Committee for the Evaluation of Civil Engineering Study Programs

Sami Shamoon College of Engineering

Department of Building Engineering

Evaluation Report

September 2011

Contents

Chapter 1- Background

At its meeting on July 14, 2009, the Council for Higher Education (CHE) decided to evaluate study programs in the field of Civil Engineering during the academic year 2010 – 2011.

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

- **Prof. Miroslaw Skibniewski,** Department of Civil & Environmental Engineering, University of Maryland, USA– Committee Chair
- **Prof. Jacob Fish,** Department of Civil Engineering and Engineering Mechanics, Columbia University, USA
- **Prof. Laurence J. Jacobs,** School of Civil & Environmental Engineering, Georgia Institute of Technology, USA
- **Prof. Gayle Mitchell,** Department of Civil Engineering, Ohio University, USA
- **Prof Jeffrey Packer,** Department of Civil Engineering, University of Toronto, Canada
- **Prof. Rodrigo Salgado**, School of Civil Engineering, Purdue University, USA*

Ms. Yael Franks - Coordinator 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 Civil 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 October 2009).

[1] The Committee's letter of appointment is attached as **Appendix 1**.

* Prof. Rodrigo Salgado did not take part in the evaluation of SCE

Chapter 2-Committee Procedures

The Committee held its first meetings on March 13, 2011, during which it discussed fundamental issues concerning higher education in Israel, the quality assessment activity, as well as Civil Engineering Study programs.

In March 2011, the Committee held its first cycle of evaluation, and visited the Sami Shamoon College of Engineering and the Technion. In May 2011 the Committee conducted its second evaluation cycle, and visited Ariel University Center of Samaria and Ben-Gurion University of the Negev. During the visits, the Committee met with various stakeholders at the institutions, including management, faculty, staff, and students.

This report deals with the **Department of Building Engineering of the Sami Shamoon College of Engineering.**

The Committee's visit to the Sami Shamoon College of Engineering took place on March 14-15, 2011.

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

The Committee thanks the management of Sami Shamoon College of Engineering and the Department of Building Engineering for their self-evaluation report and for their hospitality towards the Committee during its visit at the institution.

Chapter 3: Evaluation of Building Engineering Study Program at Sami Shamoon College of Engineering

- *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.*

Background

Sami Shamoon College of Engineering (SCE), formerly known as Negev Academic College of Engineering, was established in 1995. Since 2002, in addition to its main campus in Beer Sheva, the College operates a second campus in Ashdod. It is a privately endowed, relatively new academic institution offering undergraduate programs in six areas of Engineering: Chemical, Building, Electrical & Electronics, Industrial and Management, Mechanical, and Software Engineering. As noted in the self evaluation report (SER), all programs, except Building Engineering, lead to the degree of Bachelor of Science (B.Sc.), while the Building Engineering program leads to the degree of Bachelor of Technology (B.Tech.). The program caters predominantly to low income students and under-represented populations from Beer-Sheva and the surrounding communities. Many students in the Building Engineering program combine the curriculum of full-time study with part-time or full-time employment to support themselves and their families.

In 2009-2010, there were 3,626 students in the college, 280 of them in the Department of Building Engineering. The Department has a total of 8 core faculty members that have a full time position at SCE, 7 of them with at least 50% of their teaching load in the Dept. of Building Engineering.

Mission and Goals

The Building Engineering program offers two areas of specialization: structural engineering and construction management. The program aspires to employ 'top notch academic staff' which in the context of its institutional focus translates into hiring effective teachers and mentors, holding degrees in Building Engineering, for future graduates. The institution also aspires to become one of the top choices for applicants into undergraduate engineering programs in Israel. Given that there are currently four institutions in Israel offering civil/building engineering curricula, including one that offers graduate degrees in addition to undergraduate programs, this may be difficult to achieve. As an undergraduate college, Sami Shamoon College will be well served to focus on its core quality teaching mission fulfilling educational aspirations of under-represented populations of college students. Graduates receive, and should continue to receive, quality preparation for immediate entry into industry careers. The committee believes that the College should also consider part-time programs, in order to accommodate students who due to family responsibilities and work schedules, find it hard to graduate within 4 years, while maintaining high quality standards in engineering education.

