

UVU

College of
**ENGINEERING
& TECHNOLOGY**

UTAH VALLEY UNIVERSITY



E & T

2017-'18
HIGHLIGHTS

uvu.edu/cet

E&T Receives \$700K NSF Nano-Technology Grant

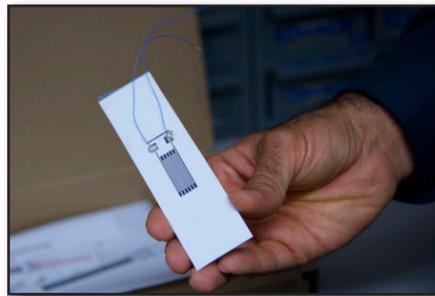


The College of E&T received a seven hundred thousand dollar grant from the National Science Foundation. The NSF funds are earmarked for developing a new nano-technology class as part of the computer engineering degree.

The new class will engage students on the emerging, and lucrative field of nano-micro fabrication. Utilizing state of the art machinery, students will be able to design and produce nano sensors on a variety of media which can

then be used by millions around the globe.

The new program is being developed as a multi-disciplinary effort between UVU's department of Computer Science, department of Digital Media, and department of Physics. For example, the department of Digital Media has been developing virtual reality games to be used in several of the learning modules.



"There is no other university worldwide who has virtual reality training for nano-technology", said Dr. Reza Kamali, assistant professor of Computer Engineering. "This is the future of the world, and we are on the top of it."

Local industry advisory board members have also been offering their assistance and expertise as the class development has proceeded. Board members represent Utah County companies including, IM Flash, Moxtek, Gooch Engineering, along with several nearby universities.

Hundreds Attend Annual Salt Flats Event

Despite high winds that prohibited the Wolverine Racing Team from even attempting a run for their 6th World Record, hundreds of high school students still made the trip to the Salt



Flats and had a great chance to see and hear from our Automotive Technology faculty and students.



Surveying Team 3rd in National Competition

A surveying team of six Geomatics students finished third in the annual National Student Survey Competition sponsored by the National Society of Professional Surveyors. After three grueling February days and nights performing surveying field work in 50mph winds in the Nevada desert, completing a Topographic Site survey map, and a 15 minute presentation of their work the UVU team out performed rival schools like the University of New Mexico, Fresno State University, and Idaho State University.



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Three New Engineering Degrees Approved

The new Bachelor of Science degrees in Civil Engineering, Electrical Engineering and Mechanical Engineering were approved in October by the UVU Board of Trustees and will join the already existing ABET accredited Computer Engineering degree to form a solid nucleus of engineering opportunities for UVU students. The new engineering programs began in fall 2018.

The new degrees will serve the nearly 500 UVU students currently enrolled in pre-engineering, as well as future incoming students. The new programs are designed to meet ABET accreditation requirements and will seek ABET accreditation after they have had their first graduates in 2020. The programs also allow the learning to be more focused and have greater impact in the community, especially as UVU students become engaged through internships and local employment. By adding these degrees, UVU continues to respond to industry needs as an engaged learning institution.

"The faculty, staff, and students at the College of Technology & Computing represent an outstanding community whose work makes significant contributions to the Utah Valley region and beyond," said Saeed Moaveni, Dean of UVU's College of Technology and Computing. "We look forward to partnering with our community to build on the College's distinguished history to address the growing needs of the region in engineering fields. With the current high emphasis on STEM areas, these new engineering programs allow UVU to meet the needs of both students and regional companies."



E&T Welcomes a New Associate Dean & Two New Department Chairs



Kazem Sohraby -
Associate Dean for Student Affairs



Kim Brown -
Chair, Digital Media



Rob Warcup -
Chair, Construction Technologies



E&T Celebrates Engineering & Technology Week

In February, E&T joined the nationwide celebration of National Engineers Week with all departments offering hands-on displays and information for potential students as part of E&T's Engineering & Technology Week. Additionally, several prominent speakers were invited on campus where they made fascinating presentations. This was the first time National Engineers Week had been celebrated on the UVU campus and plans are for the College of Engineering and Technology to make it a bigger and better annual event each February.



IS&T Students Dominate Competition

Students from our Department of Information & Technology won several titles in the State PBL Competition. The UVU chapter also received a 3rd place award for Outstanding Chapter of the Year.

