COUNCIL FOR HIGHER EDUCATION

Committee for the Evaluation of Electrical and Communication System Engineering Study Programs

The Tel Aviv University

Programs in Electrical and Communication System Engineering

Evaluation Report

November 2016

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Chapter 1: Background

The Council for Higher Education (CHE) decided to evaluate study programs in the field of Electrical and Communication System Engineering during the academic year of 2016.

Following the decision of the CHE, the Minister of Education, who serves ex officio as Chairperson of the CHE, appointed a Committee consisting of:

- *Prof. Alan Oppenheim*- Department of Electrical Engineering and Computer Science – MIT, USA. Committee Chair.
- *Prof. Susan Conry* –Wallace H. Coulter School of Engineering Electrical & Computer Engineering - Clarkson University, USA.
- *Prof. Roch Guerin*- Department Chair and Professor of Computer Science & Engineering Department- Washington University in St. Louis, USA.
- *Prof. Ehud Heyman**- School of Electrical Engineering - Department of Physical Electronics- Tel Aviv University, Israel.
- *Prof. Eby G. Friedman**-Electrical and Computer Engineering, Department of Electrical and Computer Engineering- University of Rochester, USA.
- *Prof. Mathukumalli Vidyasagar*- Chair in Systems Biology Science Erik Jonsson School of Engineering & Computer Science - The University of Texas at Dallas, USA.
- *Dr. Orly Yadid-Pecht -* iCORE/ATIF Strategic Chair in Integrated Sensors/Intelligent Systems, Professor and Lab Director - University of Calgary, Canada.
- *Prof. Dr.-Ing. Walter Kellermann*- Chair of Multimedia Communications and Signal Processing- University Erlangen-Nuremberg, Germany.

Ms. Daniella Sandler and Ms. Inbal Haskell-Gordon served as the Coordinators of the Committee on behalf of the CHE.

Within the framework of its activity, the Committee was requested to:[1]

1. Examine the self-evaluation reports, submitted by the institutions that provide study programs in Electrical and Communication System Engineering, and to conduct on-site visits at those institutions.

2. Submit to the CHE an individual report on each of the evaluated academic units and study programs, including the Committee's findings and recommendations.

3. Submit to the CHE a general report regarding the examined field of study within the Israeli system of higher education including recommendations for standards in the evaluated field of study.

The entire process was conducted in accordance with the CHE's Guidelines for Self-Evaluation (of September 2013).

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[1] The Committee's letter of appointment is attached as **Appendix 1**.
*Prof. Heyman and Prof. Friedman did not join this visit and did not participate in writing this report.

Chapter 2: Committee Procedures

The Committee held its first meeting on January 6, 2016, during which it discussed fundamental issues concerning higher education in Israel, the quality assessment activity, as well as Electrical and Communication System Engineering Study programs in Israel.

In January 2016, the Committee held its visits of evaluation to 12 programs: Tel-Aviv University, the Technion, Bar-Ilan University, Ben-Gurion University, Shamoon College of Engineering, Ruppin Academic Center, Azrieli - College of Engineering Jerusalem, Lev Academic center, Ort Barude College, Holon Institute of Technology, Ariel University and Afeka College of Engineering. During the visits, the Committee met with various stakeholders at the institutions, including management, faculty, staff, and students.

This report deals with the programs of Electrical Engineering Administration at the Tel Aviv University. The Committee's visit to the University took place on January 7, 2016.

The schedule of the visit is attached as **Appendix 2**.

The Committee thanks the management of the Tel Aviv University and the School of Electrical Engineering for their self-evaluation report and for their hospitality towards the committee during its visit at the institution.

Chapter 3: Evaluation of Electrical Engineering Study Programs at the Tel Aviv University

This Report relates to the situation current at the time of the visit to the institution, and does not take account of any subsequent changes. The Report records the conclusions reached by the Evaluation Committee based on the documentation provided by the institution, information gained through interviews, discussion and observation as well as other information available to the Committee.