Recommendations:
Immediate:

- As stated throughout the self evaluation report, the college aspires to expand accessibility to higher education and extend academic opportunities for high school grads in Israel. In light of this, the committee recommends that evening, weekend and/ or summer programs should be developed, in support of the working student populations, and that support programs be provided to increase retention of existing students

The Study Program

The Building Engineering program at Sami Shamoon College of Engineering has a single degree, the B. Tech. in Building Engineering (Structural Engineering and Construction Management). This is a traditional, applied knowledge–focused program that aims at producing practicing engineers, especially for the construction and structural engineering industries in the Beer Sheva region. The program uses textbooks that are typical for a civil engineering program in the U.S., and has a number of laboratory classes. The program at the College is successful in serving students at the periphery of the Israeli society. For example, the program includes preparatory courses for students who are unprepared for higher education or need a refresher in basic mathematics, physics and chemistry. The committee was impressed that the faculty in the College could teach students initially deficient in their knowledge of advanced calculus and physics. The committee believes that due to the proximity of Sami Shamoon College to Ben Gurion University the program can benefit from a possible arrangement with BGU to allow Sami Shamoon students to enroll in more elective courses on the BGU campus.

As reported by SCE, the current dropout rate from the Program is approx. 20%. The faculty in the Program and the leadership at the College has made it clear that they would like to change the designation of their B.Tech. degree to a B.Sc. degree, as Building Engineering is currently the lone program in the College granting a B.Tech. rather than a B.Sc. degree. The committee believes that this is a reasonable request based on the apparent substantial equivalency of the program's curricular offerings to other Building Engineering or similarly named programs which offer a B.Sc. degree.
Any expansion of the faculty should continue to be in the area of the current program, and should focus on gaining a critical mass of teaching talent in that area. The committee also believes that any plan to introduce an M.Sc. program is still premature at this time and that the faculty should focus on further strengthening their undergraduate program. The faculty should recognize that with the increasing focus towards professional licensure by examination, the study program may need to be modified to include new offerings related to sustainable design and construction practices.

Finally, the committee believes that an external industry advisory board to help with the placement of students and to provide regular feedback to the faculty would be beneficial to the College. Since the study program is focused on professional engineering practice in structural engineering and construction, this input from industry professionals is critical for the students in the program.

Recommendations:
Intermediate:

- The College should establish an external advisory board for the Department
- Until a critical mass of faculty is developed in additional areas of study, it is not recommended that the College introduces additional Civil and Environmental Engineering specialty areas beyond Structural Engineering and Construction Management

Long Term:

- Until the current Bachelor degree is strengthened in the different ways detailed in this report, the committee does not recommend the introduction of an M.Sc. program in Sami Shamoon College

Students and Alumni

The committee met with undergraduate students, the majority of whom were from the Beer Sheva area. In addition to their academic studies, over half of the students indicated that they worked full-time. The need to supplement their income, which was similar for a number of their peers, contributed to extending their time to graduation for 5 years and sometimes more.

The student-to-faculty ratio is excessively high, at approx. 40 to 1. This ratio should be reduced. As reported by the College, the program has a student dropout rate of about 20%. This is a relatively high dropout rate and the committee believes that new initiatives that would improve the existing graduation rates are needed. These initiatives could include added course offerings in the summer, more flexible/elective course offerings, video/tutorial offerings and a student support system including professional mentoring. Part-time academic programs should be considered to accommodate full-time working students. These initiatives should be executed while maintaining high standards in teaching.

Access to and help from the faculty was a strong asset of the program, which also was one of the reasons for students selecting Sami Shamoon College. In general, students considered instruction provided by both the full-time and the adjunct teachers to be good. Accessibility to the former and the new Chair of the faculty was viewed positively. The low number of responses from students on teaching evaluations, as reported in the SER, seemed to stem from students' impression that the evaluations did not carry sufficient merit. Such evaluations are essential for informed feedback from students to the instructor and, consequently, constitute a valuable self-improvement tool for the instructor. Also, the evaluations are one of the important tools for the Department and College administration to evaluate the instructor performance, reward the best instructors and remedy potential problems that become apparent as reported by the students.