Winners:

- Michael Hill:**
 - 1st - Retail Management
 - 2nd - Personal Finance & Management Concepts

- Adam Westbrook:**
 - (Qualified for National Competition in Website Design)
 - 1st - Information Management
 - 3rd - Computer Concepts, Programming Concepts, Networking Concepts

- Adam Knowles:**
 - (Qualified for National Competition in Website Design)
 - 2nd - Help Desk Individual Event

- Griselda Garcia:**
 - 2nd - Project Management & Information Management

- Team Events:**
 - 1st - Desktop Publishing Team Event- Griselda Garcia and Melissa Monk

Utah Valley University does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation, gender identity, gender expression, age (40 and over), disability, veteran status, pregnancy, childbirth, or pregnancy-related conditions, citizenship, genetic information, or other basis protected by applicable law in employment, treatment, admission, access to educational programs and activities, or other University benefits or services. The following office has been designated to handle inquiries regarding non-discrimination: EOAA/Title IX – 801-863-5704 – 800 W University Pkwy, Orem, 84058, Suite BA 203.

E&T Co-Sponsors ASEE National Convention

E&T played a prominent role in the ASEE national convention held in Salt Lake City in June. As Co-Sponsor of the event, E&T was featured throughout the activities during the four day gathering of the American Society for Engineering Education.

There was lots of excitement around the “Shock Factor”, the all-electric off-road rock crawler designed and built by E&T’s Automotive Technology department. Educators from around the globe were impressed and many even climbed aboard for pictures behind the wheel.



“This was a fantastic opportunity for us to showcase just some of what we can do,” said Don Wilson, Automotive Department chair. “These engineers really understood the dynamics of what we have accomplished with this all-electric rock crawler.”

E&T also had a display booth at the convention’s trade show, giving more than 4,000 attendees a chance to find out exactly what E&T offers.

The leadership of ASEE was so impressed with E&T’s involvement they asked if E&T would be willing to host a delegation of China educators for a tour of E&T’s main Orem campus facilities. So after ASEE concluded, roughly 25 educators from seven different universities in China made their way to Utah County.

E&T arranged for the group to first visit IM Flash for a behind the scenes tour, followed by a luncheon on the UVU campus. The group then spent several hours touring all of the E&T departments including the Automotive area, the Engineering Technology labs, the 3-D printing lab, the Digital Media lab and finally ending up in the Computer Science area.

“We’re pleased to be able to develop relationships with these fine teaching institutions in China,” said Saeed Moaveni, Dean of the College of Engineering and Technology. “We are hoping to soon have exchange students between our university and theirs since they are so well aligned with what we do here at E&T and have many of the same engineering and technology programs.”



2018-19 National CHEF OF THE YEAR!



1st - Southern Braised Pork Cheek w/ Dauphine Potatoes, Sautéed Mustard greens, Red Pepper Puree and Cajun Fried Shallots and Peppers



2nd - Oyster Stew w/ Bronzed Red Fish, Cajun Pork Cheek Sausage and Summer Vegetable Stew



3rd - Jambalaya Al La Chef, Pork Cheek and Tenderloin Roulade with Pork Cheek Sausage and Red Fish Collar Jambalaya, Creole Heirloom Tomato Compote, Cajun Cream and Spicy Tomato Sausage with Buttery Sautéed Asparagus



4th - Seafood Trio: Smoked Creole Butter Red Fish, Oyster Rockefeller, and Cajun Red Fish Mouseline with Cayenne Butter Sauce, Summer Root Vegetable Puree, Sautéed Sweet Corn Medley w/ Glazed Carrots and Butternut Squash



Chef Todd Leonard, E&T's Culinary Arts Institute department chair, was named the 2018-19 National Chef of the Year at the American Culinary Federation national convention held in New Orleans. Chef Todd beat out four other regional winners for the first Chef of the Year national title in UVU history.

At the rigorous competition, Chef Todd had 90 minutes to prepare a four-course menu and he used every second, finishing mere seconds before his time expired. The judges, all master chefs, then huddled and compared tastes, presentation skills and sanitation scores.

"Hey, if it was easy, anybody could do it," joked a jubilant Chef Todd. "I knew I needed to make a big impression with an over-the-top menu and leave no doubt who was the best chef this year. It was intense knowing that one mishap, one mis-step, one tiny little thing going wrong would cost me the title. But clearly, it was a risk worth taking."



2018-19 ACF Knowledge Bowl Champions!

Karri Lowe, Abby Raff, Alex Robertson, Hailey Newman, Jeremy Hanson, K.J. Francorn, coach Meghan Roddy, coach



UVU culinary arts students won the national title in the Culinary Knowledge Bowl "Final Four" event. The victory marked the second time in three years that UVU has won the national title.

