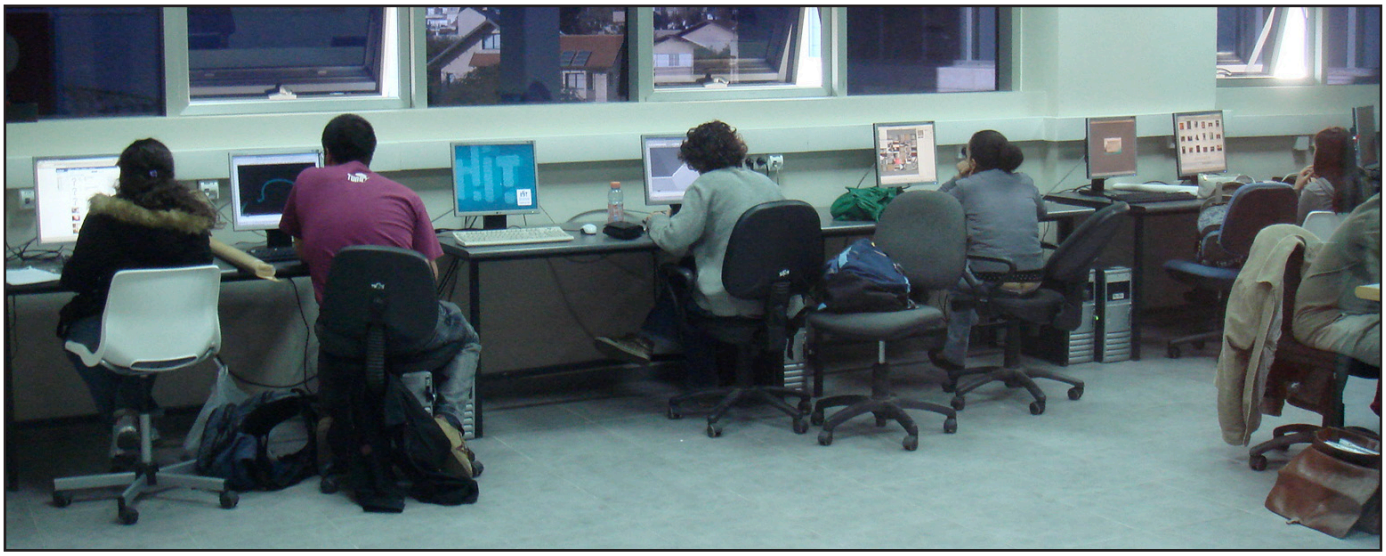
COUNCIL FOR HIGHER EDUCATION
המועצה להשכלה גבוהה
مجلس التعليم العالي
Planning & Budgeting Committee • הועדה לתכנון ולתקצוב

Committee for the Evaluation of Academic Quality for Industrial Design Studies

Evaluation Report



Holon Institute of Technology

Department of Industrial Design

Academic evaluation December 10-11, 2007

Background At its meeting on October 31, 2006 the Council for Higher Education (CHE) decided to evaluate study programs in the field of industrial design during the academic year 2006-2007.

Following the decision of the CHE, the Minister of Education, who serves ex officio as the Chair of the CHE, appointed a committee for the evaluation of academic quality of industrial design studies consisting of:

- **Prof. Rosanne Somerson** Department of Furniture Design, Rhode Island School of Design, U.S.A., Committee Chair
- **Prof. Gabriela Goldschmidt** Faculty of Architecture & Town Planning, Technion – Israel Institute of Technology, Committee Co-Chair
- **Prof. Edward Colker** retired Professor and Provost, Pratt Institute, U.S.A
- **Prof. Haim Finkelstein** Chair of the Department of the Arts, Ben-Gurion University of the Negev
- **Prof. Jan-Christoph Zoels** Senior Partner, Experientia, Italy
- **Ms. Alisa Elon** Coordinator of the committee on behalf of the CHE.

Within the framework of its activity, the committee was requested to submit the following documents to the CHE:

1. A final report for each of the institutions, which would include an evaluation of industrial design study programs, the committee's findings and recommendations.

2.1 A general report regarding the status of the evaluated field of study within the Israeli institutions of higher education.

2.2 Recommendations for standards in the evaluated field of study.

The committee will submit independently to the CHE the documents specified in point 2 above.

The committee's letter of appointment is attached as *Appendix 1*.

The first stage of the quality assessment process consisted of self-evaluation, including the preparation of a self-evaluation report by the institutions under evaluation. This process was conducted in accordance with the CHE's guidelines as specified in the document entitled *"The Self-Evaluation Process: Recommendations and Guidelines"* (December 2006).

