TAIPEI TECH POST



BIMONTHLY

NATIONAL TAIPEI UNIVERSITY OF TECHNOLOGY



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CAREER

2019 Taipei Tech Career Expo Sees Over 16,000 Job Opportunities



With Taipei Tech's hands-on approach and internship program, we are confident that every Taipei Tech student is ready for what the job market needs.

The Taipei Tech Career Expo took place on March 20, 2019. In collaboration with the Workforce Development Agency of the Ministry of Labor, the Taipei Tech Career Expo successfully brought in recruiters from top-tier companies. Taipei Tech also worked with the 1111 Job Bank to advertise additional job openings. Together with opportunities provided on site, there were more than 16,000 well-paying offers for our graduating students and job seekers.

Nearly 150 companies registered to recruit on site at Taipei Tech, including a number of domestically and internationally renowned enterprises like TSMC, DELTA, Everlight Electronics, Amazon, Super Micro, Enercon, Wipro, Taiko Motors, Tokyo Electron, and UL.



In addition to the career expo, Taipei Tech also hosted individual recruitment sessions from March 20 through 29, in which individual companies talked directly to a group of job seekers in a private setting. Leading companies in electrooptics, motors, mechanical engineering, information technology, and motors participated, including Largan Precision, Quanta Computer, Hotai Motor, NISSAN, PIXNET, YAMAHA, and Schneider Electric.

Taipei Tech finance and information engineering students also designed an online job-matching system for the Career Expo. The system allowed job seekers to send their resumes to recruiters electronically, with personal information strictly safeguarded.

Su Chao-Chin, Dean of Taipei Tech Research and Development Office, expressed approbation of the Expo and Taipei Tech students: "With Taipei Tech's hands-on approach and internship program, we are confident that every Taipei Tech student is ready for what the job market needs."

The international students at Taipei Tech also find their future through the Career Expo. A survey conducted by Cheers magazine in February 2019 indicated that Taipei Tech distinguished itself from all Taiwanese technical universities in terms of the graduates' domain knowledge, stress resistance, and teamwork ability. The survey also shows that Taipei Tech graduates have higher salaries on average, with undergraduates receiving an average monthly salary of TWD \$35,000, master's degree holders receiving 40,000–43,000, and Ph.D. holders receiving 60,000–65,000.

HONOR

Taipei Tech Ranked Most Favorable TVET University by Taiwan Companies



Taipei Tech graduates are ranked most employable among TVET universities. Taipei Tech graduates are ranked the most favorable TVET (technical and vocational education and training) university by Taiwan companies, according to a recent survey conducted by China Times Weekly and the 1111 Job Bank, effectively making Taipei Tech graduates the most employable among TVET universities.

The survey is intended to serve as a reference for high school and vocational high school students who have recently finished their General Scholastic Ability Test and are deciding where to apply. The survey results show that National Taiwan University tops all universities, and Taipei Tech tops all TVET universities, in terms of employability.

Daniel Da Hua Lee, General Manager of 1111 Job Bank, said that employers stress the importance of global mobility, critical thinking, and breakthrough innovative thinking among job seekers. Although the technology industries have been in a predominant position in Taiwan's economy, the importance of humanities and management has also been growing.

Lee further indicated that the information and finance industries have rising personnel needs, especially with the dawn of FinTech, AI, and big data analysis. These needs mean that universities known for their finance and information programs will be ranked higher.

China Times Weekly executive editor Lee Shih Wei indicated that the survey has more than 2,000 participants in its sample size, large enough to serve as a credible reference.

Lee also emphasized the importance of internship and working experiences. Aside from the domain knowledge acquired from university courses, students are highly advised to intern or work part-time at companies in their related industries. These internships will add to their resume and give them a higher chance of securing their ideal job.

GLOBAL LINK

Renewal of MOU between Taipei Tech and CIT on Continuous Academic Exchange

Taipei Tech and Chiba Institute of Technology (CIT) renewed the memorandum of understanding on student and academic exchanges during the visit of CIT delegates to Taipei Tech in March 2019. President Kazuhito Komiya of CIT and President Sea-Fue Wang of Taipei Tech had a pleasant talk about the the universities' current collaboration and future plans.

Taipei Tech and CIT are both technical universities with a long history; they share the same focus of problem-based education, especially in mechanical engineering. Through the Sakura Project, a Japan Science and Technology Agency (JST) initiative promoting academic exchange between Japan and other Asian countries, Taipei Tech has been engaged in an academic and cultural exchange program with CIT since 2014.

The robotics contest is one of the major events in this program. The contest is a two-week event that is hosted in Chiba, Japan each summer, and undergraduate mechanical engineering students from all over Asia team up and design robots according to a designated topic. Every summer, Taipei Tech sends a dozen students to the event, where they work with students from other Asian countries to build



President Kazuhito Komiya of CIT and President Sea-Fue Wang of Taipei Tech had a pleasant talk about the the universities current collaboration and future plans.

robots. This event helps students learn the crucial skills of solving problems using their domain knowledge in a multicultural and multilingual environment.

