

July 21, 2014

Ms. Maria Levinson-Or
Coordinator
Quality Assessment Division
Council for Higher Education
Email: marial@che.org.il

Dear Ms. Levinson-Or,

We would like to thank the committee for its valuable insight, constructive comments, and practical recommendations that we are committed to implement.

* * *

We accept the critical remarks of the committee, and will do our best to comply with the spirit of the committee's observations as follows:

Chapter 4, Summary of Recommendations and Timetable (p. 11):

- a) *"The department must put into place a structure that ensures that the MSc program provides students with an education that meets CHE standard".*

We acknowledge that having a wider selection of courses may benefit our students, and we have already begun considering a variety of ways to expand the study opportunities we offer our Master's students.

1. Concretely, we have decided to enable students to take appropriate courses at other universities, while getting credit for them here. This was allowed in the past in situations when the advisers felt a need to expand the student's knowledge in basic areas or advanced topics that are not covered in our curriculum. Following the recommendation of the committee, in the future we will actively encourage our students to take any advanced courses of suitable quality elsewhere (including ones not necessarily recommended by the adviser).

2. We have also resolved to make an effort to invite suitable external lecturers to give advanced courses in areas that are currently not covered enough in our curriculum.
3. It should be noted that we have recently hired new faculty members who specialize in fields such as machine learning and algorithmic game theory, thus expanding the scope of topics covered by the faculty.

Having taken the necessary steps toward the implementation of the committee's recommendations, we feel it is important to highlight and emphasize the following points:

- Our MSc program is unique in that it combines Computer Science with Mathematics. In fact, it is the only such program remaining in Israel today. This means that our students get a wider selection in the more mathematical branches, admittedly at the expense of a somewhat narrower selection in practical and experimental Computer Science.
- Our curriculum is slanted towards CS theory and algorithms because we believe that those areas will have a growing relative impact on the future of technology development. We are therefore convinced that our graduates will continue to be successful and competitive when joining the job market. This tendency may even increase given the fact that topics such as big data, privacy and algorithms, which are well covered at Weizmann, are becoming central stage.
- The problem of breadth for graduate students in Israel is not as severe as it is in some other countries, for several reasons. First, most of our applicants come from undergraduate programs in CS that are focused, technical and demanding (unlike the situation in many other countries, where undergraduate studies are often spread over a wider scope, from exact sciences to social sciences and liberal arts). Moreover, many of the Israeli CS graduates have already accumulated rather extensive and advanced computer related experience during their army service or from part-time work in hi-tech companies during their undergraduate studies.
- Finally, the guiding philosophy of our department is to focus the classes towards research oriented and advanced topics. This is our strength, and the students coming to the Weizmann Institute are well aware of it, and as the committee has heard from our students – they highly appreciate it.

Chapter 4, Summary of Recommendations and Timetable (p. 11):

- b) *“The department must establish a systematic advising system for first year’s master’s students”.*

We have already established a format for advising first year MSc students. The Chair of the Board of Studies in Mathematics and Computer Science assumes the role of adviser to first year MSc students. The adviser’s tasks are to recommend and approve each first year student’s selection of courses, as well as to assist them (if necessary) in finding a research group for their master’s research.

* * *

Chapter 4, Summary of Recommendations and Timetable (p. 11):

- c) *“Within a year the Department should set in place a process to reflect on the attainment of outcomes in a planned periodic manner”.*

The realization of the program’s learning outcomes is checked individually for every student at the end of the second year of each Master’s class. Upon the submission of one’s thesis, he/she must appear before two faculty members who are not associated with the student’s research and defend it. This is an excellent opportunity to examine and evaluate the student’s specific background in relation to his/her research project, as well as his/her boarder knowledge and understanding of the field. To this end our evaluation system provides three separate grades: thesis, examination and courses. It enables the Board of Studies to focus on a problematic pattern should one becomes apparent.

Also, the Board of Studies reviews the mandatory feedback on courses that students submit online. Guided reading courses as well as projects that first year MSc students are welcome to do are additional ways to check on depth breadth of their knowledge acquisition and application.

* * *

In conclusion, we are delighted that the committee was impressed with the quality of our faculty and students at all levels, and with the fact that we run a focused computer science research program of the highest quality.



Professor Irit Sagi, Dean
Feinberg Graduate School of the
Weizmann Institute of Science



Prof. David Peleg, Dean
Faculty of Mathematics and Computer Science
Weizmann Institute of Science



Prof. Itai Benjamini, Chair
Board of Studies in
Mathematics and Computer Science