Committee Procedures

The Committee held its first meeting on October 23, 2007. At this meeting Committee members discussed fundamental issues concerning Industrial Design study programs in Israel and the quality assessment activity. During the period December 2007 - January 2008, Committee members conducted a two-day visit to each of the institutions offering study programs in the field under examination.

During these visits, the Committee met with the relevant officials at the institutions in accordance with the structure of each institution, as well as with faculty members, students, and alumni, and also conducted a tour of the campus.

This report deals with the **Department of Industrial Design at the Holon Institute of Technology (HIT)**.

The Committee's visit to HIT took place on December 10-11, 2007. The schedule of the visit, including the list of participants representing the institution, is attached as *Appendix 2*.

The committee members thank the management of HIT and of the Faculty of Design and of the Department of Industrial Design for the self-evaluation report and for their hospitality towards the committee during its visit.

Evaluation of the Department of Industrial Design at Holon Institute of Technology

Background

The Holon Institute of Technology was founded in 1969, as The University Institute of Technology, under the academic auspices of Tel-Aviv University.

In 2002, the institution was officially recognized by the CHE as an independent institution of higher education. In 2006, it was renamed the Holon Institute of Technology.

The Department of Industrial Design is one of three departments (together with the Department of Interior Design and the Department of Visual Communication Design) within the Faculty of Design at HIT. Its origins date back to 1976, when the institution was still under the auspices of Tel-Aviv University. HIT received authorization from the CHE to grant a bachelor's degree in Industrial Design (B.Des.) in 2001.

The self-evaluation report submitted by HIT states that in the academic year 2006-7 the total number of students at the Institute was 3,451 of whom 282 were ID students.

The Committee was pleased with the Institute's thorough preparation for the Evaluation process. The self-evaluation report was informative and detailed though in a few places there were factual discrepancies. However, overall the information provided in the self-evaluation report was substantiated in our site visit. On site, the institution had prepared well for us, providing us with additional materials, presentations, tours, and access to everything that we had requested to complete our assessment. We wish to thank the Institute for hosting us so openly and hospitably, as well as for their candid transparency about Industrial Design in the institution. We would like to particularly thank the Department of Industrial Design for their extensive preparation efforts.

We wish to note that there was a strong voice of frustration about a general lack of full support for the department within the larger institution. This sentiment was corroborated during our site visit. We will explain this in more detail in our observations and recommendations. One note that is worthy of mention is that since we received the self-evaluation report the Institution's leadership has changed. The President, Vice President and Dean of the Faculty are all new in their positions as of October 2007, with the President new to the Institution as well. We believe that the new leadership is aware of some of the challenges they face in bringing about needed improvement, and hope that this assessment process can help in strategic prioritization.

Mission and Goals

In the Executive Summary it is stated that the program has adapted to meet local Israeli industry requirements, and that it is organized around three central fields within Industrial Design: Design for Industry and Marketing, Local and Cultural Creative Design, and Social and Environmental Design. The summary also states that what distinguishes HIT from other like programs in Israel is "excellence based on pluralism", allowing both distinction and collaboration under one roof. In the site visit, the new President stated that he believes HIT should deepen expertise where current infrastructure exists rather than broadening too far. The Committee believes that this is wise, especially when the expertise of the teaching staff is taken into account and in view of what they consider to be the areas that will best benefit Israeli industry and culture. The students' achievements reflect well on these three areas of stated focus. Our impression was that these three "routes" resulted from a creative response to huge enrollment growth, but are effectively integrated and substantive in their academic program within the structure of an undergraduate degree.

However, the Committee believes that the full potential of unique excellence for HIT remains unrealized. Within the context of the larger institution there is direct relevance in all Industrial Design subject areas to potential collaboration with other Faculties within the Institute, specifically Engineering, Computer Science and possibly Instructional Systems Technology and Management of Technology. In other countries, designers are working directly with these disciplines to symbiotic benefit. HIT has a unique range of expertise that has not been coordinated to take best advantage of the overall programs of the Institute. Focused collaboration and joint programs among areas of the Institute could dramatically distinguish HIT from other programs in Israel, while adding further depth and research opportunities for collaborating areas.

We suggest that systems be devised to create bridges within Faculties of the Institute such as related programming, collaborative courses, and perhaps even team industry-sponsored projects to develop these aspects of broader cross-pollination within the Institute as a whole. The first step could be creation of a forum in which teaching staff from different Faculties would learn about each other's programs, methodologies, research interests, and curricula. The second stage would be implementation of some form of incentive for innovative multi-disciplinary programming or joint research proposals. Specific targeted funds to encourage such undertakings would help facilitate a starting point. Through such a vehicle, HIT could really define interdisciplinary study in a unique and rich way, drawing on the strong base of areas of specialization within the Institute. These opportunities would add enormous value to Industrial Design students, and their way of thinking and developing ideas would likely benefit students in other areas of study.

