



# ABET AND LEARNING OUTCOMES

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# ABET is a Program Accreditor

*Also called “Specialized” Accreditor*

- Not-for-profit, non-governmental
- Evaluates academic programs
  - **Not** Institutions, degrees, or courses
  - AS, BS, MS levels
- Ensure programs are relevant, technically strong
  - Technical and professional skills
- Peer review process
  - Volunteers from ABET’s member societies
- Focus: Quality assurance
  - Ensures quality of educational experience
  - Graduates ready to enter “the profession”



# ABET's 33 Member Societies





# Outcomes-based Accreditation

# Learning Outcomes

## *ABET Engineering Criteria 2000*

- Philosophy: “Outcomes-based”
  - What students learn vs. what they are taught
  - Programs define objectives to meet needs of constituents
  - Assess and demonstrate student achievements of learning outcomes
- Retain pre-EC2000 standards on math, scientific and technical knowledge
- Emphasize professional skills development
- Allow for innovation and program “uniqueness”
- Focus: Continuous Quality Improvement (CQI)

# ABET Baccalaureate Level Criteria

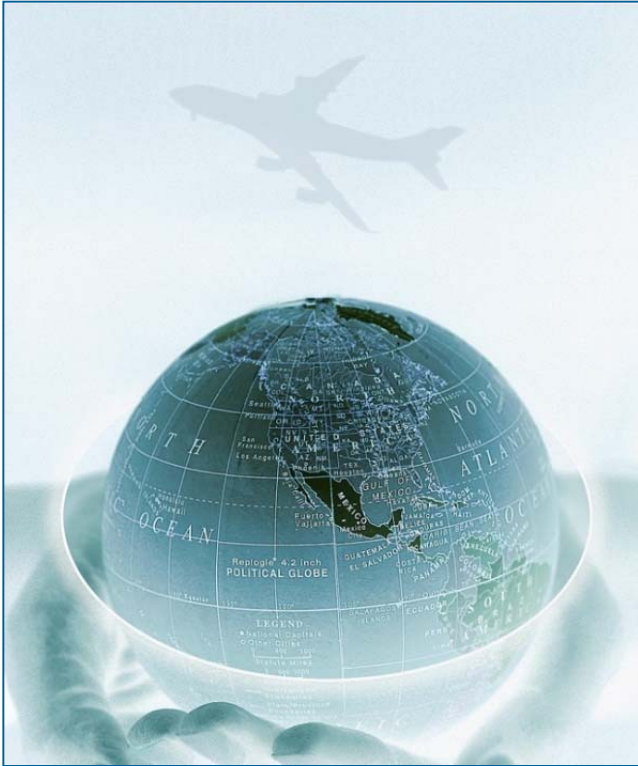
## Engineering Accreditation Commission (EAC)

1. Students
  2. Program Educational Objectives
  3. Student Outcomes
  4. Continuous Improvement
  5. Curriculum
  6. Faculty
  7. Facilities
  8. Support
- + Program Specific Criteria (if applicable)

# ABET Masters Level Criteria

## Engineering Accreditation Commission (EAC)

- Meet all General Criteria (and any applicable Program Criteria) for Baccalaureate Level Programs
- One academic year of full-time study (equivalent to at least 30 semester hours) beyond the baccalaureate program
- Each student must demonstrate a mastery of a specific field of study or area of professional practice consistent with the master's program name and at a level beyond the minimum requirements of baccalaureate level programs