The Sakura Project has also enabled information exchange on environmental protection. In 2017, Taipei Tech environmental engineering students paid a visit to Minamata in Japan to have a closer look at how mercury overuse can be detrimental to the environment and creatures. Visits to the National Institute for Minamata Disease and to local factories familiarized these students with the analytic methods of the chemicals, with the processes of ecological investigation, and, most of all, with the ecological impact of rapid economic development.

Due to these fruitful experiences of academic and cultural exchange, Taipei Tech and CIT renewed the MOU on the current items. In addition, both sides are in talks to expand the MOU to include faculty exchange, collaborative researches, and short-term language programs.



RESEARCH

Taipei Tech IR Aims to Provide Insight of Higher Education in Taiwan



Taipei Tech has been engaged in several USR projects in regards to education, senior care, and culture revitalization in rural areas.

The Taipei Tech Institutional Research (IR) Office had its grand opening ceremony on January 18, 2019. The primary responsibility of Taipei Tech IR is to provide insight that helps facilitate better teaching and university operations through data collected through surveys. Taipei Tech IR has also been tasked by the Ministry of Education to conduct an MOE project on building an integrated, cross-domain database that will help administrators and instructors better understand the situations in higher education institutes in Taiwan.

Taipei Tech President Wang Sea-Fue highlighted the importance of institutional research as Taiwanese universities face big challenges, including Taiwan's low birth rate and globalization. "Taipei Tech IR will establish a huge and comprehensive database with utmost privacy security," said Wang. "Through data analysis, universities and educational authorities will have the statistics of students' learning outcomes and working performance so they can make adjustments to course arrangements and policies."

At the opening ceremony, staff from Taipei Tech IR showed one preliminary correlative finding on the relationship between the salary of Taipei Tech graduates and the courses they took while at school. The finding shows that graduates who took computer science or programming courses are paid on average TWD \$3,000 higher than those who did not. While more research is needed, staff from Taipei Tech IR believe that this kind of data analysis will be helpful for policy planning and course adjustment and optimization.

Taipei Tech IR has also analyzed the schools from which underprivileged students come. The finding shows that 50.1% of the students are from the northern region and 95.8% are from high schools and vocational high schools in urban areas. Staff from Taipei Tech IR suggested, based on this result, that Taipei Tech should spend more effort in accepting underprivileged students from underprivileged areas.

Also opened on January 18 and sharing office with Taipei Tech IR is Taipei Tech's University Social Responsibility (USR) Office. Taipei Tech has been engaged in several USR projects in regards to education, senior care, and culture revitalization in rural areas. Some recent projects include the Fuyu Project in Mudan town in Pingtung (Fuyu is a pun on "reconstruction" and "abundance") and the branding of organically-grown produce from the Shihlei tribe in Hsinchu. The establishment of the USR Office aims to strengthen and focus Taipei Tech's USR effort.



Through data analysis, universities and educational authorities will have the statistics of students learning outcomes and working performance so they can make adjustments to course arrangements and policies, said President Wang.

FORUM

Forum Discussed Smart Electro-optics as Backbone of Taiwan's 5G and AI Industrie

The Photonics Industry & Technology Development Association (PIDA) and Taipei Tech International Academic-Industry Alliance (IAIA) co-hosted the Forum on the Applications of 5G/AloT and Smart Electro-optics on March 6, 2019. Speakers from academia and from industry were invited to give their views on the future of 5G and Al industries backed by smart electro-optics.

Chuang Yung-Shun, Chair of AAEON Technology Inc., discussed how the integration of 5G network will impact everyday life. He also indicated that the flexibility and high bandwidth of the 5G mobile network will facilitate smart manufacturing and meet a wider variety of needs.

Chen Lung-Chien, Chair of Taipei Tech Electro-Optical Engineering Department, presented his opinion on the applications and challenges of the Mini/Micro LED technology. With its thinness, low power consumption, high luminance, and longer longevity, Chen is optimistic that the Micro LED display technology will meet the needs for screens on thinner and smaller devices. Lu Hai-Han, Lifetime Distinguished Professor of Taipei Tech Electro-optical Engineering Department, focused on the 5G-powered world and on the possibility of building the 6G network on top of 5G. Lu said that, although the cost of building the 5G network is going to be expensive, network providers can reap the benefits in the near future when upgrading to the 6G network will not require additional hardware upgrades, due to advanced fiber-optics technology.

Lin Ying-Yi, Director of PIDA, highlighted the application of electro-optics in the advanced driving assistance system (ADAS) of intelligent vehicles. The upgraded image sensors, accordingly to Lin, are able to more effectively assist selfdriving, and even to improve road traffic safety.

