

Istanbul Technical University Environmental Engineering Department Advisory Board - Minutes of the Meeting

2016-2017 Academic Year

Date: 24 April 2017

Meeting room: ITU_ EED_ K305

Names of the Attendees (Graduation year from EED) from the Advisory Board:

Ahmet Burak Başpınar (BSc 2006_ITU)
Aslı Özabalı Sabuncugil (BSc 2002_ITU)
Aysegül Nuhoğlu (BSc 1985_ITU)
Esra Bozyazı Daylan (BSc 1988_ITU)
Suphi Altan (BSc 2013_ITU)
Tamer Çankaya (BSc 2009_ITU)

The Advisory Board meeting was held on 24th of April, 2017 with the attendance of the above mentioned Advisory Board members as well as Environmental Engineering Department faculty.

The number of the board members was increased up to 12 with the participation of Mr. Murat Sarıoğlu and Mr. Tamer Çankaya.

The members of the Advisory Board were first informed on the activities and efforts that have been conducted after the last Committee meeting in January 2016 within the scope of ABET Continuous Improvement studies.

The main content of the meeting was the review of the new curriculum of EEUP, which has been prepared for the continuous improvement, also requested by the Office of Student Affairs (OSA) of ITU with the consideration of all suggestions/recommendations of the Department Curriculum Development Committee.

The details of the revised curriculum of EEUP were explained as follows:

- ➤ Whole ITU undergraduate programs are asked to be limited with 160 credits. EEUP program is kept within 153.5 credits.
- ➤ 'Introduction to Environmental Engineering' course has renamed as 'Introduction to Environmental Engineering and Ethics' with the general understanding that all freshmen have the same simplified syllabus depending on the engineering branch.
- > 'Environmental Ecology' has been modified as a compulsory course with the view that this course is a basic and supplementary course for Environmental Engineers.
- > The credits of 'Water Quality Management' and 'Chemical Processes' have been increased by incorporating the hours for exercise into theoretical course hours.
- > Following the demand of the Dean of OSA, 'Introduction to Computer Science' will be discontinued and replaced by a new course namely 'Introduction to Programming in

- Python', which has been accepted as a future trend in programming by considering the inputs of Advisory Boards and students.
- > The second programming course 'Computer Applications in Environmental Engineering' will be updated and modified as a compulsory course.
- A new concept of "Academic Orientation" will beapplied in the University where the students and the lecturer will have the opportunity to discuss all academic problems as well as the difficulties in their social life in a non-credit course throughout the whole academic life.
- ➤ The credits of Environmental Chemistry I and II will be increased by one hour to be able to include physical and organic chemistry subjects. Also the lab hours will be separately counted in the program.
- ➤ The credit hours of Biological Processes will be increased to 3+1 from 2+2.
- ➤ The courses, "Control and Automation in Environmental Facilities" and "Management of Hazardous Waste" will be transferred from compulsory to elective courses. The content of the "Control and Automation in Environmental Facilities" course will be also included to the Graduate Design Project.
- > The course "Control of Treatment Sludges" will be introduced to the curriculum as a new elective course.
- > Hydrology will be renamed as Hydrology for Environmental Engineers.
- ➤ Graduation Design Project is decided to be extended to two semesters as Graduation Design Project I in the autumn semester by introducing an additional course with 6 credit hours and Graduation Design Project II in the spring semester.
- > The elective courses are also evaluated and number of the elective courses are increased.
- ➤ A new elective course, "Global Environmental Problems and Sustainability", has been designed to replace with Environmental Politics, which is then deleted from the elective course package.
- A new concept under the name "Individual Studies" has been created as an elective course, where the students would have the opportunity to conduct a one-by-one study with the lecturer.
- ➤ The course "Air Pollution Sources and Control" is renamed as Transport and Management of Industrial Emissions with a content change and improvement.

The following issues have been suggested/concluded in the context of Assessment and Evaluation process of the EED curriculum as well as the graduates:

- > The members pointed out that the new curriculum of EEUP outlines a noticeable improvement.
- > The graduates are expected to be more equipped in programming with the two courses introduced into the program with the new structure.
- "Global Environmental Problems and Sustainability" will provide a wider perspective to the graduates working in the field of sustainability. Most of the graduates in the companies are asked to fulfill the requirements of sustainability as a side work to their technical responsibilities. This course will be more useful if it is considered as a compulsory course.
- ➤ The members discussed that sustainability should also be incorporated in Graduation Project and different seminars to prepare the students for different aspects of management. The faculty has informed them that the issues of risk analysis, life cycle assessment, uncertainty, and environmental impact will be introduced in different courses and the lecture part of the design project in the proposed program.
- > The members asked to devote specific emphasis to Ethics, since they have considerably negative experiences from the practice.

- > The course "Control of Treatment Sludge" will be more useful if it was introduced as a compulsory course.
- ➤ The new concept of "Academic Orientation" would be very useful if it could be designed in a proper way. It could lead the freshmen as a mentor course, or support them especially on the basic lectures like mathematics and physics, to prepare the juniors and seniors to be a member of a team.
- The members were asked to propose their opinions how to develop the ability of the students for critical thinking. This would indicate some hints to solve the problem in evaluating the engineers from the past with the young engineers.

The meeting ended with the introduction of layouts and some photos of the new constructed building of Environmental Engineering Department.