1. Executive Summary

The committee feels that overall the TAU study program, and the environment for the faculty, adjuncts and students at TAU are working well. The faculty in the School of Electrical Engineering is of extremely high quality and many have international reputation in their field of research. There are, however, several important issues that we feel need to be addressed, either to improve the study program or to prevent a decline. Many of these are not specific to TAU but pervade the Israel Higher Education system in Engineering and are commented on in a more general sense in the General Report.

One such significant issue is the current culture in which students in their 3rd and 4th year are often working 20 hours per week in industry. As we discuss in the General Report, there are clear reasons why this culture has evolved and will likely continue. If structured appropriately as an educational partnership between the University and industry, it has the potential to be beneficial and an important part of the study program, but alternatively it also has the potential of being detrimental, and in many ways currently is. We specifically recommend that alternative models be explored and implemented to enable the students to engage with industry for both the financial and educational benefits they can derive from it, but without compromising several important years of study and the quality of the education they receive. An additional important need is the improvement of the advising structure for the students. The 1st and 2nd year students can clearly benefit from a better advising structure on track and career paths and improved and prompt feedback on their homework, and the 2nd and

3rd year students can benefit from a better and earlier introduction to the possible tracks and career choices.

We also encourage and recommend that the School be more proactive in exploring and experimenting with alternative teaching models and technology.

2. <u>Mission and Goals</u>

The stated goals of the Faculty of Engineering are "to train the students in the technological field in general and elite technology in particular, in order for them to become integrated in Israel's economic and industrial disciplines, thus providing them with the skills for professional openness and flexibility." Students of the Faculty's B.Sc. programs are prepared comprehensively and thoroughly in the fields which constitute the basis for modern engineering in general and Israel's special needs in particular. The studies for advanced academic degrees, M.Sc. and Ph.D., focus on deepening the knowledge of B.Sc. graduate students and allow them to specialize in basic and practical research fields. The aims and missions as defined by the Dean are:

- Advancing knowledge in applied and engineering sciences.

- Operating as a center of excellence, an important player in the technological and scientific infrastructure in Israel.

- Developing close collaboration with the hi-tech industry, and acting as an incubator of new technologies.

- Providing a major source of top-notch R&D engineers, of all academic levels, who should lead the progress of Israeli technology.

With regard to the study programs being evaluated the stated goals are:

- "to enable students to advance in their chosen careers in industry, academia, and public institutions, by providing them the set of tools for making

significant contributions to the field of Electrical and Electronics Engineering."

Our interpretation of this includes the mission of carrying out cutting edge and creative research, teaching students the process of defining research goals and carrying out research through close apprenticeship with faculty engaged in this level of research. We also interpret the mission to include training engineers for carrying out advanced development in industry.

Observations and findings

The committee feels in general that the School of Electrical Engineering understands and delivers on the mission and goals to the extent that budgetary constraints permit. Overall the research quality and visibility of the faculty is high and the research is on the technological forefront. The faculty overall appear to stay relevant and current in their fields. Most of the students have close interaction in some form with industry (which, as we're more explicit about below and in the General Report, depending on the form that this interaction takes, has its benefits and drawbacks). In the classroom and teaching laboratory environment, there is relatively up to date teaching equipment and exercises although students have generally expressed interest in more hands-on experience than they are currently receiving. In particular, some courses appear to be out of balance with respect to emphasis on theory vs. hands-on interaction between concepts and applications.

Recommendations

Desirable:

- We recommend that the School articulate to all levels (administration through undergraduates) a crisp and clear mission statement that is realistic in the presence of budgetary pressures and other constraints. It should include, for instance, the issue of student/ faculty ratio, TA's etc.

3. <u>Organizational Structure</u>

<u>Observations and findings</u>

The committee feels that the organizational structure currently is working well. We are aware that there are some changes proposed in the structure of the faculty and the EE School, and are not in a position to comment on the potential benefits of the proposed changes.