The students expressed a desire for more practical experience opportunities such as field trips to construction projects and, in general, more exposure to the practice-oriented pursuits in their field of study. They noted the NACE conference held on campus in January 2011 and that it provided additional information beyond the classroom. The committee supports these ideas and believes that these types of experiences should be expanded.

With the current level of English proficiency, the committee was unsure of the use of English-language references. Some level of competence in English is necessary to effectively use English-language texts.

The students primarily are responsible for finding their own internship positions in the summer following their third year of study, and faculty provide them with names of contacts at companies. Since the internship is a graduation requirement, more assistance in placement by the College and the program would be helpful. Students work individually on their final design project, and often the summer internship becomes the focus for the design topic. Alumni comments on the final design project included that it helped them decide on what professional work area in Building Engineering they wanted to focus and how to "talk, listen and learn". To emulate more fully the work environment, integration into the classroom of some student teamwork opportunities in most classes should be considered.

Students perceived their job prospects upon graduation to be very good and that there is a high demand for structural engineers in the Israeli market. Relative to their perception of the Bachelor of Technology versus a Bachelor of Science degree name, some thought it would not affect their job opportunities and that it was more important how a student presented oneself to the prospective employer. Several students did mention some concern such as whether the Bachelor of Technology degree would be interpreted as inferior to the Bachelor of Science if they went to work abroad. The committee's impression is that the academic quality of the students is generally satisfactory and the students have a strong connection to the engineering design and/or construction practice. Regarding alumni, the committee's impression was that the B.Tech. curricula had prepared them well for their careers and that the program content was equivalent to that at other institutions. Therefore, the committee thought that the designation of a B.Sc. degree would provide more ease of entry to graduate programs and more equal opportunity for everyone.
The committee thinks that the faculty could benefit from a stronger and more structured relationship with alumni such as through the establishment of an external advisory board for the Department.

Recommendations:
Immediate:

- The department should better assist in the mandatory requirement for internship placement of students
- The department should create a more structured relationship with alumni. One way of doing this is by developing a structured program of bringing an alumni to class, for presentations to the students on a practical topic related to the subjects covered in the class, at least once per semester, or by being part of an external advisory board

Immediate to intermediate:

- The department should endeavor to reduce the dropout rate as specified above
- Methods to improve English skills of faculty should be implemented; this is necessary to effectively use English language texts as part of the curricula.
- Students should be provided more exposure to the practice-oriented pursuits in their field of study
- Program faculty should ensure that the majority of upper level courses include the exercise of teamwork among students and public presentation skills related to technical material and engineering project-related information

Teaching and Learning Outcomes

The committee feels that the teaching and learning outcomes should better reflect Sami Shamoon College's mission statement of extending academic opportunities to all high school grads willing to pursue engineering education and of serving under-represented students at the periphery of the Israeli society.

The faculty teaching loads are high at 12 classroom contact hours per week. The committee hopes that that the number of hours will be reduced at some point in the future, as this will be very helpful to faculty members. One way to do this is to consider maximum consolidation of freshmen and sophomore level courses by combining courses across different departmental programs in the College. This should be done until additional faculty can be recruited, even at the expense of increasing the number of students per course section. However, the faculty should put more of their effort into developing new courses and innovative teaching pedagogy. The committee feels that a reduced teaching load should be awarded to faculty who make successful research and mentoring links with industry, perform service to national and international professional organizations, and especially to new faculty hires.

Recommendations:

Intermediate:

- Create a policy for reduced teaching loads for faculty who meaningfully engage in applied research of interest to industry, engage in professional development activities, or hold officer positions in national and international professional organizations.

Human resources

The Head of the Department of Building engineering fulfills his administrative leadership duties well and has a high level of energy and enthusiasm. The committee's impression was that he is moving the Department in the right direction. However, the Department would benefit from recruiting a senior level professor who would be in a position to establish a senior faculty leadership.

The committee understands that the structure throughout the college departments is that each Department has a Dean and a Head of Department, but believes that there is a need to reconsider this structure. For a relatively small department such as Building Engineering at SCE, one administrative leader, the Department Head, should be sufficient.

Holding lectures/seminars within existing courses by external lecturers from the industry should be encouraged, in fields relating to subjects such as the introduction and teaching of design, and construction practice-oriented courses. The importance of having these types of courses was emphasized during the discussion with students and alumni of the program.

