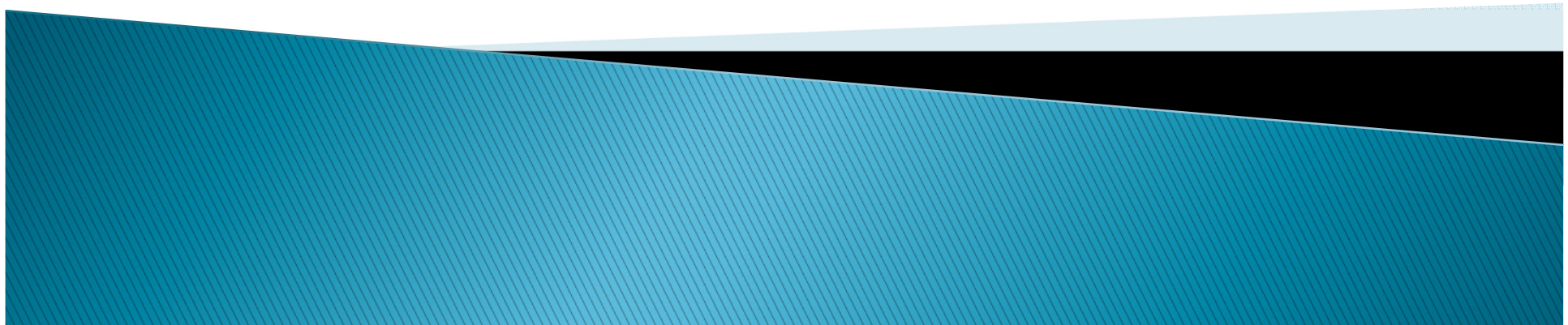


Globalization of Engineering Practice

ENRICO C. NERA

ASEAN Eng., APEC Eng.

Vice-Chairman, Philippine Technological Council Accreditation
and Certification Board for Engineering and Technology



EDUCATION

BOLOGNA DECLARATION

1999

NETWORK OF SCHOOLS

AESEAP 1972

SEFI 1973

ACCREDITATION NETWORKS

ENAE 2006

NABEEA 2007

ACCREDITATION AGREEMENTS

EUR-ACE 2006

INTERNATIONAL ENGINEER AGREEMENTS (IEA)

[INTERNATIONAL ENGINEERING MEETINGS (IEM's)]

WASHINGTON
ACCORD 1989

SYDNEY
ACCORD 2001

DUBLIN
ACCORD 2002

SEOUL
ACCORD 2011

PRACTICE

INTERNATIONAL REGISTRIES OF ENGINEERS

FEANI

EURO ENGINEER
(EUR-ING) REGISTER

NAFTA

NAFTA ENGINEERS'
REGISTER

AFEO

ASEAN ENGINEERS'
REGISTER 1988

ASEAN

ASEAN CHARTERED
PROFESSIONAL
ENGINEER REGISTER 2005

APEC
Engineer
Coordinating
Committee

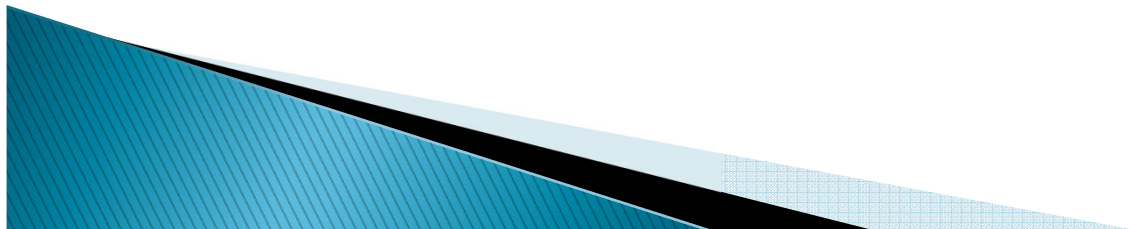
APEC ENGINEERS'
REGISTER 2000

EMF

INTERNATIONAL PROFESSIONAL
ENGINEERS (IntPE) REGISTER 2000

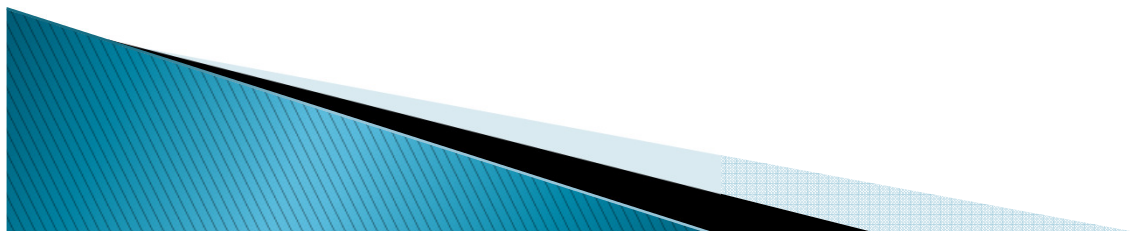
Basic Requirements for Global Practice in Engineering

