Welcome to the New Undergraduate Programs Office!

This past spring the undergraduate advising office moved to WERC 236 to form the new Undergraduate Programs area. This new area holds not only the advisors but also the SGT and AAVE offices, departmental lectures and numerous group study areas for undergraduates students. We invite all undergraduates over to take advantage of this new spacious area.

As an AERO student you have access to:

- A large conference room to practice presentations and attend software help sessions!
- A group study room with a large whiteboard
- 24-laptops with access to the aero server available for check out
- A printer
- SGT Tutoring and Mentoring Office

A card swipe has been installed, and now you can have 24/7 access to the office. To gain access after hours please see Laura in WERC 236. When lab is overcrowded and you need a place to go...visit us in the Undergraduate Programs Office.

Soon the 6th floor lab will have a student worker available at our new help desk located on the south side of the lab. This student worker will be responsible for new accounts, general questions about software, and will keep the printers stocked.

We will also be introducing a new teaming area in WERC. WERC 221 is being prepped to be the newest addition to our undergraduate space. Computers and table space will be available 24/7 starting mid-semester.

New Department Head

Dr. Rodney Bowersox was named as Interim Department Head for Aerospace Engineering. Dr. Bowersox has served as Associate Department Head for Graduate Programs and Research Infrastructure in the Department for the past three years. He brings a wealth of administrative knowledge and experience to the role of interim department head. Please join us in congratulating Dr. Bowersox on this appointment. The search for a new department head will start this fall.
Congratulations and Acknowledgements

2012-2013 Scholarship Winners

Pat and Carol Gibson
Mitchell Pace
Erica Benjamin

Benjamin R. and Deanna J. Smith
Joshua Mathews
Hunter Ritter

Michael Ebanks Memorial Scholarship
Joshua Mickle

Charles R. Overly ‘46 Memorial Scholarship
Lauryrn Hoch

AIAA Outstanding Member Award
Michael Venesky

Aldridge ‘60 Endowed Scholarship
Alejandro Azocar Robert Cline
Julian McVay Nathaniel Stanley
Jacob Willhoite Cullen Nauck
Paul Schattenberg Jorge Santana
Brigid Flood Travis Ravenscroft
William Scholten Kimberly Ellsworth

Virginia and Buford W. Shipley, Jr ‘83
Aaron Carnefix

Leland Snow Memorial Scholarship
Brooklynn Russey

Gordon and Mary Ann Gibson ‘55
Michael Pierce

Advisory Board Scholarship
Hope Russell

Travis and Rachel Joiner Memorial Scholarship
Kristin Nichols

Rockwell Collins
Micah Rickard

Dr. Helen Reed was honored at the AIAA Banquet last May with the Thomas U. McElmurry Teaching Excellence Award given by Sigma Gamma Tau.

Air Tractor of Olney donated a laser cutting machine to the Department last spring. The laser cutter is located in the HRBB basement and is pictured here with Jim Hirsch ‘91, President of Air Tractor. Air Tractor has also endowed a scholarship in memory of their founder Leland Snow ‘52.

Joshua Harris, a junior AERO student, has been awarded a 2012 NASA Aeronautics Scholarship Undergraduate Award under the NASA Aeronautics Scholarship Program. NASA selected 25 students to receive the agency's Aeronautics Scholarship for the 2012-2013 school year.

AERO senior, Emily Boster, has been named as a 2012 recipient of a prestigious national award by the Astronaut Scholarship Foundation (ASF). This award is given to 28 of the brightest and most promising students across the country with interests in science or engineering. Captain James “Jim” Arthur Lovell, Astronaut & Commander of the Apollo 13 Mission, presented the 2012 Astronaut Scholarship Foundation award to Emily on September 28, 2012.

Did you know? Dr. John Hurtado was chosen as the keynote speaker for the 2012 Freshmen Convocation. You can check out his speech on Texas A&M’s YouTube channel!