4. <u>Study Programs</u>

<u>Observations and findings</u>

The potential conflict of class studies and work in industry: A main issue observed, as commented on in the executive summary and in the General Report is the students' effective "part time" inclination with their study program in the third and fourth years because of their personal financial needs and their industry commitment. For many, the compromise is to replace class attendance with the use of resources available on line. In many cases, this on line content consists of old and out-of-date videos and other resources that aren't appropriately vetted by the course instructors. Frontal lectures are correspondingly minimally attended and hence become almost irrelevant. And "face time" with the faculty is seriously compromised.

Hands-on experience: An additional observation in our discussions with the students is their clear desire for more hands on experience and more project-oriented experience. There is the general sense that the emphasis on theory vs. hands-on experience is out of balance.

Homework feedback and class size: The students have commented that the study program does not currently provide prompt feedback regarding homework. Another problem expressed is the typically large class sessions such as recitation sections which often can be as large as 60 students. This prevents interaction and results in the recitations having the open-loop dynamic of lectures rather than being an interactive closed-loop experience.

Laboratories: As expressed in the General Report, our committee was not qualified to carefully evaluate the equipment in the laboratories. We recommend that that be done with a separate committee. It did appear that in some cases, the equipment could benefit from an update and also that additional staff in the form of lab engineers is needed.

Missing areas of study: Some areas of study (e.g. circuits, power electronics, power systems) lack senior faculty and are currently served mainly by adjunct faculty. These adjunct faculty appear to be well qualified for teaching in those areas but naturally would not have the same commitment to the overall health of the study program as would full time faculty. Also, adjunct faculty would not have the broader perspective about the goals of the School. In the context of the mission of the School, these are important areas that should have the close attention of full-time faculty.

Internationalization: It is our understanding that there are programs in the Faculty of Engineering being considered and implemented for internationalization. There appear to be a number of motivations for this, including potential revenue and the outreach it provides to a broader potential student base and perhaps postdocs and the pool of potential faculty. The committee feels that Internationalization can benefit the program and also recognizes that it requires additional resources since, for example, courses in this program need to be taught in English. A recommendation is that in all cases in which internationalization requires revamping of the course content delivery, that this be seen as an opportunity to also update the technology (on line etc.) used for the content delivery and student interaction with the content.

Teaching models and technology: In discussions with faculty about their teaching methods it was clear that many deliver content with the traditional model used when they were students. Some are experimenting with other models and with alternative technologies e.g. clickers. As discussed in more detail in the General Report, the models and technology for content delivery in courses is changing and will inevitably

be different for the next generation. In our view, faculty should be strongly encouraged to be proactive in experimenting with and incorporating alternative teaching models and technology. And particularly to accommodate the 3rd and 4th year students who primarily need more effective and integrated on line opportunities.

Recommendations

Essential:

- The committee finds that the low attendance in the 3rd and 4th year classes is a significant issue hampering the value of studies in the long term. We recommend being proactive in changing this culture and/or adapting the curriculum to this reality. This could include: considering other models of internships with industry; increasing the flexibility of course schedules to better accommodate work requirements; improving the teaching delivery methods to on one hand facilitate online access to material and on the other hand making lectures more of an interactive learning experience that draws students to class; and finally providing more guidance and individual mentoring regarding the possible professional tracks in the program and in career choices.

Advisable:

- Encouraging faculty to be proactive in exploring and experimenting with new teaching models and technology.

5. **Human Resources / Faculty**

Observations and findings

Adjunct faculty: Adjuncts of the type we met are a valuable source for teaching the students. Those whom we met showed clear passion and commitment for their roles as adjunct faculty and there's a clear win/win/win benefit for the department, for their primary outside positions and for them personally. One significant issue that the

adjunct faculty face is the lack of close integration into the fabric of the school which is amplified by the lack of office or desk space. A suitable space should be allocated for this group to improve the experience of contact hours with the students and to enhance interactions between themselves and with the full time faculty.

