

SEPTEMBER 2017

## OU Named a Top Producer for Autonomous Vehicle Workers

The San Francisco Business Times reports that Oakland University is among the top five schools placing graduates in the autonomous vehicle field.

As the automotive industry works to put self-driving vehicles on the road, the market for those qualified to work in the field is growing. The San Francisco Times reports that many of those with the right skills and knowledge for the positions are coming from Oakland.

The report states that about 1.75 percent of all engineering jobs in this field are being filled with OU graduates. While this may not seem like a large number, it puts OU among the top five schools doing this.

Self-driving vehicles may seem like a concept from a sci-fi film, but a future with autonomous vehicles is not so farfetched.

“Basically, this is the future of the automotive industry in this country and around the world,” said Louay M. Chamra, dean of the School of Engineering and Computer Science. “The technology is out there, we just need the infrastructure and the communication in order to make it happen.”

Experts predict that by 2035, companies such as Uber and Lyft will be taking full advantage of an autonomous vehicle market, allowing the average person to summon a self-driving car via their cell phone.

“I think autonomous vehicles are a lot safer,” Lane said. “Especially with the evolution of technology like the cell phone, distraction-wise.”

The autonomous vehicle industry creates a network of transportation that will eliminate distracted driving, impaired driving and creates communication between vehicles to combat traffic accidents.

“The technology already exists,” Chamra said. “We need to standardize that technology.”

Particularly, this includes communication development not merely between cars from one manufacturer, but between manufacturers’ cars, as well.

As for advancing Oakland’s program, curriculum development to keep up with the changing industry is the biggest focus for the future.

“We already teach multiple courses on autonomous vehicles and different technologies,” Chamra said. “Now we want to focus our school on applied research and applied engineering.”

Oakland’s engineering curriculum is already based on consultations with an advisory board where companies have direct input about curriculum improvements and updates. Faculty has the ability to take these suggestions and then incorporate them into their classes.

This collaborative relationship is truly what brought Oakland to the top of the industry in the first place.

“What makes our students different is that they do a lot of internships with companies developing autonomous vehicles,” Chamra said. “We are surrounded by good companies that are involved with them.”

“People always ask me what makes Oakland different,” Chamra said. “Oakland provides opportunities for people to be successful and transform their lives. I think that’s the difference.”

# NEWS YOU CAN USE

## **Oakland University to offer Master's in Systems Engineering Degree**

The industrial and systems engineering (ISE) department at Oakland University is now offering a Master's in Systems Engineering Program.

According to Boston University systems engineering enables building, analyzing and managing a system – be it electrical, mechanical, chemical, biological or one involving business processes and logistics.

“The demand for systems engineering has always been there, it's only that experience has been substituting for theoretical knowledge in systems engineering,” said Vijit Pandey, an assistant professor in the ISE department. “Graduates with a fundamental understanding of systems engineering will have a definite advantage in their careers, many local companies have shown interest in hiring systems engineers and we are routinely contacted by students interested in joining the program.”

Robert Van Til, chair and professor in the ISE department, said anybody who connects to the internet of things needs to start worrying about system level design.

“The program focuses on people who design products, what we call component level design,” Van Til added. “This degree is aimed more at design tools that focus on the system level integration of the various components.”

## **OU Business Scholars place second in prestigious international case competition**

After a demanding 12 weeks of competition in the two-part International Collegiate Business Strategy Competition (ICBSC), the OU Business Scholars placed second for overall performance in their world.

Members of the Oakland Business Scholars team began meeting in late January for the first part of this challenging competition. In phase one, ICBSC teams met at their universities to make five years of quarterly decisions for the simulated company in their assigned world, produce a strategic business plan and annual report. The teams strive to outperform each other on a number of financial and strategic measures.

## **Oakland University shines at this year's Maker Faire**

The 2017 Maker Faire® at The Henry Ford was held July 29-30 and provided an outstanding weekend experience for OU participants seeking to share their ideas of creativity and innovation.

Professors Khalid Mirza, Ph.D., (Electrical and Computer Engineering) and Colleen Ludwig (Art and Art History and faculty adviser for the Makers at OU club) led this year's Oakland contingent.

Together, the group showed off some of the best Makers of OU student projects and demonstrated the latest technology that the university and partner companies

have to offer."

The two-day, interactive event featured robotics, electronics, rockets, food, music, fashion, science and more. Hundreds of exhibiting makers participated, offering dozens of demonstrations and hands-on workshops for anyone who still has a sense of adventure.