Chiu hiu-Hui, Chair of the MOST Academia-Industry Collaboration, and Lee Jia-Hua, Director of Taipei Tech IAIA, both stressed that the research capacity obtained through academia-industry collaboration is key to keeping Taiwanese corporations relevant in the global supply chain.



PEOPLE

A Decade at Taipei Tech, A Career for Life –



Jorge Sanchez, an international student at Taipei Tech from Honduras, graduated in January 2019 and is now working as an engineer at Chicony Power (群光電能). Jorge shared with us about his professional focuses, his life at Taipei Tech, and his opinion of his alma mater.

1.Please tell us about your research field and focus.

I arrived at Taipei Tech in 2009 for a bachelor degree in mechanical engineering. I started the M.Sc. program in the Graduate Institute of Manufacturing Technology (GIMT) in 2013 and was admitted to the PhD program after one year. In the graduate program, my research focused on the fabrication of thin films and 3D structures by supercriticalfluid-enhanced electroplating process for applications in the semiconductor industry. Based on this topic, I co-authored eleven papers in peer-reviewed international journals, with two more currently under review.

In the graduate program, I focused, first, on completing the required credits and the qualification exam. Then, I focused completely on research, acquiring the necessary knowledge, designing experiments, and acquiring data. I also directed lab juniors in their own research and participated in preparing Ministry of Science and Technology grant proposals with my adviser. Overall, the PhD training was very comprehensive, and the learning experience was very fulfilling.

2. What's your favorite thing about the program at Taipei Tech?

First of all, the professors are very good; most of them are graduates from prestigious universities, with working experience in their respective fields. Secondly, there are many courses on manufacturing, MEMS, measurement, and analyses that are really helpful. Finally, the university has clean room, lithography labs, SEM, and 3D spectroscopy equipment that are very helpful for my research.

3. In your opinion, how can Taipei Tech improve?

Both the GIMT and Taipei Tech have been constantly improving since I started my program. My only suggestion is to open more English-taught courses and to keep up the good work!

4. Please tell us about the training from Taipei Tech you find useful at your current company.

I applied for the Chicony Scholarship offered to Taipei Tech engineering students per Prof. Ho Chiao Chuang's suggestion. After graduation, I was hired as a production technology engineer in the Advanced Technology Center of Chicony Power, a subsidiary of Chicony Electronics. I have found the training from both the undergraduate and the graduate programs to be very helpful, especially in electrical machinery (電機機械), CAD (電腦輔助製圖), and simulation (模擬), as well as in experiment design and equipment handling.

PEOPLE

From Harvard to Taipei Tech

Professor John Griffith



Professor John Griffith, an international scholar from the United States, has been teaching at Taipei Tech Department of English for over 10 years. Prof. Griffith, a Harvard graduate, gave students some useful suggestions, and also told us his outlook on the development of higher education in Taiwan.

1.Please tell us about the reasons to work in Taiwan.

The best reason for a foreigner to work in Taiwan is that life here is, on the whole, foreigner-friendly. Of course there are frustrations because of differences in language and culture, both at work and in daily life, but overall Taiwanese people are very welcoming and helpful to foreigners.

2. What are the differences between the university students in Taiwan and in America?

Taiwanese students tend to be less active in class than American students. American students participate in class discussion, but often are overconfident and overly sensitive to criticism. Taiwanese students accept constructive criticism, but because they often wait to be told what to do or what to think, their work tends not to be as original or as independent.

Both types of students misunderstand the nature and the value of active learning: American students often feel all that matters is their personal opinion, assuming it cannot be criticized; Taiwanese students often struggle to understand the value of original or independent work, assuming they will be told all they need to know.

Active learning, of course, is really about placing your ideas in relation to others, developing critical thinking skills,

and learning to accept constructive criticism so that you can change your view for the better.

3. Please share your opinion on higher education in Taiwan.

Although the higher education system does well in developing specific technical skills that help students find work after college, I think it is important to see the purpose of an education as extending beyond job placement. Preparing students for a career is essential; but higher education also exists to prepare students to be better people. That type of education requires study in culture, history, and ethics, in order to develop the critical thinking skills necessary not just for work but for a meaningful life – moral, thoughtful, aesthetically rich – outside of work. College graduates should be good workers, but also interesting individuals and well-informed voting citizens.

4. Please tell us the suggestions for the internationalization of Taiwan universities.

Interacting with foreigners here and immersing in a foreign culture abroad are great ways for students to gain language skills, cultural knowledge, and future business contacts. Therefore, developing work or study exchange programs with businesses and universities outside Taiwan is important, as are the efforts to bring more foreign students and researchers to Taiwan.

Still, while developing international opportunities for students, Taiwanese universities should be cautious about importing the worst aspects – political correctness, for example – of foreign university culture. Taiwanese universities need to think critically, fusing the best of what is outside Taiwan to what already works well here.