2018-19 Regional Champs!



Utahna Warren
Western Region
Student Chef of
the Year



Chef Diana Fallis
Western Region
Pastry Chef of
the Year

Utahna Warren, a Senior culinary student from Provo, was named the Western Regional Student Chef of the Year. This is the third consecutive year that UVU has won the title. Utahna then competed for the title of National Student Chef of the Year, but fell just short, finishing second in the nation.

Meanwhile, after winning the Western Regional title, UVU Associate Professor Chef Diana Fallis also finished second nationally in the Pastry Chef of the Year competition. Fallis had just three hours to create from scratch an edible sculpture along with desserts and cookies, all built around the theme, A Midsummer's Night Dream. Her sculpture instantly became a crowd favorite with hundreds of observing chefs waiting in line to take photos.



Utahna Warren's dish



Chef Di's chocolate sculpture



For the 31st time, thousands of car enthusiasts attended the Annual Auto Expo on the UVU campus in May.

Hundreds of various automobiles and models were on display with awards given to the best in show in several categories. Proceeds from the annual event go toward funding scholarships for students in the Automotive program.



In addition to the car show, there was also one of the largest auto swap meets in the Western U.S. going on at the same time.



“Putting on this show is a lot of work but it really comes together and pays big dividends for UVU and the automotive students,” said Don Wilson, UVU Automotive Department Chair. ”

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Hundreds Attend Annual Tech Expo & DGM Festival

Hundreds of high school juniors and seniors attended the annual E&T Tech Expo & DGM Festival.

Students from high schools in Utah were able to race their own 3-D printed cars, pinewood derby style.



Meanwhile, several hundred high students interested in digital media were competing in many different categories along with attending lectures during the day long event.



E&T Student Wins National Championship!

E&T students led the way as UVU finished third at the 54th Annual SkillsUSA National Championships in Louisville, Kentucky. Showcasing their career and technical skills, five E&T students came away as medalists in their competitions, including one National Champion gold medalist. Those five E&T students who earned medals helped lead UVU to a third place finish in the nation. For 18 consecutive years, UVU has been ranked among the top five in the nation thanks mainly to E&T students. Impressively, 20 E&T students who competed ultimately finished in the nation's top-10 in their respective competitions!

A LIST OF THE 2018 WINNERS:

Gold Medal Winner (National Champion):

Scotty George - Automotive Refinishing Technology -

Silver Medal Winners (2nd nationally):

Samuel Adams - Audio/Radio Production -
Gage Freeman - Audio/Radio Production -
Andrew Dearing - Cabinetmaking

Bronze Medal Winner (3rd nationally):

Cayden Bailey - Collision Damage Appraisal & Total Loss Evaluation

Other E&T Students in Top-10 Nationally:

4th place - Commercial Baking - Elena Linfesty
4th place - Engineering Technology Design - Alex Bowden, Tyler Larson, John Sadlier
4th place - Extemporaneous Speaking - Andrew Carling
5th place - Related Technical Math - Julie Hansen
5th place - Mechatronics - John Hawker, Taylor Johnson
6th place - Carpentry - Taylor Stout
6th place - Industrial Motor Control - Colby Christiansen
6th place - Robotics & Automation Technology - Miguel Ortinez, John Hawker
7th place - Collision Repair Technology - Bryan Magallanes
7th place - Motorcycle Service Technology - Kaija Kalm
8th place - Restaurant Service - McKenzie Jorgensen

Construction's Playhouse is A Big Hit

This year, students and staff from the Construction Technologies Department built and donated a "Playhouse" for the Festival of Trees held in the South Town Expo Center. Thousands of visitors were wowed by the quality of construction and learned about our construction program.

At auction, the playhouse sold for a winning bid of \$6,000. The money was donated to the Primary Children's Hospital.



CYBERSECURITY

The UVU Cybersecurity team took first place at the Rocky Mountain Collegiate Cyber Defense Competition. It qualified them for the National Collegiate Cyber Defense Competition. It was the second major cybersecurity competition that UVU won this year.



FIRST PLACE!!

CYBER

DGM Students Earn Marshall Plan Scholarships in Vienna



Two Digital Media students received the Marshall Plan Scholarship at a ceremony in Vienna, Austria. Peter Beard and Ashley Stephenson were the first two Americans to ever win the prestigious scholarship.

The newly appointed US ambassador to Austria, Trevor D. Traina, presented the Marshall Plan Scholarships to Beard and Stephenson. The scholarships are each valued between \$4,000 and \$5,000 euros.

