Message from Academic Director

The IVE Engineering Discipline covers a wide spectrum of studies including electrical and electronic engineering, mechanical, manufacturing, and industrial engineering, and construction. In the current academic year, it offers 37 Higher Diploma (HD) courses, 15 craft-level courses in 13 academic departments at 8 IVE campuses with a total enrolment of about 9,000 full-time and 8,600 part-time students.

Our courses are developed by subject specialists to meet the manpower needs of industry, and many of the HD courses are accredited by the Hong Kong Institution of Engineers. Hence our graduates have been well received by employers over the years. For instance, employment rates of the HD graduates of the 07/08 cohort were in the 90% range. In addition, graduates have ample opportunities to pursue further studies at universities – about 25% of the HD graduates have enrolled in degree programmes at UGC institutions in this academic year.

We have recently introduced whole person development, industrial attachment in the Mainland, and industry-based student projects to the HD curriculum. The objectives are to enhance students’ soft skills, increase their awareness of working in the Mainland, and widen their experience in tackling real-life projects, which are vital to building a successful career in the engineering field.

This is the first quarterly issue of the IVE Engineering Newsletter. We would like to make use of the Newsletter to connect to our stakeholders and would very much appreciate your input. We are looking forward to receiving your comments and suggestions.

Ir Dr. Lawrence W. CHAN
Academic Director
IVE Engineering Discipline

Bright Future of the Engineering Profession
Interview with Ir Dr. LO Wai Kwok

Faced with an ever-fluctuating global economy, engineers in Hong Kong are tackling the toughest challenges. Equipped with in-depth knowledge and expertise, engineers carry out the mission of creating a better world by continually developing innovative products and building mega-infrastructures.

Nowadays, how do practicing engineers keep abreast of the evolving global technology landscape dominated by fierce competition and characterized by fickle demands? We are honored to have Ir Dr. LO Wai Kwok, Past President of the Hong Kong Institution of Engineers and Deputy Chairman and Managing Director of Surface Mount Technology (Holdings) Limited, to share his views on the career prospects of engineers.

Overview of the Engineering Profession

As a veteran engineer who has received many enviable accolades from the community, including an Honorary Fellow of The Hong Kong University of Science & Technology and Vocational Training Council, Ir Dr. LO asserted that engineers always play an indispensable role in the human world.

"Actually, we cannot live without engineers. All the basic necessities of daily life, such as water supply, electricity generation, lighting, and air-conditioning systems... and so on, are the work of engineers,"
he said. “Therefore, engineers are believed to be in perpetual demand.” The insatiable of human needs, however, does not imply that engineers can always stick to the traditional ways of practice without changing. IR Dr. Lo believes that the engineering field encompasses a wide spectrum of variable factors in line with the current economic trends and technological development throughout the world, and engineers have to be highly adaptable.

**Challenges for Engineers in the New Era**

In the evolving age of technological advancement, notably due to the rapid development of information technology, the engineering profession is continually morphing and diversifying itself into a multi-disciplinary field. Until now, the number of engineering disciplines accredited by the Hong Kong Institution of Engineers has been extended to 19,” said IR Dr. LO. “The latest ones include aircraft and fire engineering.”

Today, Hong Kong engineers need to combine traditional and modern practices to cope with the many baffling challenges.

Addressing the government’s 2007-2008 policy, IR Dr. LO said that Hong Kong engineers are wholeheartedly devoted to accomplishing the 10 major infrastructure projects. “It is our mission to carry out these projects; we are all geared up to get all 10 of these infrastructure projects completed.” Among them, the Guangzhou-Shenzhen-Hong Kong Express Rail Link, Hong Kong-Zhuhai-Macao Bridge, and West Kowloon Cultural District are comparatively greater in scale. “Such huge infrastructure projects bring about economic value in the long run,” he added. These projects are currently in progress and have reached different stages of development.

**Core Values: Sustainability and Recycling**

According to IR Dr. Lo, engineers have three critical concerns while working on development projects: eco-friendliness, recycling, and logistics. All these elements must be considered in the context of the ultimate goal of sustainability. “This is really a big challenge to all engineers, to avoid the over-exploitation of natural resources and to minimise the negative impact it would bring to the world.”

In recent years, going green has been one of the most popular topics worldwide. All sorts of businesses, including a majority of the industrial players in China, have put their emphasis on recycling. “There is a growing trend for eco-minded consideration in all disciplines,” said IR Dr. LO. He suggested that engineers should learn from experiences in foreign countries and adopt what is considered feasible and sustainable for recycling natural resources. “In Japan, people make use of a new combustion and thermo-treatment technology to turn domestic sewage into clean residues, which can be recycled for other uses,” explained IR Dr. LO.

**Unparalleled Global Vision of HK Engineers**

Despite fierce competition in engineering industries around the world, IR Dr. LO believes that Hong Kong engineers have unique attributes which accord them unparalleled advantage in competing with their engineering counterparts worldwide. “Hong Kong engineers have equipped themselves with a global vision due to the multi-cultural background of Hong Kong, which make us open to foreign cultures and readily adaptable to the differential practices of overseas countries,” elaborated IR Dr. LO.

**Delving into the Kaleidoscopic Career World of Engineering**

In view of the emerging need for environmental concern and the exuberant growth of information technology, IR Dr. LO believes that engineers have a rich array of career options. “Today engineers are no longer confined to work in the technical field. Engineering graduates may take up responsibilities in administration, management, finance, logistics, and so on,” said IR Dr. LO.

“Engineering is such a marvelous field that all practitioners should have an open mind to keep abreast of the ever-changing environment around the globe. Opportunities are always there whenever you want to seize one,” he concluded.
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