



International Workshop Enhancement of Undergraduate Engineering Programs April 30 – May 1, 2012 , Boston, MA (USA)

Workshop participants will discuss requirements of professional community and international standards of engineering education to competences of modern engineers. The workshop will take place in premises of [Holiday Inn Boston–Somerville](#).



Holiday Inn Boston–Somerville
30 Washington Street
Somerville, Massachusetts 02143

Useful documents for workshop participants:

- The EUR–ACE Framework Standards for the Accreditation of Engineering Programmes
- IEA Graduate Attributes and Professional Competencies
- ABET Criteria for Accrediting Engineering Programs
- CDIO Syllabus
- CDIO Standards
- *Dobryakova M., Froumin I., Higher engineering education in Russia: incentives for real change*
- *Ruth Graham, Achieving excellence in engineering education: the ingredients of successful change*

Program

Section 1: Engineering Education Worldwide: Trends and Challenges

April 30

 Chair: Alexander Chuchalin

09:00 – 09:30 Registration 

09:30 – 09:45 Opening and Welcome

09:45 – 10:10 Alexander Chuchalin, [TPU](#)
Challenges for Russian Undergraduate Engineering Education


10:10 – 10:30 Oleg Boev, [TPU](#)
BEng Project: Agenda and Outputs

10:30 – 10:55 Coffee Break 

10:55 – 11:20 Günter Heitmann, [SEFI](#)
Current Status of Bachelor Engineering Programs in Europe

11:20 – 11:45 Don P. Giddens, [ASEE](#)
An ASEE Perspective on Issues and Opportunities in Engineering Education

11:45 – 12:00 Discussion

12:00 – 13:00 Lunch 

Section 2: Graduates' Attributes from Professional/Accreditation Bodies' View

 Chair: Iring Wasser

13:00 – 13:25 Joseph L. Sussman, [ABET](#)
A Review of Development and Continuous Improvement of ABET Engineering Criteria 2000

13:25 – 13:50 René Rochette, [Engineers Canada](#)
Implementation of Graduate Attributes for Engineering Programs in Canada

13:50 – 14:05 Discussion

14:05 – 14:30 Coffee Break 

14:30 – 14:55 Ian Freeston, [EC UK](#)
Using Learning Outcomes to Enhance the Quality of Engineering Education Programmes

14:55 – 15:20 Iring Wasser, [ENAE](#)
Graduate Attributes in Engineering Bachelor Programs and the Issues of Accreditation, Recognition of Engineering Degrees and Mobility of Engineering Graduates: a European and Global Perspective

15:20 – 15:35 Discussion

Section 3: Interaction with Industry

May 1



Chair: Dirk Bochar

9:30 – 09:55 Dirk Bochar, [FEANI](#)*Engineering Skills shall Reinforce European Industry : An Assessment of how the Challenges of Engineers and European Industry are compatible*09:55 – 10:20 Rene-Francois Bernard, [MINEFI](#)*Cooperation Between Higher Engineering Education and Industry: a French-EU Initiative*

10:20 – 10:35 Discussion

10:35 – 11:00 Coffee Break

11:00 – 11:25 Daniel Roos, [MIT](#)*Industrial and Globalization Impacts on Higher Education- An MIT Perspective*11:25 – 11:50 Sergey Avdoshin, [HSE](#)*Russian Software Engineering Educational and Professional Standards: Expectations of Stakeholders*

11:50 – 12:00 Discussion

12:00 – 13:00 Lunch

Section 4: CDIO Initiative and Best Practices

Chair: Edward Crawley

13:00 – 13:25 Edward Crawley, [SkTech](#)*Rethinking Engineering Education: The CDIO Approach*13:25 – 13:50 Kristina Edström, [KTH](#)*CDIO Implementation: Making It Happen*

13:50 – 14:05 Discussion

14:05 – 14:30 Coffee Break

14:30 – 13:55 Diane Soderholm, [MIT](#)*Building Engineering Leaders: The Gordon-MIT Engineering Leadership Program*14:55 – 15:20 Lynn Stein, [Franklin W. Olin College of Engineering](#)*Topic to be agreed*

15:20 – 15:35 Discussion

18:00 Dinner at Nantucket Grill Location: [Holiday Inn Boston-Somerville](#)