residence halls, including 20 different apartment complexes, both on campus or a short walk from campus and provides a free shuttle bus service that transports students around campus.

You can find the type of housing to make UT Arlington your new home!

Detailed lists of amenities, floor plans, pricing, meal plans including additional money to spend at all UT Arlington's on campus food providers like Starbucks, Chick-Fil-a and Panda Express, and much more, along with housing & meal plan applications are available online at: www.uta.edu/housing.



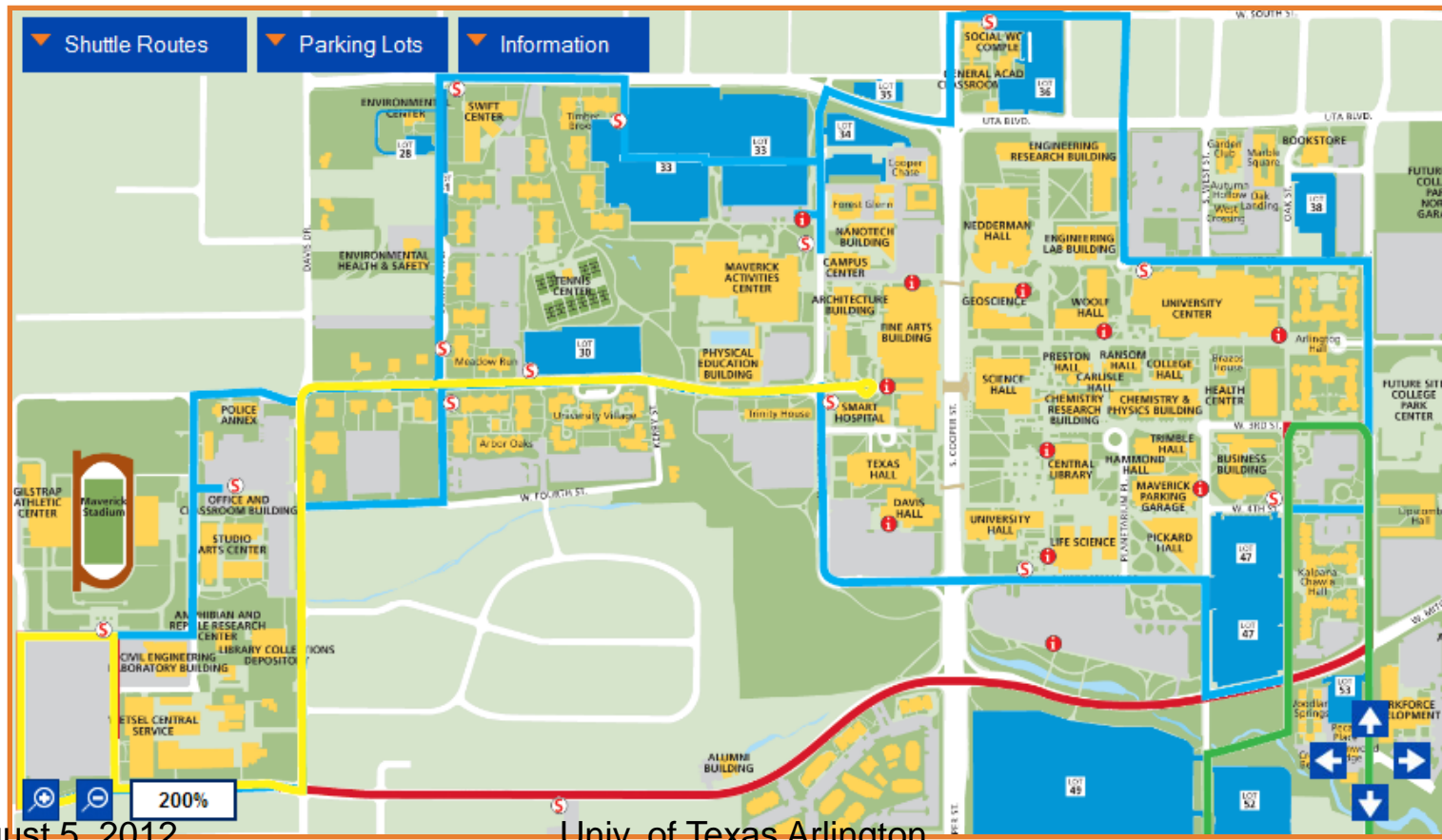
UT Arlington Dining Map



Many dining opportunities located on campus, from the U.C. Plaza and Connection Café to The Market Express. For a complete list, visit: www.uta.edu/dining.

On-site limited banking, one-card solutions with the Mav Express Card, and access to three ATM's

The University has 4 free shuttle lines in use Mon – Frid
 Mav Mover line that runs on Sat. to shopping centers and a grocery store for \$2.00.





The UT Arlington health center offers medical care and health insurance to graduate students. Office visits are free to fee paying students.

Services include:

- Immunizations
- X-rays
- General office exams
- Mental health services
- Women's health services

GRADUATE ENGLISH SKILLS PROGRAM (G.E.S.P.)



The English Language Institute (E.L.I.) provides English as a second language programs for International Students.

Graduate English Skills Program (G.E.S.P.) is an intensive English course → use materials from their graduate programs as they learn to write academic papers, read textbooks and scholarly material, expand academic vocabulary, listen to and take notes for academic lectures, and make videotaped, oral presentations.

Is Here to Assist



Students are our most important asset. We offer the tools necessary for graduate success.

Our website (<http://grad.uta.edu>), provides information needed to:

- apply to the graduate school
- forms needed during the process
- deadline information
- helpful checklists

What do committee members pay attention to?

- Official GRE and TOEFL must be satisfactory
 - Higher scores help, especially the verbal
- Good GPA's critical
 - Demonstrates how sincere the person is
- Recommendation letters
 - Should be very good
- Study plans
 - Good reference for categorization but not critical

Questions?

- GRE?
 - All universities' require this at least verbal and math
 - Quite hard to get an exemption on this
 - But if you have a strong supporter faculty member, something could be arranged
- TOEFL?
 - Need to take it with a passing score to make your life easier in grad school
 - But this is easier to get an exemption than GRE
- However, having a strong supporter will help!
- My contact info: jaehoonyu@uta.edu