2012 Student Research Week Winners

This year we had two students place 2nd in the Engineering/Architecture subject area of the Student Research Week (SRW). Senior Edwin Peraza Hernandez received 2nd place for his poster presentation, and senior Ryan Haughey received 2nd place for his oral presentation. Each was awarded $150 for their hard work. If you are interested in participating in the next SRW, visit http://srw.tamu.edu/ to sign up.
Lowy Awards

Congrats to Brink Aeronautics and AGS Aviation on their Fall 2011 and Spring 2012, respectively, Lowy Awards. The Lowy award is awarded each semester to a student airplane design team for “innovation, technical expertise and teamwork.” Brink’s team members (pictured on the left) included Grant Stein, Austin McConnell, David West, Stephanie Hoelscher, Cole Ulrich, Zac Carpenter, Steven Anderson and Diego Hernando. AGS included Kate Williamson, Brandon Klekar, Jonathan Levins, Philips Hopkins, Justin Compton and Jacob Emmett (pictured on the right).

SAE AERO Design Team Places 4th!

Over the weekend of March 16-18, 2012, the Texas A&M SAE Aero Design team participated in SAE Aero Design West competition near Los Angeles, CA. This international competition challenges students to design, build and fly a radio-controlled airplane capable of lifting an internally stored payload within design constraints. The competition also includes the aspects of report writing, oral presentation, and an actual remote-controlled flight portion. In only its fourth year of competing, the team received high marks earning fourth place overall and earning second in the oral presentation category. They received the highest ranking of any US team in the competition.

The Class of 2012 was our largest class to graduate in over 20 years!

Thanks and Gig ‘Em

We offer our thanks to Dr. Dimitris Lagoudas for his service to the Department of Aerospace Engineering. Under his leadership, the reputation of Aerospace Engineering at Texas A&M has grown to new heights. Dr. Lagoudas’ tireless efforts to improve the quality of education and research within the Department are greatly appreciated, and we wish him continued success in his new assignment as Senior Associate Dean for Research; Interim Deputy Director, TEES; and Associate Vice Chancellor for Engineering Research.

AERO Honors Distinction

Steven Anderson was awarded the 2012 Southwest Region Award for Sigma Gamma Tau (SGT), the national aerospace engineering honor society. Steven was also one of the eight students to graduate last year with the Aerospace Honors distinction. Hannah Degray, James Henrickson, Steven Shepherd, Timothy Woodbury, Michael Ballard, Dawn Peterangelo and Trevor Bennett also received this honor. For more information on our honors program, please visit http://aero.tamu.edu/current-students/undergraduate-students/aerospace-honors.
Undergraduate Office Announcements

COURSE OFFERING UPDATE

AERO 452 Heat Transfer & Viscous Flows

Starting Spring 2013, AERO 452 will only be offered during the spring semesters. In order to accommodate both fall and spring graduates, this coming spring we will be requiring all students needing this class to complete a force request form. Please stop by the advising office if you have any questions.

The Aerospace Scholarship application will now be part of the University Scholarship application. The application for continuing students opens October 15, 2012, and will close on February 1, 2013. Please include a resume with your application, and remember you must attend the Spring AIAA Banquet on May 1, 2013, if you receive a scholarship. All are encouraged to apply!

AERO 404 Mechanics of Advanced Aerospace Structures
Prerequisite: AERO 306

AERO 405* Aerospace Structural Design
Prerequisite: AERO 306

AERO 419 Chemical Rocket Propulsion
Prerequisites: AERO 351

AERO 422 Active Controls for Aerospace Vehicles
Prerequisites: AERO 421

AERO 424 Spacecraft Attitude Dynamics and Control
Prerequisites: AERO 421

AERO 428* Electromagnetic Sensing for Space-Borne Imaging
Prerequisites: AERO 306, 351 & 421

AERO 472* Airfoil and Wing Design
Prerequisite: AERO 303

Course descriptions can be found at aero.tamu.edu or catalog.tamu.edu

Spring 2013 Technical Elective Courses

Don't know what classes to take next spring?
Try using Degree Evaluation! Degree Evaluation is located in the HOWDY portal under your MyRecord tab. Follow the prompts, and you are on your way to seeing what you have credit for and what you still lack. If you are designated AERL, you can do a WHAT IF ANALYSIS and promote yourself temporarily to AERO. Changing your major will allow you to see where all the classes you have taken will apply.