The supply of academically qualified faculty for the program is very limited based on current recruitment efforts, because there are insufficient numbers of Ph.D. graduates in Civil Engineering in Israel who are able and willing to assume academic jobs at Sami Shamoon College. New faculty hires should have better English language skills than most of the current faculty. The College should undertake concerted efforts to encourage its own

graduates who have also earned graduate degrees elsewhere to become faculty members at Sami Shamoon. At present, at least 3-4 new faculty are needed to reduce the teaching loads of the existing faculty and the student-to-faculty ratio, and to raise the level of coverage of structural engineering design practice and construction management.

As a matter of recommended policy for the Department, the committee thinks that the leadership should better align its faculty hiring and mentoring strategy to the Department's mission statement, focused primarily on undergraduate education, rather than on research. However, individual faculty initiatives to engage in and sustain quality applied research effort, particularly that involving active undergraduate student participation and mentoring, should be encouraged and appropriately rewarded.

All faculty teaching in the program should be motivated and encouraged to obtain Professional Engineering licensure in Civil Engineering.

Recommendations:
Intermediate:

- One person heading the Department should be sufficient, due to the current size of the Department
- Implement Introduction and teaching design and construction practice-oriented courses by external lecturers from industry
- The Head of the Department should hold a more senior level faculty rank

Long term:

- New faculty hires should have better English language skills and focus mainly on high quality modern undergraduate education

Research

As Sami Shamoon College is a regional institution at present awarding only the first degree – the *Bachelor of Technology (B.Tech.) in Building Engineering* – a graduate education program in this Department is non-existent. Nevertheless, the Department aspires to an eventual graduate program and administrators allude to research already being an expectation of the full-time faculty members. Although according to CHE regulations colleges do not receive research funds in their operating budgets, the research expectations of the College (for example, in terms of publications in English-language peer-reviewed and ISI/SCI indexed journals, research income generation, etc.) are not enunciated. A small complement of academic full-time staff have in general, demonstrated minimal research performance – measured by the rate of output and impact – by international standards. There are some exceptions, particularly in the established corrosion research area, and in the newly acquired expertise in concrete-FRP composites. The "input" stimulating research, namely the funds acquired, has dwindled to negligible levels from internal College resources during the period 2004-2005 to 2009-2010. On the other hand, the rise in externally acquired funds more than offsets this decline in internal funds. However, it is largely raised by a small number of faculty members. The establishment of an *Innovation Center* at SCE in 2007 foreshadows the R&D aspirations of the College, but the ability of the Department to execute this ambition is very limited. In general, the ability of most of the Department's staff to make an impact on the international research stage is very low, and the absence of a graduate program does not support the human resources aspect of the research infrastructure for the Building Engineering program and for the College as a whole.

The Department's SER states that "The College must establish a R&D authority whose tasks include enlisting funds for research projects, assisting faculty members in filling out research proposals, and editing proposals and scientific papers in English". Such a "top-down" process is unadvisable and will inevitably be largely unsuccessful; instead, a "bottom-up" process based on the drive of individual academics is necessary. If the Department does intend to seriously pursue research as a component of its mission it would need to pay close attention to research performance metrics of the faculty, provide incentives and rewards (perhaps in the form of attractive "start-up" packages or in the form of research or professional development leaves), hire new young faculty who have appropriate credentials and a passion for research, and steadily improve the Department's facilities for research (as described in "Infrastructure" below). However, the committee believes that research should not be the focus nor an expectation of all the faculty members at present. Instead, the Department should foster a culture of life-long learning among students and faculty alike.

Recommendations:
Intermediate:

- Create administrative mechanisms in the Department and the College generating opportunity for success by individual faculty based on a "bottom-up" process initiated by the drive of individual faculty
- Department should create and foster a culture of life-long learning among students and faculty alike, e.g. through appropriate professional seminars and workshops.

Infrastructure

The Department is fortunate in that its main building is modern and spacious, with another expansion nearing completion as well. The provision of this new space for the Department is a very positive development and will aid the repatriation of some laboratories, provide a better nucleus for the Department as a whole, and enable the faculty numbers to grow. The lecture rooms are appealing and appear to also be well-equipped with contemporary facilities.