---

## **OU's Project Upward Bound awarded \$3 million federal grant**

Oakland University's Project Upward Bound (PUB), a college preparatory enrichment program, has received a \$3 million grant from the federal government. The five-year grant will help sustain one of the university's most successful and enduring programs. Oakland University's PUB is the second-largest in Michigan and celebrated its 50th anniversary in 2016.

---

## **OU Biology professor awarded grant for corneal research**

Sheldon R. Gordon, Ph.D., a professor in the department of Biological Sciences, has been awarded a \$15,000 Eye and Vision Research grant by Eversight, a global nonprofit network of eye banks. The grant was awarded in support of his work in the area of corneal research.

# STATE AND NATIONAL HEADLINES

## **Expert: U.S. Higher Ed a Key Resource for Global Outreach**

American colleges and universities are an “essential part of our nation’s diplomatic outreach” and critical to building the cross-cultural relationships necessary to solve the world’s most pressing problems, a U.S. State Department official said at an international education forum Tuesday.

“The citizens of just one nation alone will never overcome our global challenges,” Thomas A. Shannon, Jr., U.S. Under Secretary for Political Affairs at the State Department, told attendees at the forum.

“Economic opportunity, good governance, energy security and global security can only be advanced by committed individuals, institutions and nations working together to find solutions,” Shannon said. “It’s all about partnerships.”

Shannon made his remarks on the second day of the eighth annual forum of EducationUSA, a State Department network of over 400 international student advising centers in more than 170 countries. Among other activities, the network helps American institutions of higher education better understand how to recruit international students from diverse parts of the world.

*Diverse Education*

## **US: State Funding Cuts Matter**

According to a new study on the relationship between state budget cuts and tuition increases, there is a “pass through rate” 25.7 percent of budget cuts to tuition increases since 1987. However, the pass through rate has been at its highest level in the post-Recession.

Education and Workforce Experts Provide Recommendations for Aligning College Curricula and Other Workforce Strategies with Advanced Manufacturing Needs

Detroit- A new report from leading national higher education and workforce experts says colleges and universities should work with industry to modify their curricula to ensure students gain the knowledge, skills, and abilities they will need upon graduation for jobs that involve new lightweighting technologies, materials, and processes.

The report includes recommendations about college-level competencies required for emerging technologies and lightweight metal solutions across several industries. The report urges programs at both the technical/production (two-year, associate’s degree) and design/engineering (four-year, bachelor’s degree) manufacturing areas, including integrated computational materials engineering (ICME), metamorphic manufacturing, distortion control, and thin-wall aluminum die casting.

*Association of Public & Land Grant Universities*

## **A Review of College Promise Programs: Evidence from the Midwest**

This paper provided a review of research and design components related to college promise programs in the Midwest. According to the report, there are 56 college promise programs in the 12-state Midwestern region. The paper examines Missouri’s A+ program and the Kalamazoo Promise, and explores key questions in the design of college promise programs, such as whether they are first- or last-dollar, the role of serving adult students, and whether the program should cover four-year and two-year college programs.

*Michigan Higher Education Compact*

## **To save students money, colleges look to OER**

An appreciation for how the costs of textbooks and other learning materials make it harder for many students to pay for college has prompted universities across the country – and some university systems – to adopt policies to create or adopt what are called open education resources, or OER.

*The Cap Times*

## **River University continues Job Guarantee Program for Second Year**

New Hampshire’s River University is continuing with its promise to graduate that they will find employment nine months after graduation.

*Diverse Issues in Higher Education*

**OAKLAND UNIVERSITY  
OFFICE OF GOVERNMENT AND  
COMMUNITY RELATIONS**  
(248) 370-3682 | oakland.edu/govrel

**Rochelle A. Black**  
Vice President  
black@oakland.edu

**Nicole Wells Stallworth**  
Assistant Vice President  
wellstallworth@oakland.edu

**Claudia DiMercurio**  
Executive Assistant  
dimercur@oakland.edu

**Jacqueline Racchi**  
Executive Secretary  
racchi@oakland.edu

**A Season to Celebrate for the School of Music,  
Theatre and Dance**

The 2017–18 performance season is our first as Oakland University's newly established School of Music, Theatre and Dance (SMTD). "The creation of the school acknowledges the continual growth of our programs in stature, reputation and the level of influence in the region, state, nation and beyond," said Jackie Wiggins, director of SMTD. "We have designated this our SMTD celebration year and we invite you to join the celebration."

