

ABET Accreditation at the Faculty of Engineering An-Najah National University



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ABET Accreditation



Accreditation Board for Engineering and Technology

- is a non governmental organization that accredits post secondary educational organizations in :

- 1) Applied science
- 2) Computing sciences
- 3) Engineering sciences
- 4) Technology .

- around 3,100 programs are accredited, distributed over more than 660 universities and colleges in 23 countries.

What is ABET accreditation ?

- ABET accreditation is assurance that a college or university program meets the quality standards established by the profession for which it prepares its students.

Why Is **ABET** Accreditation Important ?

- 1-Accreditation helps students and their parents choose quality college programs.
- 2-Accreditation enables employers to recruit graduates they know are well-prepared.
- 3-Accreditation is used by registration, licensure, and certification boards to screen **applicants**. (postgraduate studies, scholarships, employment opportunities).
- 4-Accreditation gives colleges and universities a structured mechanism to **assess, evaluate, and improve** the quality of their programs.
- 5- Recognition for the University.



A study conducted in USA to compare between graduates after and before ABET accreditation.

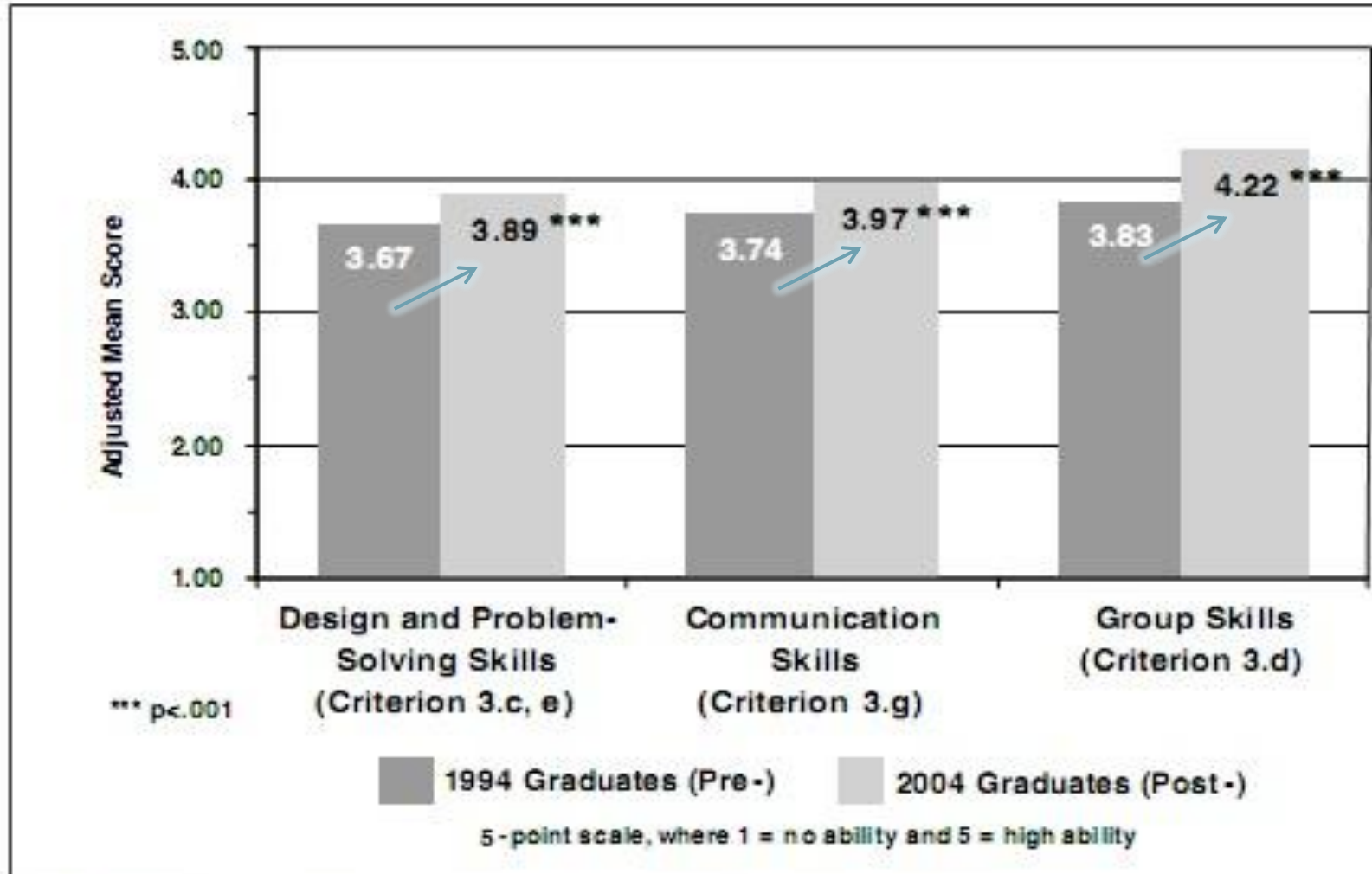


FIGURE 5 Differences in graduate-reported engineering skills (the project skills cluster).

The process for accreditation

- Self-Evaluation (assessment & evaluation).
- Fills in the Self-study Report (SSR).
- Submit SSR to ABET organization.
- ABET auditors visit the university.(meetings with students, faculty, ...etc)
- If it fulfills the requirements, then Accreditation is given.

ABET - Engineering Criteria

◎ Outcomes based criteria

- Criterion 1 - Students
- Criterion 2 - Program Educational Objectives
- Criterion 3 - Program Outcomes
- Criterion 4 - Continuous Improvement
- Criterion 5 - Curriculum
- Criterion 6 - Faculty
- Criterion 7 - Facilities
- Criterion 8 - Support
- Criterion 9- program criterion