The Aerospace Scholarship application will now be part of the University Scholarship application. The application for continuing students opens October 15, 2012, and will close on February 1, 2013. Please include a resume with your application, and remember you must attend the Spring AIAA Banquet on May 1, 2013, if you receive a scholarship. All are encouraged to apply!

Starting August 23, 2013, Freshmen Year Grade Exclusion (FYGE) will no longer be offered to students. If you plan to use FYGE, you will need to request it by August 23, 2013, regardless of the catalog you are on.

In the fall of 2013, all students will receive an extra q-drop, making the total you can use at Texas A&M equal to 4. The q-drop deadline will be extended to the 60th class day. You will still only have 6 drops in the State of Texas.

Course descriptions can be found at aero.tamu.edu or catalog.tamu.edu

Spring 2013 Technical Elective Courses

AERO 404 Mechanics of Advanced Aerospace Structures
Prerequisite: AERO 306

AERO 405* Aerospace Structural Design
Prerequisite: AERO 306

AERO 419 Chemical Rocket Propulsion
Prerequisites: AERO 351

AERO 422 Active Controls for Aerospace Vehicles
Prerequisites: AERO 421

AERO 424 Spacecraft Attitude Dynamics and Control
Prerequisites: AERO 421

AERO 428* Electromagnetic Sensing for Space-Borne Imaging
Prerequisites: AERO 306, 351 & 421

AERO 472* Airfoil and Wing Design
Prerequisite: AERO 303

Course descriptions can be found at aero.tamu.edu or catalog.tamu.edu

* AERO Design Electives
What's going on in AERO?

AGGIE AWE

There is a new group in Aerospace at Texas A&M. It is Aggie Aerospace Women in Engineering (AAWE). The mission of this new group is to support and encourage women in the Texas A&M Department of Aerospace Engineering through personal and professional networking and to promote our field of study.

Their next general meeting will be October 11th. All are welcome to attend.

Follow them on facebook: Aggie Aerospace Women in Engineering

Go Beyond with Camp SOAR!

This summer the Department hosted its first high school summer camp, Camp SOAR (Summer Opportunities in Aerospace Research). SOAR is a five-day summer camp designed to expose upcoming high school juniors and seniors with an interest in aerospace engineering to the research and facilities at Texas A&M University's Department of Aerospace Engineering. Thirty outstanding students were selected to attend this past summer, July 22 – 27, to experience the amazing opportunities aerospace engineering can hold. Participants stayed on campus in modern residence halls and had use of the University's recreational facilities, library and computer facilities to give them a feel for what life is like as an aerospace engineering student at Texas A&M.

The group was divided into two different tracks, airplanes and rockets. The rocket teams were asked to build estes rockets, starting out with a small pre-designed rocket and, after a successful morning of launches, moved to their own design of rockets. This allowed the teams to be creative in their design process but also to learn the aspects of decreasing drag to get more lift with their given motors (propulsion unit). The airplane teams worked on building a balsa wood wing, which they then monokoted with their own design and layered with solar panels to provide power. This allowed students to learn the design elements of creating a well-structured wing and how the slightest mistake in covering can add to additional drag on the airplane. The students also had the opportunity to interact with current students and faculty as they visited many of our facilities, including the Vehicle Systems and Control Laboratory, Land Air and Space Robotics Lab, the Flight Research Laboratory, Helicopter and Unmanned Systems Laboratory, Jet Engine Lab, Materials Demo and many more.

