

Academic Year 2008–2009 Yuan Ze University
Department of Industrial Engineering and Management
Overseas Academic Visiting Program Report

Professor Sun, Professor Jen and Professor Lin in IE&M department led a group of 20 students to initiate this academic visit in Singapore. During April 2 to April 5, 2009, they have visited Temasek Polytechnic, National University of Singapore (NUS) and Nanyang Technological University (NTU), proceeding a visiting journey of four days...

We have visited Singapore for the academic interchange program in April. Our group included freshmen, master students, PhD students, staffs, and professors in the department of IEM. The weather in Singapore was very hot. Once getting off the airplane, all of us took off heavy jackets and wore clothes with short sleeves. After having traditional Nyonya lunch, we went to Temasek Polytechnic (TP). The TP is not a university in Singapore, instead, it is more like a science and technology school contrast to Taiwan.



The faculties in the TP firstly introduced their school. Then, they toured us to their fuel cell laboratory. The research work in this Lab targets in real products. For example: researchers develop fuel cell bicycles, battery chargers, and so on. The main theory for these products is to apply chemical conversion among hydrogen, oxygen, and catalyst to generate electric power. Next, we visited 3D media studio. I was impressed and very interested in this laboratory. If you had ever seen the movie “Minority Report” acted by Tom Cruise, you should have impression on the way how they operated computers. They can make some actions like magnify, shrink, or rotate the pictures on the screen by using hands only. The reason behind this is that they utilize the reaction of infrared ray. Their 3D media room also made me very exciting. In the lab, three walls simulate real environment by “Virtual Reality” technique. The screen can be updated whenever a person wears the sensor moves, for example: squatting down, going forward and backward, etc. It seems just like we are looking out from our side.



There are only three national universities in Singapore: National University of Singapore (NUS), Nanyang Technological University (NTU), and Singapore Management University (SMU). We visited two of them in this trip. In the second morning, we had a seminar in NUS which ranks in top 30 in the world. The students from both YZU and NUS presented their research. The presenters from NUS were the volunteers, while our presenters were appointed instead. Basically they are better than us in terms of attitude. But as for the presentation content and skill, I think the students from both universities gave equally well talks.



We went to NTU in the afternoon. NTU is also one of the top universities which ranks number 77 in the world. We visited the “School of Mechanical and Aerospace Engineering”. It is called a school since it has more than 100 professors in this unit. Their lab focuses on the robot with automation and visual capability for making judgments. I feel that our department can’t be compare with their resource because these research equipments require huge funding.



The “National RFID Center” in NTU is our last visiting spot. The staffs in the center introduced the products of RFID to us warmly. Everybody was highly interested in this field, and many of us inquired the functions of the products and practiced how to use them. The whole academic activities visiting end here. We enjoyed the rest of the time to experience the culture and life in Singapore. Having learned new things from different aspects, I am very glad to participate in this program to Singapore.