A number of the Department's laboratories (such as the Engineering Materials Laboratory, Strength of Materials Laboratory, Soil Mechanics Laboratory, and the Building Materials Laboratory) are currently located "off site" in the nearby Technological College of Beer Sheva. This is not a desirable situation as laboratory renewal will not take place under such circumstances and differentiation from a lower-level technical college is also difficult. The technical support staff complement (one laboratory engineer) is meager, but increased laboratory-based activity could be the basis for an expansion. These laboratories do provide considerable hands-on experience for small laboratory groups and can be deemed adequate for most undergraduate course requirements. However, if viewed as a collective *research* facility they are, in general, relatively fundamental and "traditional," and require an infusion of modern apparatus. Discrete exceptions do exist though, such as the "Corrosion Research Center" which has a state-of-the-art, albeit small-scale, facility. This Center captures the interest and imagination of a large number of Sami Shamoon College undergraduates and is a good example of what can be achieved by "bottom-up", faculty-driven initiative (despite a regular teaching load).

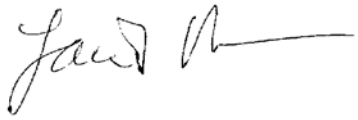
The library is bright, modern, and oriented totally towards undergraduate degree students, which is, considering financial constraints, totally appropriate. Multiple copies of reference textbooks, as specified by every course lecturer, are maintained, such that students do not generally need to purchase books. Furthermore, laptop computers are freely available for student use in the library, negating the obligation for every student to buy his/her own (although many increasingly do so). The library maintains excellent opening hours and the Director of the Library is passionate and dedicated to servicing Sami Shamoon students. One notable characteristic of the library, due to budget constraints, is the limited electronic (on-line) subscription to major journals. This will somewhat impede advanced project study by final year students, and indeed leading-edge literature reviews by faculty undertaking research, but the library does provide a good "work-around" by sourcing requested articles on an individual basis. In the interim, sharing of library collections and other resources at the nearby Ben Gurion University could be considered.

Recommendations:
Intermediate:

- Procure additional modern apparatus into the laboratories
- Increase electronic subscriptions to major civil engineering and construction journals
- Consider sharing library collections with Ben Gurion University

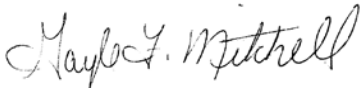
Signed by:

Prof. Miroslaw Skibniewski,
Chair



Prof. Jacob Fish

Prof. Laurence J. Jacobs



Prof. Gayle Mitchell

Prof. Jeffrey Packer

Appendix 1: Letter of Appointment

May, 2011

שר החינוך
Minister of Education
وزير التربية والتعليم

Prof. Miroslaw J. Skibniewski
Department of Civil & Environmental Engineering
A. James Clark School of Engineering
University of Maryland, College Park
USA

Dear Professor Skibniewski,

The State of Israel undertook an ambitious project when the Israeli Council for Higher Education (CHE) established a quality assessment and assurance system for Israeli higher education. Its stated goals are: 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. Involvement of world-renowned academicians in this process is essential.

This most important initiative reaches out to scientists in the international arena in a national effort to meet the critical challenges that confront the Israeli higher educational system today. The formulation of international evaluation committees represents an opportunity to express our common sense of concern and to assess the current and future status of education in the 21st century and beyond. It also establishes a structure for an ongoing consultative process among scientists around the globe on common academic dilemmas and prospects.

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

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 Civil Engineering Studies.

The composition of the Committee will be as follows: Prof. Miroslaw J. Skibniewski (Chair), Prof. Jacob Fish, Prof. Laurence J. Jacobs, Prof. Gayle Mitchell, Prof. Jeffrey Packer and Prof. Rodrigo Salgado.

Ms. Yael Franks will coordinate the Committee's activities.

In your capacity as the chair of the Evaluation Committee, you will be requested to function in accordance with the enclosed appendix.