- ▶ Must be licensed to practice in the home country
- ▶ Must have at least seven (7) years of professional practice in the field of specialization, 2 years of which are in significant charge of engineering work
- ▶ Must have obtained a degree from an accredited engineering degree program



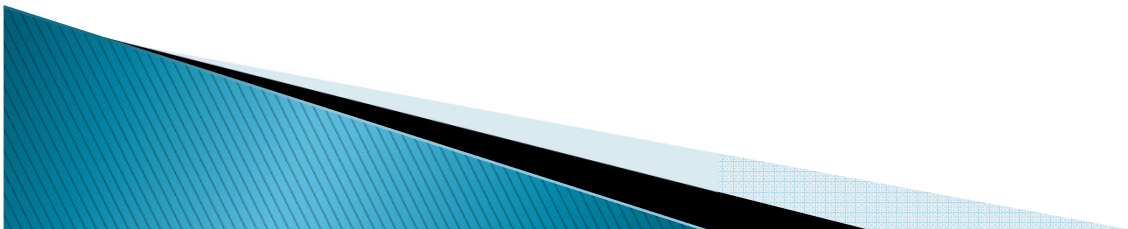
Washington Accord (1989)

- ▶ Covers undergraduate engineering degrees
- ▶ Agreement between the bodies responsible for accrediting professional engineering degree programs in each of the signatory countries
- ▶ Substantial equivalency of programs accredited
- ▶ Graduates of accredited programs in any of the signatory countries be recognized by the other countries as having met the academic requirements for entry to the practice of engineering.



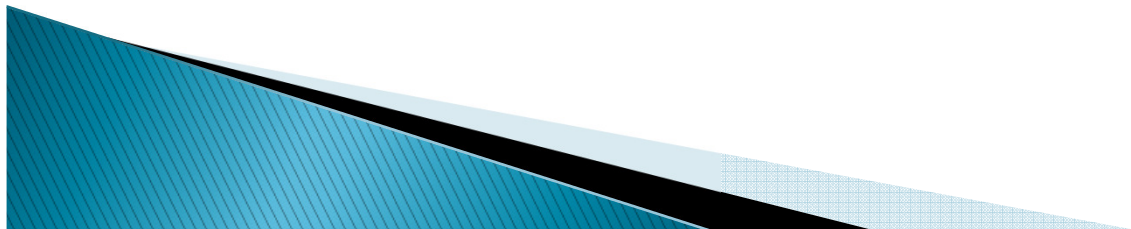
Washington Accord

- ▶ 15 member countries
- ▶ Philippines was accepted as provisional member in 2013
- ▶ Will apply for full membership in 2015
- ▶ Represented by the Philippine Technological Council(PTC), the umbrella organization of all professional engineering organizations



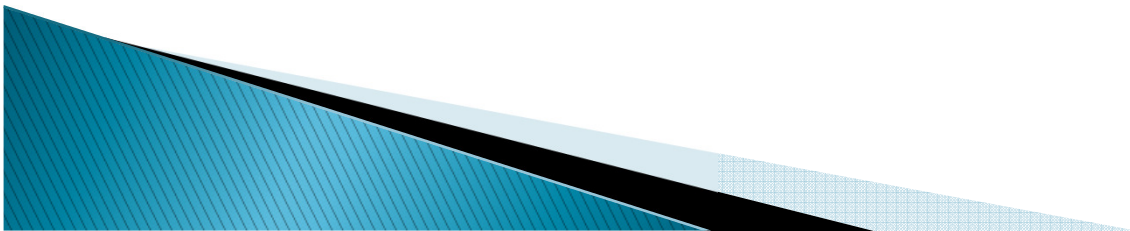
PTC Accreditation Criteria

1. Program Educational Objectives
2. Student Outcomes
3. Students
4. Faculty and Support Staff
5. Curriculum
6. Facilities and Learning Environment
7. Leadership and Institutional Support
8. Extension Service, Community Oriented programs, Industry–Academe Linkage
9. Continuous Quality Improvement