# Global Engagement



# ABET is Engaged Globally

*Consistent with ABET's Mission & Vision*

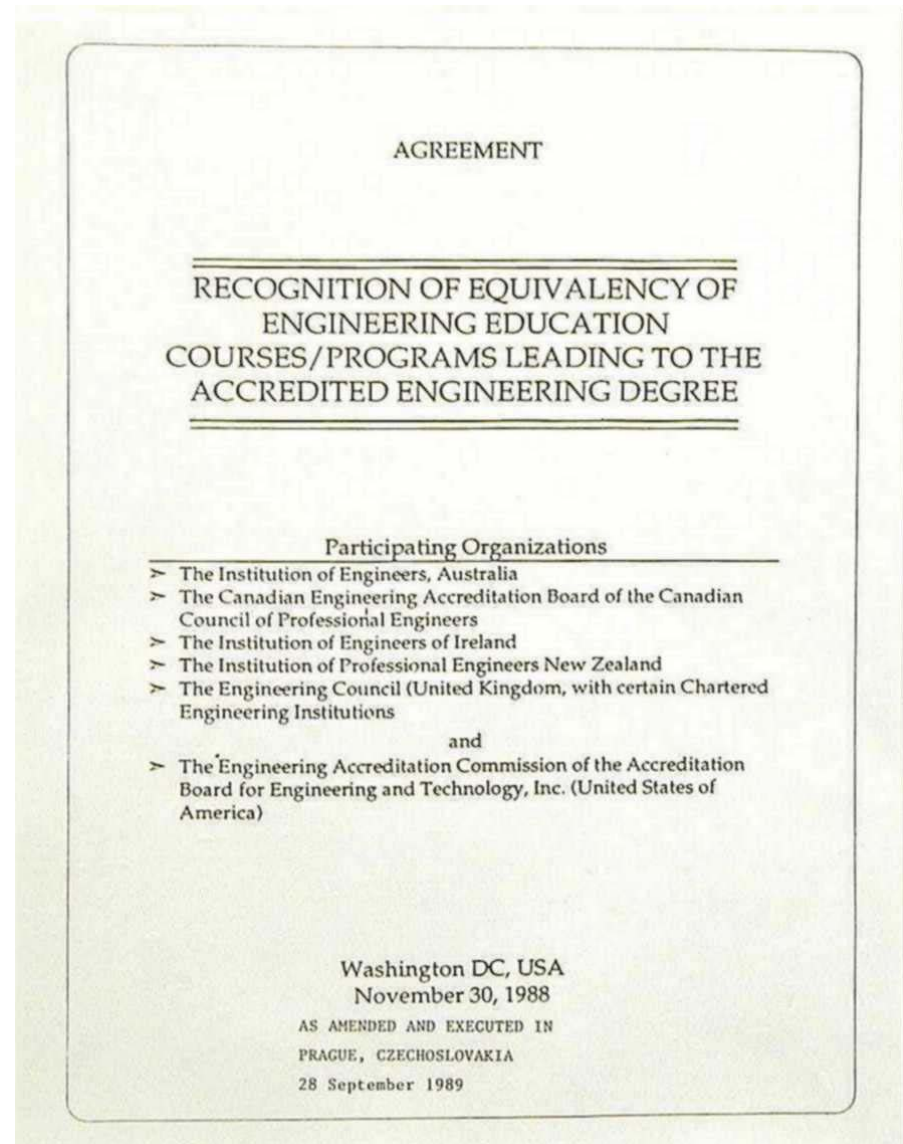


- Worldwide Accreditation: 3,300+ programs
  - 365 programs outside the U.S.
- Memoranda of Understanding (MOU)
  - 16 national agencies
  - Transition to Outcomes based assessment & evaluation
- Mutual Recognition Agreements
  - “Substantial Equivalency” of accreditation systems
  - Engineers Canada, International Engineering Alliance (IEA), Seoul Accord (Computing)
- Membership in Global Organizations
  - GEDC & IFEES