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

Sincerely,

Gideon Sa'ar
Minister of Education,
Chairperson, The Council for Higher Education

Enclosures: Appendix to the Appointment Letter of Evaluation Committees

cc: Ms. Michal Neumann, The Quality Assessment Division
Ms. Yael Franks, Committee Coordinator

רח' שבטי ישראל 34 ירושלים מיקוד 91911 • טל' 02-5602330 • פקסמיליה 02-5602246
34 Shivtei Israel St' 91911 Jerusalem. Tel. 02-5602330. Fax 02-5602246
شارع شبطي يسرائيل 34 . اورشليم القدس 91911 . هاتف 02-5602330 فاكس 02-5602246
כתובת אתר ממשל זמין: http://gov.il
כתובת אתר המשרד: http://www.education.gov.il

November 2009

Appendix to the Letter of Appointment for Evaluation Committees (Study Programs)

1. General

On June 3, 2003 the Council for Higher Education (CHE) decided to establish a system for quality assessment and assurance in Israeli higher education, which came into effect in the academic year of 2004-2005. Within this framework, study-programs are to be evaluated approximately every six

The main objectives of the quality assessment activity are:

- To enhance the quality of higher education in Israel;
- To create an awareness within institutions of higher education in Israel to the importance of quality evaluation and to develop an internal culture of self-evaluation, as well as the required mechanisms;
- To provide the public with information regarding the quality of study programs in institutions of higher education throughout Israel;
- To ensure the continued integration of the Israeli system of higher education in the international academic arena.

It is not the CHE's intention to rank the institutions of higher education according to the results of the quality assessment processes. The evaluation Committee (hereinafter "Committee") should refrain from formal comparisons.

2. The Work of the Evaluation Committee

2.1 The Committee shall hold meetings, as needed, before visiting the institution, in order to evaluate the material received.

2.2 The Committee shall visit the institutions and the academic units being evaluated – if possible - within 4-6 months of receiving the self-evaluation reports. The purpose of the visit is to verify and update the information submitted in the self-evaluation report, clarify matters where necessary, inspect the educational environment and facilities first hand, etc. During the visit, the Committee will meet with the heads of the institution, faculty members, students, alumni, administrative staff, and any other persons it considers necessary.

2.3 The duration of the visits (at least one full day) will be coordinated with the chairperson of the Committee.

2.4 Following the visit, the Committee will submit the CHE with:

1. A final report on each of the evaluated departments,

2. A general reports on the state of the discipline in the Israeli higher education system. The general report will include recommendations to the CHE for standards and potential state-wide changes in the evaluated field of study.

2.5 The reports will be sent to the institutions and the academic units for their response.

2.6 The reports and Committee's findings will be submitted to the CHE and discussed within its various forums.

3. Conflict of Interest Policy

3.1 In order to avoid situations that may question the credibility and integrity of the evaluation process, and in order to maintain its ethical, professional and impartial manner, before issuing their Letter of Appointment members and chairperson of the evaluation Committee will sign a Declaration on Conflict of Interest and Confidentiality.

3.2 In the event that a member of the Committee is also a current or former faculty member at an institution being evaluated, he/she will not take part in any visits or discussions regarding that institution.

4. The Individual Reports

4.1 The final reports of the evaluation Committee shall address every institution separately.

4.2 The final reports shall include recommendations on topics listed in the guidelines for self-evaluation, including:

- The goals, aims and mission statement of the evaluated academic unit and study programs
- The study program
- The academic faculty
- The students
- The organizational structure
- Research
- The broader organizational structure (school/faculty) in which the academic unit and study program operate
- The infrastructure (both physical and administrative) available to the study program
- Internal mechanisms for quality assessment
- Other topics to be decided upon by the evaluation Committee

5. The Recommended Structure of the Reports

Part A – General background and executive summary:

5.1 General background concerning the evaluation process; the names of the members of the Committee and its coordinator; and a short overview of the Committee's procedures.

5.2 A general description of the institution and the academic unit being evaluated.

5.3 An executive summary that will include a brief description of the strengths and weaknesses of the academic unit and program being evaluated.

Part B – In-depth description of subjects examined:

5.4 This section will be based on evidence gathered from the self-evaluation report and the topics examined by the Committee during the site visit.

5.5 For each topic examined, the report will present a summary of the Committee's findings, the relevant information, and their analysis.

Part C –Recommendations:

5.6 This section will include comprehensive conclusions and recommendations regarding the evaluated academic unit and the study program according to the topics in part B.