Ph.D. student teaching staff: In the 2007 report, the recommendation was made that Ph.D. students be allowed to be teaching assistants and this has been corrected. However, PhD students are still not allowed to teach in the labs, and the apparent reason given is that there are more costs involved. Complementing this, TA'ship is not rewarding enough for many of the PhD students, and consequently Teaching Assistantship is mainly done by MSc students. This is an area which the department, school and TAU can and should be more proactive in addressing through encouragement and mentoring of Ph.D. students teaching skills. Many Ph.D. students aspire to academic careers and teaching apprenticeship and mentoring during the Ph.D. program should be seen as an important part of the overall program and experience.

Lab Engineers: The labs are understaffed, i.e. there is a need for more lab engineers. This is required mainly for the students' experience, but also in support of the research.

Full-Time Faculty: some areas of expertise are still lacking. In addition, students would be better served if allocation of advisors/ mentors from the faculty would be assigned to them individually, especially in their early stages. In relation to faculty satisfaction – the search for an appropriate model regarding IP of faculty at the University still needs to be addressed.

Gender Balance: Gender balance is missing. This is well recognized at multiple levels of the administration and ways of being more proactive about it are being explored. Programs such as the "Rising Stars" program among a number of US Universities should perhaps be looked at as one approach.

Student-Faculty Ratio: The student faculty ratio is too high. The target ratio at the universities as expressed to us by CHE is 20:1, At TAU in the School of Electrical Engineering as well as at many other universities it is closer to 40:1. It has been expressed to us by the upper administration that this will unfortunately remain an issue because of budgets. We discuss this further in the General Report since it seems to be a pervasive issue at the Universities and Colleges and is a result of the overall budget. Clearly this issue is in conflict with the stated missions and needs to be corrected.

Post-Doctoral Fellows: Post-Doctoral Fellows are not commonly found at TAU. We understand many of the reasons, but nevertheless we would recommend developing a strong culture of welcoming and supporting postdocs. The presence of postdocs definitely enhances the research programs.

Recommendations

Essential:

- The student faculty ratio should be aggressively addressed, or at minimum providing the students with more individual support in the presence of extremely high student faculty ratios. Students seem a bit lost in their first years of study and look to industry rather than the faculty for guidance regarding their career and track choices. Enhanced guidance from the faculty can materially impact the student experience and probably contribute to better attendance in classes in the later years.

Advisable:

- Faculty gender balance should be improved.

Desirable:

- Appropriate model regarding IP of faculty needs to be addressed.
- Shared office/desk space should be provided for adjunct faculty.

6. <u>Students</u>

<u>Observations and findings</u>

As mentioned earlier, a primary student issue observed by the committee is the fact that in the 3rd and 4th years and during graduate years, student are basically part-time at TAU and part-time in industry. This generates many problems Consequences of the fact that students are only part-time were not fully evaluated, but in general, the perception is that this is a problem that has to be addressed with high priority.

Students have expressed the desire/need for more hands on experience in the study program.

Students expressed an interest for more guidance from the faculty in choosing tracks. The guidance they get comes mainly from their industry interactions, which can be less objective. They would like to get more advice/ guidance on the possibilities they have early on, so they can be better informed when making their choices regarding which tracks to choose, and in general career choices.

Engagement with IEEE and other professional organizations: We were surprised at the low level of involvement of the students in IEEE student organizations. Engagement with IEEE can clearly be of benefit to the students through increased awareness of the professional organization, access to mentoring programs, etc.

<u>Recommendations</u>

Advisable:

- Students' low attendance in 3rd and 4th year classes because of scheduling conflicts with work obligations should be addressed.

- More guidance/ personal advice from faculty regarding tracks is important. This should be done more comprehensively and earlier in the students' studies.
- Recitation sections should be in smaller groups, so that the student experience is improved.

