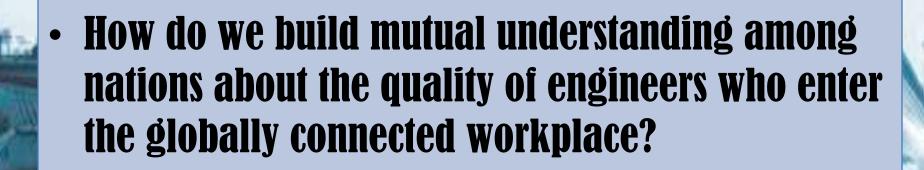


Engineering Profession in Jordan and Engineering Outcomes and PSUT Model

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Undersecretary General
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- George Peterson,
- Washington Accord Secretariat, 2001–2007

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Overview

- JEA is 150,000 registered members
- 11 branches (Amman Center) and 14 branches (Jerusalem Center)
- 30+ JEA liaison offices in the world
- 60,000 engineering students at National Universities
- 1280 engineering firms in Jordan alone
- Every 30+ minutes we have a new engineering graduate in the six disciplines of JEA main streams
- 55,000 registered members in Electrical engineering discipline and 30,000 in Civil, and 25,000 in mechanical alone.
- 35,000 Jordanian Engineers in the Gulf alone

Overview

- JEA was established in 1958 with a Jordan Engineering ACT (first amendment 1972)
- PSUT was established in 1991 with two schools Electrical Engineering and Information Technology Schools (a total number of students of 3500 and 160 staff members)
- Jordan Has a the Higher Commission for Quality and Accreditation (Independent Body)

Role of JEA in the education and training in the formation of a **Practicing Engineer**

- Meet standard of engineering education: Graduate Attributes
- Meet standards for professional competency
- Observe code of conduct
- Maintain competencies

PSUT Vision in the formation of Practicing Engineers

- Creating the programs of engineering that meet the requirement of the engineering practice according to JEA standards
- PSUT achieved the first two attributes of having its programs by ABET.
- Making the un employability rate at its minimum level by meeting the other two standards

Engineering Market GAP

·Its all about engineering attributes needed in a global engineering world

Attribute

JEA Graduate Attribute Profile has 12
elements, supported by a Knowledge Profile
(8 elements), and a definition of the Level of
Problem Solving, which support the culture
of quality assurance and accreditation

Graduate Attributes of Quality Assurance and Accreditation

Engineering knowledge

Problem analysis

Design/development of solutions

Investigation

Modern tool usage

The engineer and society

Environment and sustainability

Ethics

Individual and teamwork

Communication

Project management and finance

Life-long learning

Attributes: Complex Engineering Problem and activities

- 1. <u>Depth of knowledge</u> required
- 2. Range of conflicting requirements
- 3. <u>Depth of analysis</u>
- 4. Familiarity of issues
- 5. Extent of applicable codes
- 6. Extent of stakeholder involvement and needs
- 7. <u>Interdependence</u>

- 1. Range of resources
- 2. Level of interactions
- 3. <u>Innovation</u>
- 4. Consequences to society and the environment
- 5. Familiarity

