Summary of ABET Advisory Board Meeting

(Jan 19, 2011)

- Our graduates are equipped with a very good theoretical knowledge within the up-to-date context of Environmental Engineering; however they have difficulties in transferring this knowledge into practice. The main reason of this is that the students do not participate in the projects devoted to engineering practice and do not use their already gained theoretical knowledge through an integrated approach. Especially, the deficiency in selecting materials and equipments results in lack of self-confidence in their professional life. Thus, our graduates need to spend some time during their professional life in order to overcome this deficiency.

In this context, more technical trips should be scheduled in order to show the students the full-scale applications on site, some of the lectures should be performed in the field, the problems encountered in the field should be introduced and the proposed solutions to these problems should be discussed, number of application examples should be increased with the support of technical experts and operators.

The design project practice suggested instead of the graduation project is considered to be beneficial to the students. However, this project should not be limited to wastewater treatment. On the other hand, considering the design project on particular environmental engineering areas could limit the students, the projects should be offered in a wider context. With this course, topics relating to project management, project flow diagrams, and process management should be covered and by this way, the students should be better prepared for their professional life. With the support of the external constituents, eliminating the students' lack of confidence would be possible.

- Our educational program focuses heavily on water and wastewater topics; however courses and topics related to other contemporary environmental issues are not sufficiently covered.

In this context, this requirement can be met by getting assistance from the legislation and the technical experts in the related area regarding environmental problems. As an example, technical solutions relating to noise pollution control can be covered. An additional course can be developed on the

solid waste topic considering the design and management aspects. Contemporary problems relating to current environmental issues and solution suggestions on various dimensions can be introduced to the students.

Environmental system of an industrial plant and related legislations should be investigated and evaluated together considering the importance and the necessity of the integrated approach in solutions to environmental problems.

In this context, in order to strengthen the theoretical information, getting technical assistance from the external constituents and providing applications on full-scale systems in industrial and design courses will be helpful.

Students should be trained as researching engineers and should be taught where and how to get the information. Besides, the importance of life-long learning using the necessary tools and equipments should also be introduced.

Students should be taught how to use Geographical Information System (GIS) and AutoCAD software, both of which are commonly used in engineering practice.
Foreign language is important in engineering practice; however it is important to know the technical terms also in Turkish.