Many of the students expressed a desire to come to A&M next year (seniors) or come back to camp (juniors). The department plans to offer the camp again next July. If you will be here next summer for school keep us in mind as we will be looking for enthusiastic aerospace students to serve as our counselors. Not only is the camp a great experience for high school students, it is a great opportunity and experience for you. Thanks to this year's counselors: Audra Burnap, Haylie Peterson, Lisa Warren, Lauryn Hoch, Rachel Guilette, Travis Pollock, Cody Bucheger, Jory McVay, Jesus Orozco, Logan Hodge, Brandon Baker, and John Guthery.

TAMU High-Altitude Balloon Club Visits Alaska for study

Project Aurora was an activity organized by the TAMU High-Altitude Balloon Club in conjunction with Houston-based Project Aether Group. As a part of the project, students launched helium-filled weather balloons capable of reaching 100,000 ft (20 miles) altitude into the Arctic sky to observe the northern lights and make various measurements. The TAMU team consisted of 9 undergraduates -- Rahul Venkatraman (AERO), Kimberley Webster (AERO), Megan Woodring (AERO), Christopher Cantu (AERO), Nicholas Ortiz (AERO), Lisa Malone (AERO), Celica Perez (Bio), Dylan McGarry (MEEN) and Travis Dawsey (ENTC-MMT) and two graduate students – Frans Ebersohn (AERO) and John Guthery (AERO). The project was coordinated and supervised by Dr. Sharath Girimaji of Aerospace Engineering. The Texas A&M High Altitude Balloon Club (HABC) is one part of the recently started Buoyant Flight Laboratory in the Aerospace Engineering Department. The purpose of this Laboratory is two-fold. First, and foremost, the objective is to provide undergraduate students experiential learning opportunities with one of the most benign forms of flight-buoyant flight. The second purpose is to use the balloons as in-air laboratories to perform various experiments. Thus, balloons can serve as platforms for research and development of flight control strategies, remote sensing, and atmospheric measurements.
How to get involved in Research?

One of the questions we get asked all the time is, “How do I get involved in Undergraduate Research?”.

There are many great opportunities in our department for you to get involved, and professors love to have undergraduates in their labs.

First, you will want to look into the type of research going on in the department. Our website provides a listing of all the professors with a summary of their current research interest. Your goal as a student is to determine what area of research you believe you are interested in and then find a professor in our department that does work in that area.

Not sure what area? Take a look at your courses. What courses do you enjoy most? Is it the subject matter or maybe it’s the professor teaching the course? If you have a relationship with a professor from one of your courses, it is a great way to start the conversation about research opportunities. Once you determine a few areas and professors you want to work with, make an appointment to talk to them about their research.

The Department runs three summer research programs Undergraduate Summer Research Grants (USRG), Research Experience for Undergraduates (REU) and IIT Kanpur/TAMU Exchange Program. These programs are great for students looking to learn about research, study abroad or graduate school. Details on each program can be found below.

Students in the ESP or AERO Honors program are required to take two research seminar courses. These courses help you develop proposal writing skills as well as help to match you with a potential professor for research.

The key is to take the initiative to find out what is interesting to you. Volunteer to be part of research groups, ask to attend weekly meetings and take any opportunity to learn and observe. The relationships you form as an undergraduate researcher could potentially lead you to graduate school one day at A&M.

Summer Research with REU/USRG

The REU and USRG programs span 10 weeks and involve undergraduate students from A&M as well as students from other colleges and universities. Students work closely with graduate students and faculty members on current research projects, attend presentation skills workshops, and make a formal poster presentation and written report of their research at the conclusion of the program.

The USRG program run by the College of Engineering allows students to pursue any type of research at A&M. Last summer the department offered two REU programs, one focused on materials research and the other focused on a variety of aerospace research.