Program objectives & Program outcomes

- Objectives : What graduates are expected to attain within a few years of graduation, and it's based on the needs of **stakeholders**.
- Outcomes : What students are expected to know and be able to do by the time of graduation (skills, abilities)

The Accredited Arab's Universities

Country	University	Website
Bahrain	University of Bahrain	http://www.uob.edu.bh/
Egypt	The American University in Cairo	http://www.aucegypt.edu/
Jordan	Jordan University of Science and Technology	http://www.just.edu.jo/
Kuwait	Kuwait University	http://www.kuniv.edu.kw/
Lebanon	American University of Beirut	http://www.aub.edu.lb/
Oman	Sultan Qaboos University	http://www.squ.edu.om/
Qatar	Texas A&M University at Qatar	http://www.qatar.tamu.edu/
Saudi Arabia	King Abdulaziz University	http://www.kau.edu.sa/
Saudi Arabia	King Fahd University of Petroleum & Minerals	http://www.kfupm.edu.sa/
Saudi Arabia	King Saud University	http://www.ksu.edu.sa/
Saudi Arabia	Qassim University	http://www.qec.edu.sa/
Saudi Arabia	Yanbu Industrial College	http://www.yic.edu.sa/
UAE	American University in Dubai	http://www.aud.edu/
UAE	American University of Sharjah	http://www.aus.edu/
UAE	University in Dubai	http://www.ud.ac.ae/
UAE	Higher Colleges of Technology	http://www.hct.ac.ae/
UAE	UAE University	http://www.uaeu.ac.ae/

◎ Student Outcomes (SO's)

(a) an ability to apply knowledge of mathematics, science, and engineering.

(b) an ability to design and conduct experiments, as well as to analyze and interpret data.

(c) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.

(d) an ability to function on multidisciplinary teams.

- ⦿ (e) an ability to identify, formulate, and solve engineering problems
- ⦿ (f) an understanding of professional and ethical responsibility
- ⦿ (g) an ability to communicate effectively
- ⦿ (h) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- ⦿ (i) a recognition of the need for, and an ability to engage in life-long learning
- ⦿ (j) a knowledge of contemporary issues
- ⦿ (k) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

Thank You