



**IFEES**

INTERNATIONAL FEDERATION OF ENGINEERING EDUCATION SOCIETIES

**IFEES Strategic Plan**

Final Version

22 September 2015

## **Membership (who we are)**

A global membership organization of Engineering Education Organizations, Professional Societies, Student Organizations, Policymakers, Industry and Government Entities with an interest in advancing engineering education throughout the world

## **Vision**

Be the collective voice and change agent for achieving relevance, excellence, equity, access and diversity in engineering education worldwide

## **Mission**

Advance and advocate for engineering education and engineers worldwide by connecting, sharing resources and leveraging strengths of members and stakeholders

## **Objectives**

- Provide a forum for its members to leverage its resources
- Provide a community that will identify and advance the issues related to engineering education
- Define the profile of the emerging engineer through stakeholders
- Advocate and disseminate best practices to external stakeholders, such as policymakers and industry

## **Values**

IFEES will promote the following core values among its members and in all of its activities:

- Excellence and quality in engineering education
- A culture of community building and collaboration among all stakeholders and across all diversity borders
- An engineering educational experience and profession which displays integrity, honesty, mutual respect and sensitivity to cultural, economic, and geographic issues of its stakeholders

## **Strategic Thrust Areas**

IFEES will use its activities to address the following thrust areas of interest:

1. Increase IFEES membership
2. Increase partnership opportunities with like-minded organizations
3. Support the network of students, faculty and partners (institutions and industry)
4. Promote quality assurance (QA) of engineering education
5. Increase participation in the World Engineering Education Forum (WEEF)
6. Develop capacity building in engineering education

For each thrust area, the following will be described:

- a. Description of activity
- b. Benefits
- c. How it supports the IFEES Mission
- d. Future Vision - where IFEES should be in 2, 5, 10 years
- e. Partners

## **1. Increase IFEES Membership**

- a. Description of activity: How can IFEES best position itself to grow membership?  
Possible opportunities include the following:
  - Personal promotion of IFEES by individual members to potential members
  - Increase the visibility of IFEES in members' conferences and events (such as technical co-sponsorship, short talks about IFEES in the conference program, distribution of flyers, etc.)
  - Production of promotional materials that may be used at member conferences or related activities
  - Advertise in applicable professional publications. In addition, many members of IFEES are publishers of journals with a wide distribution
  - Encourage established member(s) to sponsor/mentor newcomers in IFEES
  - Install creative membership fees for new and established members to attract and retain members
  - Create membership categories to address a wider range of possibilities
- b. Benefits
  - Both new and existing members benefit by expanding the membership base. IFEES will become a more robust, stable institution with greater influence and impact.
- c. How does it support the IFEES mission?
  - Expanding the membership base provides IFEES more resources that will allow it to focus on broadening its impact through activities such as: expanded training, underwriting the costs of attendees from developing countries, etc.
- d. Future vision: Where should IFEES be in 2, 5, 10 years?
  - Within 10 years, double the existing number of member organizations in all categories, including academia, industry, etc.
- e. Partners (industry, academia, association, etc.)
  - Current: all current IFEES members should be involved in supporting the growth and success of the organization. As such, IFEES leadership should work with and through IFEES members to promote membership to appropriate organizations with aligned interests
  - Proposal: suggest a small working group be created to identify potential new members
  - What do they bring to the activity?
  - Diverse viewpoints, opportunities for broader impact, financial stability

## **2. Increase partnership opportunities with like-Minded organizations**

- a. Description of activity:

- Align IFEES with organizations whose mission areas are of mutual/similar interest
- b. Benefits
- IFEES members benefit through relationships with organizations with similar interests, providing opportunities for greater influence and impact through synergies of IFEES and others
- c. How does it support the IFEES mission?
- Expanding the IFEES influence and impact. Can also reduce the amount of resources needed to achieve specific mission area goals through (potentially) complimentary activities
- d. Future vision: where should IFEES be in 2, 5, 10 years?
- Should establish relationships with several organizations, including international organizations
- e. Partners (Industry, academia, professional and international organizations, etc.)
- Both industry and academic organizations should be considered and potentially targeted as partners