Desirable:
- More hands on experience in labs and through projects.
- More internalization and engagement in English is desirable.

7. ## **Teaching and Learning Outcomes**

Observations and findings

In general, the committee has found that students are asking for more hands on experience in their course experience. In addition, students are asking for more calibration in the first and second year on how they're doing. Making the transition from the army or high school to this new educational environment has challenges and students want feedback and guidance on how they're doing. Overall there doesn't seem to be an effective mentoring and guidance program in place and particularly for students in the first and second years.

Also important for the students is early guidance regarding available track choices, courses and help in information required to make choices about them.

We would like to note that it is a well-known fact that overall in the educational environment at all levels, teaching methods and technology for content delivery and student interaction with course content (exercises, problem sets, projects etc.) is rapidly changing and evolving. At the university level there is strong recognition of this and efforts seem to be in place for TAU to be proactive along these lines. At the school level, and specifically with the presentation of the current curriculum, the faculty appears to be more reactive and perhaps not experimenting proactively and enthusiastically with available technology for online grading of exercises and problem sets to for example provide immediate feedback to students as they work on

problems, auto-grading and feedback on small projects etc. Of course transitioning course content to an interactive on line environment and incorporating new technologies (clickers are just one example) into the classroom environment requires resources in terms of time and money. However, we would encourage and recommend that the faculty become more aggressive and proactive in moving their course content in this direction. In doing this, the faculty and administration need to clearly recognize that for the most part, the key goals for incorporating new technology and on line experiences for the student can't be to save money or time but rather to enhance the experience for the students and to make the process of content delivery more efficient.

Recommendations

Desirable:

- New teaching methods and their integration into the curriculum and individual courses is important.

8. **Research**

Observations and findings

Research universities such as TAU are intended as the primary research mechanism for Israel. This is stated as their primary mission, with teaching and training of students for the high tech industry as a secondary mission. The interpretation is that the study programs are intended to train students for advancing technology in the short and long term and at the graduate level in particular to train them in developing research skills by working closely with faculty on research projects.

The research done by EE faculty is in general of very high quality and many of the faculty have strong international reputations. Some important research tracks are missing (e.g. circuits, microelectronics), which the school is aware of.

9. <u>Infrastructure</u>

<u>Observations and findings</u>

The teaching laboratories appear to be well maintained and with reasonably up to date equipment. A key and important suggestion is for common shared space to be provided for the adjunct faculty to use. Currently office/desk space to use and for meeting with students is provided to some by their research collaborators. It should be more routinely viewed as an important component of the adjunct faculty structure.

The two (quite new) research laboratories that the committee visited were excellent examples of how research labs are to be equipped. They were well organized and high end equipment was in place. Each was worth around $1M of investment.

<u>Recommendations</u>

Desirable:

- Shared office space should be provided for adjunct faculty.

10. <u>Self-Evaluation Process and implementation of previous recommendations</u>

<u>Observations and findings</u>

The committee has found the self-evaluation report to be comprehensive and reasonably accurate.

Some weak points that we have mentioned in our report were identified also in the self-evaluation report and consequently are clearly recognized by the School.

Response to recommendations in the 2007 report: Overall, the recommendations of the earlier committee (of 2007) were taken into account. In particular:

- The starting hour of the MSc courses was set to 15:00 instead of 16:00.

- Additional Lab engineers were added, but as mentioned in this report, this remains a weakness and additional investment is needed in this area.
- PhD students are now allowed to be TAs. However, although PhD candidates are now allowed to teach, many of them choose not to do so. In addition, they are not allowed to teach in the labs for budgetary reasons. This should be corrected.

Chapter 4: Summary of Recommendations

Essential Recommendations:

- The committee finds that the low attendance in the 3rd and 4th year classes is a big issue hampering the value of studies long term.