These programs provide students with a great idea of what graduate school is like. Students are provided with a stipend for their time, a housing allowance and tuition of one credit hour of independent research.

Applications for all programs are due starting in February. Stay tuned to the listserv for more details. To view past research topics and to learn more, please visit http://aero.tamu.edu/research/undergraduate/reu or http://aero.tamu.edu/research/undergraduate/aero-propulsion-fluids.

ITT Kanpur/TAMU Exchange Program

The exchange program allows students from A&M to conduct research at the Indian Institute of Technology (IIT) Kanpur, while students from IIT Kanpur study here at A&M. Students are able to work on projects under the guidance of world-renowned aerospace engineering faculty at both institutions. This past summer, students from A&M worked on research projects that focused on structures, dynamics and hypersonics and visited Delhi, India, the Taj Mahal in Agra, Lucknow and tourist attractions in the state of Rajasthan. This exchange program is a great way to learn about research and gain a cultural experience.

Students interested in participating in the program for Summer 2013 should contact Dr. Vikram Kinra at kinra@tamu.edu no later than October 15, 2012.
Study Abroad in Brazil!

The Department will once again host a study abroad program in Brazil next summer. This summer program lasts five weeks, and students earn 6 hours of major specific course credit along with 6 hours of International Cultural Diversity credit. Senior AERO student, Josh Mickle, states, “Going to Brazil on Aerospace Study Abroad was by far one of the best experiences of my undergraduate career at Texas A&M. Through a direct, daily interaction with Brazilian students, I was able to develop a new understanding of myself while greatly improving my cross-cultural communication skills. This program was the perfect blend of academics, culture, industry and fun. The best aspect of the entire trip was getting an opportunity to gain a global business perspective through visits to GE Aviation, TAM Airlines MRO and Embraer.” We will be offering AERO 213, AERO 214, AERO 404 and AERO 485 in 2013. Contact Dr. Talreja if you have any questions at talreja@aero.tamu.edu.
Mark Your Calendars…

September
- 28: Last day to apply for December graduation

October
- 15: Mid-term grades
- 15: Scholarship application opens
- 27: FE Exam

November
- 2: Q-drop deadline at 5:00 pm
- 2: Last day to change KINE 198/199 grade type by 5:00 pm
- 15: Preregistration begins for 2013
- 18: Bonfire 1999 Remembrance Day
- 22-23: Thanksgiving holiday

December
- 3: Redefined day: Attend Friday classes
- 4: Last day of fall classes; Redefined day: Attend Thursday classes
- 5: Critical Design Review
- 5-6: Reading Days
- 7,10-12: Final Exams
- 14-15: Graduation
- 20: Force requests and Provisional applications due
- 24-Jan 1: Winter Break University Closed

January
- 11: Last day to register for spring
- 14: First day of spring classes
- 21: Martin Luther King, Jr. Day University Holiday

If you or your student organization has a story for the next newsletter, please contact Laura Olivarez at laura.olivarez@tamu.edu.

Prospective Student Corner

Would you like to visit campus? Contact the Aggieland Visitor Center! They offer campus tours and teach you about the rich history and traditions at Texas A&M University. Are you interested in meeting with the Admissions office and Financial Aid office? Would you like to take a tour of the residence halls? Anxious to sit in on a class? Are you ready to have your questions answered by an academic advisor? The Aggieland Visitor Center can plan a whole day of activities, and they are just a phone call away! 979-845-5851. www.tamu.edu/visit

Important Dates

August 1, 2012: Admissions and Financial Aid Applications Open for Fall 2013! admissions.tamu.edu


January 15, 2013: Last Day to Apply for Fall 2013 Admission

October 15, 2012: Last Day to Apply for Spring 2013 for Transfer Students

January 1, 2013: Transfer Applications for Summer/Fall 2013 Open

February 16, 2013: Aggieland Saturday-University Open House http://admissions.tamu.edu/aggielandsaturday/