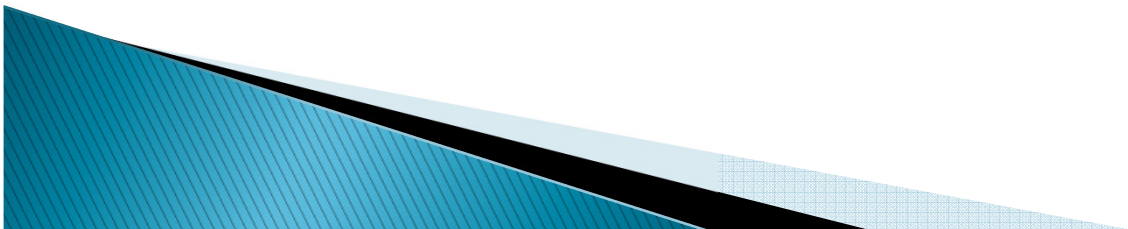
Students

- ▶ Policies and processes must be in place to allow student access to academic exchange with other universities



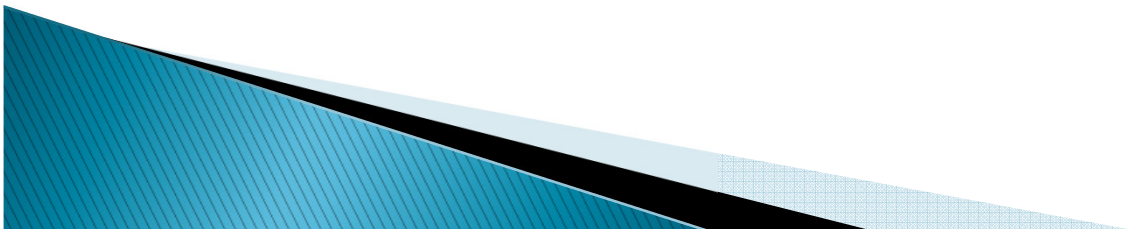
Faculty and Support Staff

- ▶ The program must have professional development opportunities for the faculty to participate in research, scholarly work, professional development activities and industrial interaction.
- ▶ The program must allow training and development of support staff.



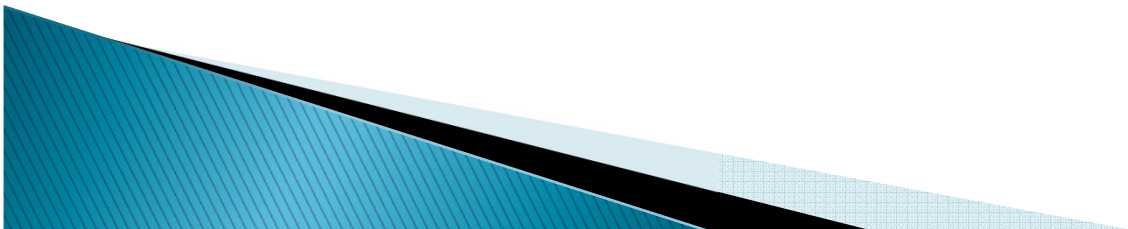
Linkages

- ▶ Encourage participation of faculty in exchange programs with other universities



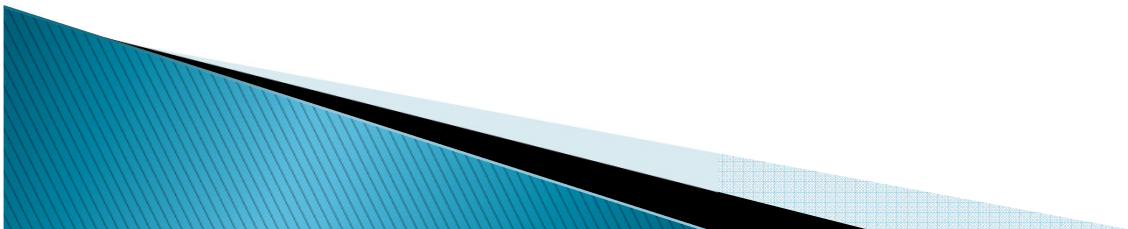
Conclusions

- ▶ The shift in academic calendar will facilitate the compliance with the above criteria which in turn will enhance the program's accreditation consistent with the standards of the Washington Accord
- ▶ Accreditation of the engineering programs will enhance the qualification of graduate engineers to the global practice of engineering



Conclusions

- ▶ Overseas Filipino engineers get “engineer” billing, not as “technicians”
- ▶ Better employment opportunities, better treatment and better recognition
- ▶ Foreign companies setting up businesses in the Philippines will have access to competent and recognized pool of Filipino engineers



Thank you!