- There is currently no oversight or educational planning of the structure by which students divide their time between studying at the university and working in industry. We would recommend considering other models of internship with industry.

- More guidance and individual mentoring should be provided to students regarding the possible professional tracks in the program and in career choices.

- If internationalization is pursued, this will typically involve revamping of the course content delivery, and this should be seen as an opportunity to also update the technology (on line etc.) used for the content delivery and student interaction with the content.

- The high student faculty ratio should be addressed. This is a pervasive problem throughout the higher education system and is well recognized by the institutions. If it cannot be rectified then the system should openly admit that they can't provide the quality education that they claim.

- Students should be provided with more individual support. Students appear to be a bit lost in their first years of study and currently look to industry rather than the university for guidance regarding their career and track choices. This guidance should come from the faculty and can materially enhance the student experience and probably contribute to better attendance in classes in the later years.

Advisable Recommendations:

- Recitations should be in smaller groups, so that the student experience is improved.

- Faculty Gender balance should be improved.
- Encouraging faculty to be proactive in exploring and experimenting with new teaching models and technology.
- Students' low attendance in 3rd and 4th year classes because of scheduling conflicts with work obligations should be addressed.
- More guidance/ personal advice from faculty regarding tracks is important. This should be done more comprehensively and earlier in the students' studies.

<u>Desirable Recommendations:</u>
- We recommend that the School articulate to all levels (administration through undergraduates) a crisp and clear mission statement that is realistic in the presence of budgetary pressures and other constraints. It should include, for instance, the issue of student/ faculty ratio, TA's etc.
- More internationalization and engagement in English would benefit the students.
- Some faculty expressed dis-satisfaction with the current IP policy of TAU. An appropriate model regarding IP of faculty which addresses these concerns is advised.
- Being proactive about new teaching methods and technology and their integration into the curriculum and individual courses is important.
- Shared office/desk space should be provided for adjunct faculty.
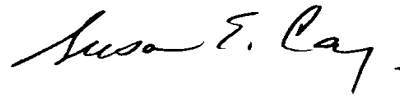- More hands on experience in labs and through projects.

Signed by:

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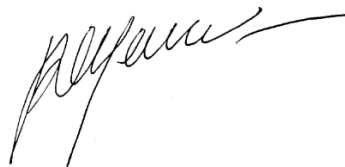Prof. Alan Oppenheim - Chair

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Dr. Orly Yadid-Pecht

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Prof. Dr.-Ing. Walter Kellermann

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 Prof. Susan Conry

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Prof. Mathukumalli Vidyasagar

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Prof. Roch Guerin

Appendix 1: Letter of Appointment

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COUNCIL FOR HIGHER EDUCATION

December 2015

Prof. Alan Oppenheim
Department of Electrical Engineering and Computer Science
MIT
USA

Dear Professor,   Al

The Israeli Council for Higher Education (CHE) strives to ensure the continuing excellence and quality of Israeli higher education through a systematic evaluation process. By engaging upon this mission, the CHE seeks: to enhance and ensure the quality of academic studies, to provide the public with information regarding the quality of study programs in institutions of higher education throughout Israel, and to ensure the continued integration of the Israeli system of higher education in the international academic arena.

As part of this important endeavor we reach out to world renowned academicians to help us meet the challenges that confront the Israeli higher education by accepting our invitation to participate in our international evaluation committees. This process establishes a structure for an ongoing consultative process around the globe on common academic dilemmas and prospects.

I therefore deeply appreciate your willingness to join us in this crucial enterprise.

It is with great pleasure that I hereby appoint you to serve as the Chair of the Council for Higher Education's Committee for the Evaluation of the study programs in **Electrical and Communication System Engineering**. In addition to yourself, the composition of the Committee will be as follows: Prof. Susan Conry, Prof. Roch Guerin, Prof. Ehud Heyman, Prof. Mathukumalli Vidyasagar, Dr. Orly Yadid-Pecht, Prof. Eby Gershon Friedman, Prof. Dr.-Ing Walter Kellermann.