UVU's Department of Digital Media is a global exchange partner with St. Pölten University of Applied Science in Vienna. This is the third year that UVU students have gone to St. Pölten UAS.

Beard, a senior from Nephi, Utah, and Stephenson, a senior from Boise, Idaho were each awarded a Marshall Plan Scholarship for their project work at St. Pölten during the summer semester 2018. Their projects included a significant amount of web game development and virtual reality design.

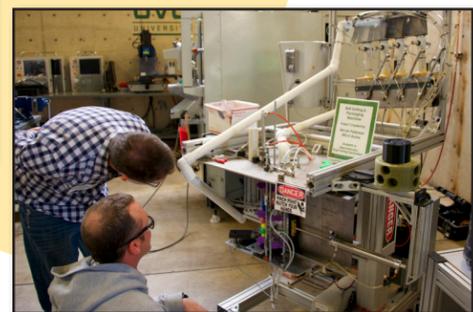
To date, 22 students of St. Pölten UAS have received the scholarship. Peter and Ashley are the first two American Marshall Plan fellows.

Engineering Technology Holds Two Annual Fairs

Quickly becoming one of the most popular events on campus, the Department of Engineering Technology has now been forced to hold not one, but two, Technology Fairs.

“Our student’s projects have become so impressive, both in complexity and in size, we decided to split it up into two events with one Fair each semester,” said Dave Adams, Department Chair.

UVU students, high school students and many industry professionals made their way to the Gunther Technology Building to see first hand what these future engineers created.



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E&T Students Help Win National Title



Two software engineering students helped a UVU team win the National T3 Student Competition at the 2018 T3 Conference in Ft Lauderdale, Florida.

The winning team consisted of two Software Engineering students, Lovina Roundy and Christian Russell from the Department of Computer Science along with two financial planning students.

The T3 (Technology Tools for Today) Conference gives students a chance to be paired with corporate “mentors” who together solve a hypothetical problem.

The winning team from UVU was paired with corporate executives from ORION. The team together developed a new computer program nicknamed, RIGEL, targeted for the financial planning industry which allows communication between multiple platforms such as Google Assistant, Slack, Skype and Amazon Alexa.

This was the first year UVU’s software engineering students were invited to the competition. “Our UVU students were absolutely the best at the competition,” said Jingpeng Tang, Associate Professor of Computer Science. “The judges were all very impressed with our student’s knowledge, preparation and presentation skills.”

The winning team members all received scholarships for further studies at UVU.

Faculty and Staff Awards



Faculty Senate Award of Excellence:
Full-Time Faculty
Angela Trego – Technology Management



Faculty Senate Award of Excellence:
Full-Time Faculty
Sowmya Selvarajan – Geomatics



Faculty Senate Award of Excellence:
Adjunct Faculty
Christian Fredrickson – IS&T



Faculty Senate Award of Excellence:
Adjunct Faculty
Dewey Lundahl – EART



Alumni Award Outstanding Educator of the Year:
Matthew North – IS&T



Dean’s Faculty Award:
Teaching
Terry Orr – Collision Repair Technology



Dean’s Faculty Award:
Scholarship
Basil Hamdan – Cybersecurity



Dean’s Faculty Award:
Service
Sean Tolman – Pre-Engineering



Dean’s Staff Award:
Full-time Staff
Marianna Henry – Academic Advisor, Digital Media

UVU Board of Trustees Approves College Name Change



In January, the Utah Valley University Board of Trustees approved a name change for one of UVU's largest colleges. Effective immediately, the College of Technology and Computing was renamed the College of Engineering and Technology. This name change is a direct result of the recent approval of UVU's three new engineering degrees by the Northwest Commission on Colleges and Universities.

The newly approved Bachelor of Science degrees in Civil Engineering, Electrical Engineering and Mechanical Engineering will join the already existing Computer Engineering degree to form a solid nucleus of engineering opportunities for UVU students.

"This college name change is evidence of our serious commitment to engineering and addressing the growing needs for more engineers in our region," said then UVU President Matthew S. Holland.

University officials anticipate a high demand for these new engineering programs in an effort to meet the critical shortage of engineers in Utah.

"Our new motto is 'Design Your Future,'" said Saeed Moaveni, Dean of UVU's College of Engineering and Technology. "We now have a unique lineup of engineering and technology programs to match most students' aspirations and abilities."

Classes for the new engineering degrees began in the fall 2018 semester. Information on these and other programs is available on the College of Engineering and Technology website: uvu.edu/cet