# MRA: Washington Accord

## Engineering

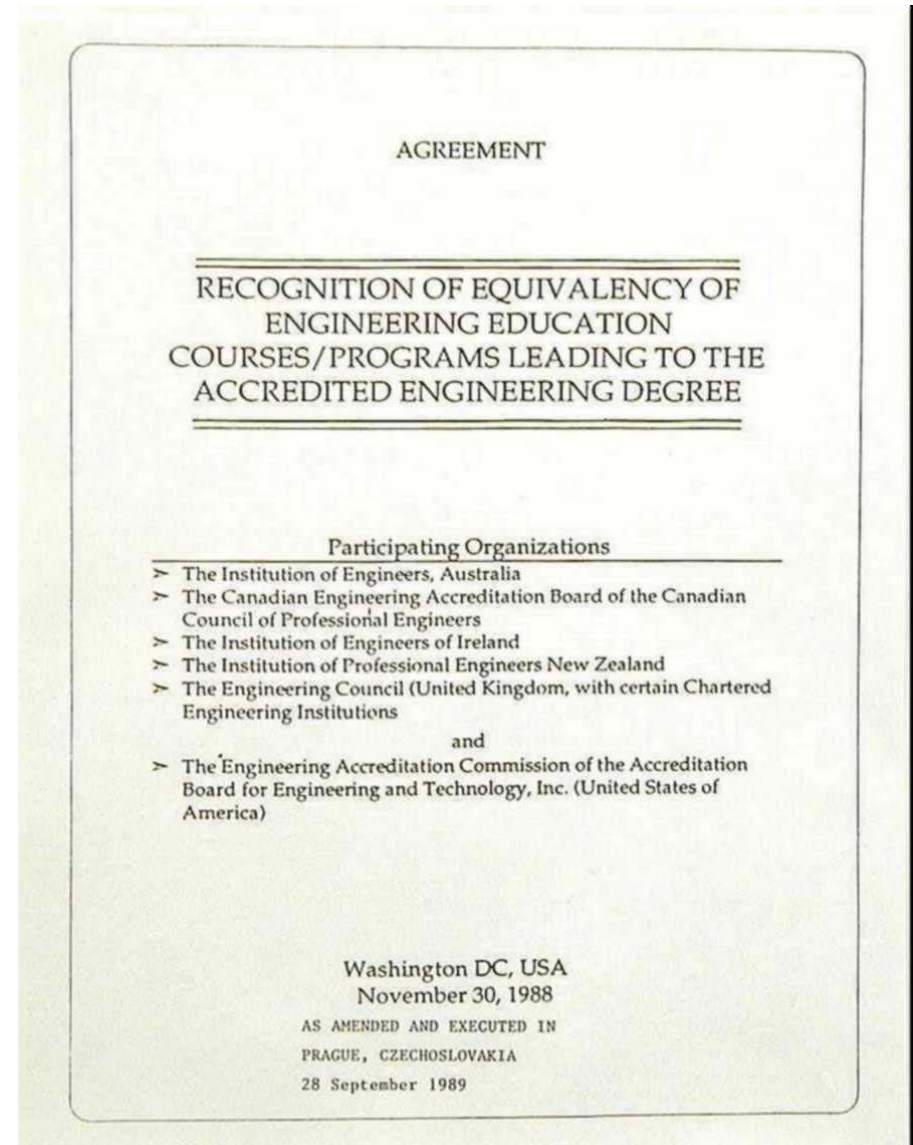
- **ABET: U.S.** (1989)
- **EAust. Australia** (1989)
- **CEAB: Canada** (1989)
- **EI: Ireland** (1989)
- **IPENZ: New Zealand** (1989)
- **EngC: UK** (1989)
- **HKIE: Hong Kong** (1995)
- **ECSA: South Africa** (1999)
- **JABEE: Japan** (2005)
- **IES: Singapore** (2006)
- **IEET: Chinese Taipei** (2007)
- **ABEEK: South Korea** (2007)
- **BEM: Malaysia** (2009)
- **MUDEK: Turkey** (2011)
- **AEER: Russia** (2012)



# MRA: Washington Accord

## Graduate Attributes

- Engineering Knowledge
- Problem Analysis
- Design/Development of Solutions
- Investigation & Experimentation
- Modern Tool Usage
- The Engineer and Society
- Environment and Sustainability
- Ethics
- Individual and Teamwork
- Communication
- Project Management and Finance
- Lifelong Learning



# ABET Symposium



- 4-5 April 2014, Pittsburg, PA
- Four educational tracks
  - Program Assessment
  - Preparing for Accreditation
  - **Innovation** in Technical Education
  - Program Evaluator Development
- Self-Study Room
  - Review sample self-studies
- Post-Symposium Workshops: 6-7 April
  - Assessment tools, active learning, basic and advanced Program Assessment Workshops (PAWs)

# Questions?





# Thank you!

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