

## **REPORT ON the Training on NFTC Forum on Engineering Personnel Registration**

The training on Outcome-based Engineering Education was held on **September 2<sup>nd</sup>, 2021** virtually on Zoom. The training was hosted by NPU-FEIAP “Belt and Road” Engineering Education Training Center (NFTC) and supported by CAST, China Association of Science and Technology. Speakers of this training are Academician Professor. Ir. Dr. Chuah Hean Teik, Chairman of FEIAP Standing Committee on Engineering Education, and Ir. Dr. Tan Yean Chin, FEIAP Secretary General. A total of 112 participants from China, Malaysia, Australia, Myanmar, Philippines, Kenya, Mauritius, Pakistan, Nigeria, Nepal, India, Papua New Guinea, Vietnam, Taipei, and Cambodia, etc., attended the training.

### ***Objectives of the training:***

The objectives of the training are:

- 1) to introduce registration and development of engineering personnel via FEIAP & Africa, Asia and the Pacific Accord (AAP Accord) to participants;
- 2) to introduce and explore engineering graduate outcomes and professional competencies;
- 3) to have detailed discussion with participants.

Dr. Tan Yean Chin introduced FEIAP firstly, including its history, members, office bearers, and FEIAP’s objectives. He then demonstrated three main projects of FEIAP, namely NFTC Functions and Programs, Africa, Asia and the Pacific Accord (AAP Accord), and FEIAP Engineering Personnel Registry. Dr. Tan Yean Chin explained each project in detail. He also introduced the process of registration of graduate engineering personnel and development of graduates’ professional competency profiles. Dr. Tan believes that AAP Accord can play key role in mobility of engineering personnel.

Professor Chuah Hean Teik explored graduate attributes and professional competency for engineering personnel from the aspects of modes of services, mobility of engineering personnel, requirement for accreditation and international benchmarking for independent practices, knowledge profiles for engineering personnel, and professional competency of engineer, engineering technologist and engineering technician. Prof. Chuah explained roles of Engineering Personnel and technical job functions in detail through various examples.

In the last part, Prof. Chuah moderated the Q&A session where participants asked questions about the elaboration of AAP Accord concepts, the way to complete engineering personnel register, the current situation of engineers in each country, etc. Prof. Chuah and Dr. Tan answered all questions and interacted with participants. Participants also expressed their gratitude and presented their interest to join in future training.

### 1 Project 1 :- NFTC Functions and Programs

NPU-FEAP Belt and Road Engineering Education Training Centre (NFTC) (Officially Formed 29 June 2019 @ Xian, China)

**Functions of the Centre**

- Offer mentorship training and reviewing of FEAP Engineering Education Guidelines
- Promote the mutual recognition of the Engineering Education Programs
- Enhance the mobility of engineers, engineering technologists, and technicians
- Make contribution to the regional prosperity

**Goal of the Center**

Train capable professors and engineers to guide and review the establishment of an Accreditation System

### Engineering Personnel Development

#### Engineering Personnel Progression and Development

FEAP or Equivalent Engineering Accreditation System

Mobility NEEDED for Cross-Border Employment

Individual Practice Widely for Civil and Construction Industry (or Authority Submission)

APEC and IPEA International Engineers

- FEAP Engineering Guidelines (Stage 2 full compliance)
- AAP Accord, EUR-ACE & Washington/Sydney & Dublin Accord

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### 1 Main Activities at the Training Centre

### AAP Engineering Education Council

## Mobility Forums

An APEC/IntPE/ACPE Engineer must have have:

- Completed an accredited or recognized engineering program, or assessed recognized equivalent
- Been assessed within their own economy as eligible for independent practice
- Gained a minimum of seven (7) years practical experience since graduation
- Spent at least two(2) years in responsible charge of significant engineering work
- Maintained their continuing professional development at a satisfactory level

**Prof. Adisa, A. B...**

Prof. Adisa, A. Bello, FAEng

**NFTC HOST**

NFTC HOST

**Yin Yin Kyi (TU-...**

Yin Yin Kyi (TU- Taunggyi)

Hean-Telik Chuah (UTAR/IEM)

**Baba Jibril El-Ya...**

Baba Jibril El-Yakubu

## Graduate Attributes and Professional Competency for Engineering Personnel

Ir. Academician Emeritus Professor Tan Sri Dato' Dr. HT Chuah  
Chairman  
Standing Committee on Engineering Education  
Federation of Engineering Institutions of Asia and the Pacific

### Engineering Solution

**Prof. Adisa, A. B...**

Prof. Adisa, A. Bello, FAEng

**NFTC HOST**

NFTC HOST

**Ayla Safdar**

Ayla Safdar

NFTC HOST

Abraham Eju

Abraham Eju

Prof. Adisa, A. B...

NFTC HOST

Ayla Safdar

Yin H. Meng

MAGDASHI SOOBAH

Dr. Myo Hsueh

Dr. Myo Myo Win (Myanmar)

Dr. Myo Hsueh

Dr. Myo Myo Win (Myanmar)

Ms. Khayy SOPHIA(SEC)

Dr. Myo Hsueh

Yin Yin Kyi (TU- Taunggyi)

Su Hong Yeoh

Dr. ChitMyatWin

Eng. Khin Maung Hlaing (Fe...

Dr. Ong Chong Yee

HEM SOONHOU(SEC)

Tazabbil Kiri

Malaysia Jab Chuan

Daniel Chuan Jooi Hoong

Eng. Dr. Abubun Dauro

Dr. Ong Chong Yee

U. Samuel Clem...

Dr. Heek Tin Cho Nyunt, GRI...

KYAW ZIN OO

Dr. We Lin Htet (CME)

Baba Jibril El-Ya...

## **Visions and Objectives**

### **NPU-FEIAP B&R Engineering Education Training Center (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.