Ms. Daniella Sandler and Ms. Inbal Haskell-Gordon will be the coordinators of the Committee.

Details regarding the operation of the committee and its mandate are provided in the enclosed appendix.

I wish you much success in your role as a member of this most important committee.

Sincerely,

Hagit Messer

Prof. Hagit Messer-Yaron
Vice Chair,
The Council for Higher Education (CHE)

Enclosures: Appendix to the Appointment Letter of Evaluation Committees

cc: Dr. Varda Ben-Shaul, Deputy Director-General for QA, CHE
        Ms. Daniella Sandler, committee coordinator
        Ms. Inbal Haskell-Gordon, committee coordinator

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Electrical Engineering - Schedule of site visit Tel Aviv University

(All meetings will take place at Wolfson Building of Electrical Engineering # 206)

Thursday 7/1/16

Time	Subject	Participants
9:00-9:45	Opening session with the heads of the institution and the senior staff member appointed to deal with quality assessment	Rector Prof. Yaron Oz Vice Rector Prof. Eyal Zisser Prof. David Horn
9:45-10:30	Meeting with Dean of the faculty of Engineering	Prof. Yossi Rosenwaks (Dean)
10:30-11:15	Meeting with the academic and administrative heads of the department of **Electrical Engineering**	Prof. Ady Arie (Chairman, School of EE) Prof. Mark Shtaif (Chairman, Phys Elect Dept.) Prof. Michael Margaliot (Chairman, System Dept.) Prof. Ram Zamir (Head of BSc program) Prof. Avishay Eyal (Head of MSc program) Prof. Jacob Scheuer (PhD committee) Pnina Efrati (Head of Faculty am\admin) Yaffa Gidon (Secretary of EE School)
11:15-12:00	Meeting with senior academic staff*	Dr. Tal Ellenbogen Prof. Uri Erez Prof. Amir Boag Prof. David Burshtein Prof. Boaz Patt-Shamir Prof. Nahum Kiryati Prof. Yosi Shacham Prof. Ofer Shayevitz Prof. David Mendlovic
12:00-12:45	Meeting with PhD students / Junior academic staff *	
12:45-13:30	Lunch (in the same room)	Closed-door working meeting of the committee
13:30-14:15	Meeting with adjunct lecturers	Eli Gershon Isaac Izraeli Yuval Beck Eyal Katz
14.15-15.15	Meeting with BA and MA students	
15.15-16:00	Final Project Presentation	

16:00-16:30	Meeting with Alumni**	Shani Ardazi Noa Tayar Yaniv Frenkel
16.30-16:45	**Break**	
16:45-17:30	Tour of campus (classes, library, offices of faculty members, computer labs etc.)	Neiman Library of Exact Sciences & Engineering -Ifat Shamai (Head of Reference & Instruction Dept.). Electronics teaching lab/ Alon Dahan, Wolfson build.306 Power Electronics Lab/ Bishara Bishara, Wolfson build. 132 The advanced labs in communication & signal processing/ Jacob Fainguelernt, Kitot build. 201 Advanced Lab - Computer Organization/ Marko Markov, Kitot build. 204 RFIC Research Lab/ Eran Socher (Samuel Jamson), Lab build. 203-203 Nano electro- optics Research Lab/ Tal Ellenbogen, Lab build. 204-206 Students Room, Lab build.221
17:30-18:00	Closed Door Meeting	
18:00-18.30	Summary Meeting	Rector Prof. Yaron Oz Vice Rector Prof. Eyal Zisser Prof. David Horn Prof. Yossi Rosenwaks (Dean) Prof. Ady Arie (Chairman, School of EE)

* The heads of the institution and academic unit or their representatives will not attend these meetings.
** The visit will be conducted in English with the exception of students who may speak in Hebrew and anyone else who feels unable to converse in English.