GC 2012-5627: DEVELOPMENT TRENDS OF ENGINEERING EDUCATION IN TAIWAN

Prof. Min Jou, National Taiwan Normal University

Professor Jou received his Ph.D. in 1994 from Rensselaer Polytechnic Institute. He joined the faculty in 1995 as Associate Professor in National United University. He was appointed as the Chairman for Mechanical Engineering Department from 1997-2000. In 2006, International Association of Science and Technology for Development (IASTED, Canada) appointed Dr. Jou to serve as Technical Committee on the Web, Internet, and Multimedia. In 2001, he returned to Taipei city and joined the faculty in National Taiwan Normal University. Dr. Jou was promoted to Professor in 2006. In 2009, he was appointed by National Science Council (Taiwan) to serve as committee member of research project principal reviewer in Discipline of Applied Science Education. Professor Jou has authored 1 technical book in design, and over 50 research papers in diverse areas of education, e-learning technology, information technology, and automation. In addition to, he served as reviewer of numerous SSCI and SCI indexed journals for many years. Dr. Jou is an editorial board member of the International Journal of Electronic Democracy (Inderscience Publishers), International Journal on New Trends in Education and Their Implications, and The Turkish Online Journal of Educational Technology (SSCI). Dr. Jou teaches multidisciplinary courses in industrial education, application of ICT technology in education, media and technology, virtual reality technology, computer aided engineering, and mechatronics; for which he has received numerous departmental, school, institute, and national awards. Current research interests include engineering education, u-learning, e-learning, m-learning and mechatronics.
Taiwan is a country which relies heavily on its manufacturing industries; therefore, it needs an enormous pool of skilled labor. This is the main reason behind Taiwan’s development of an extensive technological education system. In the past, more people enrolled in vocational education than academic education. However, the number of people enrolling in vocational education has been in obvious decline due to the upgrade and transformation of industry in recent years. This change has caused the number of students arriving at university from academic high schools and vocational schools to become equal. These students advance to higher education levels in different ways. Universities in Taiwan are divided into two systems: comprehensive universities and technological universities. In the past, due to recruiting regulations, comprehensive universities could only recruit students from academic high schools, and technological universities could only recruit students from vocational high schools. Fortunately, recruiting regulations in Taiwan have since been relaxed. Thus, students from vocational schools are able to attend comprehensive universities, and students from academic schools are able to attend technological universities. However, the majority of students in comprehensive universities are from academic high schools, and the majority of students in technological universities are from vocational high schools.