### **3. Support the network of students, faculty and partners (institutions and industry)**

- a. Description of activity:
- Strengthening the ecosystem for engineering faculty, students and institutions (academic and industry) to network by sharing best practices: conferences, journals, online platforms, faculty networks, student networks (face to face as well as virtual)
- b. Who benefits?
- All IFEES members will benefit: engineering faculty, students and institutions (academic and industry)
- c. How does it support the IFEES mission?
- Ecosystem catalyzes the mission of improving the quality of engineering education around the world.
  - Expanding the IFEES influence and impact.
- d. Future vision– where should we be in 2, 5, 10 years?
- Increase number and quality of all elements of this ecosystem gradually over the years
- e. Partners (industry, academia, association, etc.)
- Current: Currently academia, associations and industry are involved in developing this infrastructure, BUT not in an integrated and organized manner

- Proposed: Increase participation of industry and community organizations and help coordinate and integrate ecosystems being developed by IFEES members in various regions
- What do they bring to the activity? Industry and community organizations bring the dimension of relevance to the activities of the ecosystem

#### **4. Promote Quality Assurance of Engineering Education**

- a. Description of activity:
  - Promote improving the quality of the educational experience for engineering students. The focus is primarily on the undergraduate level. It is envisioned that this area will provide a forum for quality assurance groups and other interested parties to fully engage in discussions and activities that benefit all members, such as sharing of “Best Practices,” building professional relationships in this area, and building stronger ties between IFEES members and quality assurance organizations.
- b. Who benefits?
  - All IFEES members will benefit, but in different ways: Industry (employers of graduates), academe (continuous quality improvement), students (the best possible education offering), institutions (quality programs, competitive advantages)
- c. How does it support the IFEES mission?
  - Quality engineering education is fundamental to all IFEES activities, and to the long-term success of the engineering profession
- d. Future vision – where should we be in 2, 5, 10 years?
  - Near term: identify QA organizations that would provide, and receive, value from this engagement. Provide information to IFEES members about ways to participate in the QA: benefits of QA, provide workshops on QA process, targeted offerings in various aspects of formal QA techniques, etc.
  - Longer term: formal partnership between IFEES members (such as QA agencies) on QA activities specifically delivered to IFEES members.
- e. Partners (Industry, academia, association, etc.)
  - Current: ABET, Engineers Canada, European Network for Accreditation of Engineering Education (ENAAE), German Accreditation Agency Specialized in Accrediting Degree Programs in Engineering, Informatics, the Natural Sciences and Mathematics (ASIIN),
  - Proposed: above, plus Institute of Electrical and Electronics Engineers, (IEEE), American Society for Engineering Education (ASEE), European Accredited Engineer (EUR-ACE), International Engineering Alliance (IEA), World Federation of Engineering Organizations (WFEO), etc.

## **5. Increase Participation in WEEF**

- a. Description of activity:
  - Identify different avenues and methods to increase the number of participants in WEEF, identify barriers to attending WEEF, identify different populations and strategies to attract them
- b. Who benefits?
  - All members of IFEES, the academic community, industry sponsors, students, etc. and other organizations participating in the WEEF (GEDC, SPEED, etc.)
- c. How does it support the IFEES mission?
  - It will increase IFEES's influence and impact on improving engineering education. Help bring together various organizations with similar mission
  - Provide diverse viewpoints, opportunities for broader impact, financial stability
- d. Future vision– where should we be in 2, 5, 10 years?
  - Greater attendance, representing a more diverse set of organizations
- e. Partners (Industry, academia, association, etc.)
  - Current: IFEES members
  - Proposed: above, plus others with local affiliations as well as new members, International Engineering Alliance (IEA), World Federation of Engineering Organizations (WFEO), (UNICEF) etc.

## **6. Capacity building in engineering education**

- a. Description of activity:
  - Increase capacity of engineering education on a global basis so more students can enter the profession. Increase capability of faculty and staff, increasing student interest and engagement, mentoring
- b. Who benefits?
  - Students, educators, industry, general public
- c. How does it support the IFEES mission?
  - Promotes establishing and improving the quality of engineering education worldwide
- d. Future vision– where should we be in 2, 5, 10 years?
  - Establish and support initiatives to promote this area.
- e. Partners (Industry, academia, association, etc.)
  - Current: IFEES members, related/affiliated groups
  - Proposed: above, plus others with local affiliations as well as new members, Indo-US Collaboration for Engineering Education (IUCEE), International Energy Agency (IEA), WFEO, etc.