

## **REPORT ON THE FEIAP TRAINING**

FEIAP 3 Days Training on Introduction to Outcome-Based Engineering Education and Professional Engineer Development and Assessment was held from **20-22 September 2020** virtually, hosted by the NPU-FEIAP “Belt and Road” Engineering Education Training Centre, NFTC and supported by CAST.

### ***Objectives of the Training :-***

The objectives of the training were to provide information and training on

- 1) Outcome-based engineering education accreditation system.
- 2) Outcome-based Professional Engineer Development and Assessment

### **Day 1**

The programme allowed the speaker, Ir. Dr Tan Yean Chin to shares the importance of mutual recognition of engineering personnel graduates (e.g. engineers, engineering technologists and engineering technicians) for growth, cross border mobility and networking in a globalised world.

The speaker also discussed on the demand, actions and understanding required by institution/organization and highlighted a few sample of each economy and region to achieve this objective.

For the Outcome-based Professional Engineer Development and Assessment, the speaker shared with the attendees the typical requirements of the professional engineer development and assessment that were required to have consistent standard that would serve the needs of the economy and if possible could consider complying with the requirement of the APEC / IPEA Engineers Registration.

The topics covered for the 1st session were

- I) Importance of mutual recognition of Engineering Graduates for Growth, Mobility and Networking
- II) Introduction to Outcome-Based Professional Engineer Development and Assessment (Part 1)

For the 2<sup>nd</sup> session, the speaker continued with the Outcome-Based Professional Engineer towards APEC Engineers Registration (applicable also for IPEA)  
(Part 2)

### **Day 2**

The President of FEIAP Prof Dr Huang Wei gave an opening speech on FEIAP effort to promote the scientific and technological progress in engineering and to improve the engineering quality in advancing engineering development in the industries for the benefit of the profession. He added that in 2019, at the starting point of the ancient Silk Road, in Xian China, FEIAP and NPU co-founded the NFTC with the ultimate aim to strengthen networking, standards of the economies and organizations of the “Belt and Road” region through activities conducted such as training sessions and conferences, so as to mutually promote the “Belt and Road” engineering education accreditation and registration of professional engineers.

The proposal to implement the action plans of NFTC for 2021-2023 was successfully held on the 29<sup>th</sup> August 2020. FEIA P NFTC has planned a series of activities and the schedule has been reviewed. FEIAP has also reached a preliminary consensus with FAEO on the “Belt and Road” engineering education standards. This is a major milestone achievement in promoting the “Belt and Road” engineering development. This online training as scheduled, would be to provide the said training and hopefully would achieve fruitful results for all.

The President ended his speech calling for opportunities to exchange ideas on engineering education development, enhance mutual understanding, and strengthen cooperation in facilitating the formation and operation of the Belt and Road Engineering Education Accord in order to improve the quality of engineering education of all countries.

Following the President’s speech, YBhg Tan Sri Dato Academician, Ir Prof Em Dr Chuah Hean Teik, the speaker for the day spoke on Outcome-based engineering education accreditation system. For the Outcome-based engineering education accreditation system, the speaker introduced to all attendees the FEIAP Engineering Education Guidelines (included Engineer, Engineering Technologist and Engineering Technician) that are of equivalent to world standards for engineering standards (e.g. Washington Accord).

### **Day 3**

Discussion on Outcome Based Engineering Education Accreditation System moderated by Tan Sri Dato Prof. Ir. Dr. Chuah Hean Teik took place in the morning sessions followed by the Mutual recognition of engineering graduate and the outcome based professional engineer development and Assessment System conducted by Ir. Dr Tan Yean Chin in the afternoon session. This session allowed the attendees to pose questions and seek answers and clarifications. It was a very successful mingling sessions between the speakers and the attendees.

## **Visions and Objectives NPU-FEIAP B&R Engineering Education Training Centre (NFTC)**

### **Visions**

1. To have a unified and inclusive Engineering Education Standards which promotes mutual recognition of the Engineering Education Programs (Engineer, Engineering Technologist and Technician programs) among Economies in the B&R Initiative region and FEIAP member economies.
2. To facilitate and to promote mobility of the Engineers, Engineering Technologists and Technicians among the economies in B&R Initiative region and FEIAP member economies.
3. To provide continuous professional development to increase the number of competent Engineers, Engineering Technologists and Technicians who will help the economies to develop into developed nations
4. To promote understanding of civilization in B&R Initiative region and FEIAP member economies via cultivation of cultural intelligence in engineering education.
5. To promote students exchange programs among universities in the B&R Initiative region and FEIAP member economies.

## **Objectives**

1. The NFTC is set up in NPU, Xian, China.
2. To conduct Engineering Education Accreditation Training (EEAT) based on established FEIAP Engineering Education Guidelines, FIEAP Engineering Technologist and Technician Education Guidelines
3. The Engineering Education Accreditation Training (EEAT) will cover training of Assessors, Academics and Accreditation Agencies of the economies in the B&R Initiative region and FEIAP member economies.
4. To facilitate and promote of mutual recognition of Engineering Education Programs among the Universities in the B&R Initiative region and FEIAP member economies, which is keystone for the mobility of Engineering Personnel (e.g. Engineers, Engineering Technologists and Engineering Technicians).
5. To facilitate and promote students exchange program among the Universities in the B&R Initiative region and FEIAP member economies.
6. To facilitate and promote the mobility of engineering personnel (e.g. Engineer, Engineering Technologist and Technician) who has fulfilled the FEIAP Engineering Education Standards in the economies of the B&R Initiative region and FEIAP member economies.
7. To conduct Professional Development courses for Infrastructure Development and Maintenance for the Engineers, Engineering Technologists and Technicians.
8. To facilitate and promote the networking of the engineering personnel (e.g. Engineer, Engineering Technologist and Technician and Academics) to share knowledge, experiences, business opportunities and friendship for closer ties among the engineering fraternity in the economies of the B&R Initiative region and FEIAP member economies.
9. To improve and keep up to development of the world on the Engineering Education and Training to benefit the economies of the B&R Initiative region and FEIAP member economies.
10. To be a platform for exchange of academics and engineering students in B&R and FEIAP member economies.