5.7 Recommendations may be classified according to the following categories:

- ***Congratulatory remarks and minimal changes recommended, if any.***
- ***Desirable changes recommended*** at the institution's convenience and follow-up in the next cycle of evaluations.
- ***Important/needed changes requested for ensuring appropriate academic quality*** within a reasonable time, in coordination with the institution (1-3 years)
- ***Essential and urgent changes required, on which continued authorization will be contingent*** (immediately or up to one year).
- ***A combination of any of the above.***

Part D - Appendices:

5.8 The appendices shall contain the Committee's letter of appointment and the schedule of the on-site visit.

6. The General report

In addition to the individual reports concerning each study program, the Committee shall submit to the CHE a general report regarding the status of the evaluated field of study within the Israeli institutions of higher education. The report should also evaluate the state and status of Israeli faculty members and students in the international arena (in the field), as well as offer recommendations to the CHE for standards and potential state-wide changes in the evaluated field of study.

We urge the Committees to clearly list its specific recommendations for each one of the topics (both in the individual reports and in the general report) and to prioritize these recommendations, in order to ease the eventual monitoring of their implementation.

****

Appendix 2: Site Visit Schedule

Civil Engineering - Schedule of site visit
Shamoon College of Engineering, Beer Sheva

Monday, March 14, 2011

Time	Subject	Participants
10:00-10:30	Opening session with the heads of the institution and the senior staff member appointed to deal with quality assessment	Prof. Jehuda Haddad – President Prof. Zohar Laslo – College Quality Assessment
10:30-11:15	Meeting with the Dean & Head of the Department of Civil Engineering	Dr. Rami Eid – Head of Department Dr. Uri Tzadka – former Dean/Head of Department
11:15-12:00	Meeting with representatives of relevant committees (teaching/curriculum committee, admissions committee, appointment committee)*	Dr. Leonid Grinis – Teaching Committee Dr. Nicolae Gluck – Final Project & Practical Training Committee Dr. Rina Farhat – Curriculum Committee Dr. Vladislav Kholmer – Admissions Committee Prof. Alan Solomon -Appointment Committee
12:00-12:45	Lunch (in the same room)	Closed-door working meeting of the committee
12:45-13:30	Meeting with senior faculty*	Prof. David Bonen Dr. Amir Eliezer Dr. Rina Farhat Dr. Nicolae Gluck Dr. Leonid Grinis Dr. Vladislav Kholmer Dr. Edi Leibovich Prof. Semion Levitsky Prof. Victor Kagalovsky
13:30-14:15	Meeting with adjunct academic faculty*	Prof. Arie Ben Zvi Dr. Avraham Avigur Dr. Ron Avni Dr. Anatoly Bengart Dr. Yehoyachin Gur Dr. Eduard Mogilevsky Mr. Amiel Mozes Mr.Yeshayahu Sokal
14:15-15:15	Closed-door working meeting of the committee	

* The heads of the institution and academic unit or their representatives will not attend these meetings.

Tuesday, March 15, 2011

Time	Subject	Participants
10:00-11:00	Tour of campus (classes, library, offices of faculty members, computer labs etc.)	Dr. Rami Eid Dr. Uri Tzadka Suggested tour is as follows: Dr. Bob Weintraub – Library Staff Members - Offices Classes/Computer Classes Dr. Leonid Grinis – Fluid Mechanics Lab Prof. David Bonen - Buildings Materials Lab Dr. Amir Eliezer – Corrosion Research Center
11:00-11:45	Meeting with students**	8 students from all levels
11:45-12:30	Meeting with Alumni**	Mr. Mordechay Alush Mr. Yaniv Ben Ami Ms. Irit Benado Mr. Ziv Cohen Mr. Oren Friedman Mr. Omer Kaufman Mr. Gidon Magen Mr. Moab Meedi
12:30 – 13:45	Lunch and Closed Door Working Meeting of the Committee	
13:45-14:45	Summation meeting with heads of department and institution	Prof. Jehuda Haddad – President Prof. Zohar Laslo – College Quality Assessment Dr. Rami Eid – Head of Department Dr. Uri Tzadka – former Dean/Head of Department

* 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.