The Committee noted that the new President and other academic leaders are

committed to developing a strong strategic planning process, and the President has created a Strategic Planning Committee. We endorse this decision, as rapid growth without appropriate evolution of structures and procedures has had a negative impact on the Industrial Design Department. There also seems to be a deficit in general planning procedures, which the new President seems cognizant of and eager to improve upon. We support this initiative, and will offer both observations and suggestions in this report that we hope will assist in institutional strategic planning.

Study Program

The study program is well conceived and results in commendable student work and a notable level of student satisfaction with their education. Student work at HIT was sophisticated and executed at a high level of resolution. The experience and dedication within the teaching staff is apparent, and is benefiting the students. We noted that the first year Foundations program that includes students from all departments within the Faculty appears to be successful and well liked by the students, as it integrates them into the whole population of the Faculty of Design. We also heard convincing arguments for the decision to divide the students into three "routes" of study within the department, based on three different areas ofIndustrial Design that mirror excellence in the teaching staff as well as cultural relevance. We were given many impressive publications of student works that showcased these focus areas. For example, a project working with economically challenged high school youths over a period of time, introducing them to design process and practice, was a wonderful indication of a commitment to the goal of benefiting culture. In later years, students elect a focal path, but still have exposure to all of the "routes" enabling them greater exposure than if they narrowed into one route only. For the most part fourth year projects seemed to demonstrate excellence in both conceptual development and execution.

Some areas needing improvement were, however, apparent. The Committee found that the academic integration of the Theory and History courses was seriously lacking. While an appreciable portion of the study program is allotted to the Theory and History and the General Studies courses, there is still much need for better integration, and for more courses with greater contextual relevance for designers. Additional problems arise from the format of these courses and the students' preparation for them, as well as with the choice and variety of the courses offered. Teaching staff expresses concern that the students attending these lectures generally lack the basic skills needed for performing adequately in courses of this nature. They cite a basic lack of background knowledge and properly developed analytical skills; they also find that students need to strengthen writing and research capabilities. It appears that students do not do

much reading for these courses; teaching staff suggests that materials in English seem to be too demanding in many instances. The problem is exacerbated by the fact that formats are primarily lecture courses given to a large number of students in which no individual attention can be expected to be given to the students' performance; in fact, no written assignments are given and the students' work is generally graded solely on the basis of final examinations.

This situation, detrimental as it is to benefiting from the full potential of these courses, also reflects on research practices in design courses in general. That the research is not of the highest academic standard is clearly demonstrated by the limited use of the library and the fact that most of the research for projects is currently internet-based. Students seem to define research almost completely within the spectrum of design procedures, rather than in the broader cultural, social or behavioral framework. Advanced materials research seemed minimal as well. There are no real facilities for on-going research to be conducted, nor are there standards in courses that demand a framework for the best caliber of academic research (i.e. requirement of multiple references from primary sources).

Quite a few students voiced their desire for a broader liberal education and more serious academic foundation; others complained that the General Studies courses are quite irrelevant to their needs and interests, arguing that they should be offered more theory and history courses that are geared more specifically to design and cultural issues.

The Committee is aware of the difficulty of striking an adequate balance between the conflicting needs and interests for General Studies courses in relation to professional courses in the discipline. Still, we recognize a need for General Studies courses that are less haphazardly chosen and that meet a broader humanistic foundation for students in all faculties (indeed, it is mostly in the framework of General Studies courses that students from all faculties freely intermingle). The Theory and History courses on the Design Faculty level and within the Department should be augmented by new courses currently not existing such as, for instance, Contemporary Design Theory or by a more rigorous Design History course. Also to be considered are additional areas of study complementary to the three routes (i.e. Environmental Studies to supplement "Social and Environmental Design"). Teaching staff should raise the expectations for academic research, and should provide better orientation and more stringent research requirements. The large frontal lecture courses should be complemented by smaller tutorial groups and/or seminar format classes in order to allow students to better develop their writing and analytical skills and attain a higher academic stature. Ideally, the large frontal classes should be reduced in size, but more importantly, students should have a majority of seminar courses or courses where enrollment is smaller, so that reading, writing, and discussion are emphasized.

Faculty and Teaching

The teaching staff in the ID Department is a highly motivated, devoted and collegial group. This makes for a very positive atmosphere in the Department to the general satisfaction and benefit of the entire ID community in the school. Adjunct faculty members are fully integrated into the Department and have opportunities to voice their opinions, proposals and concerns. The Committee would like to praise the positive and amicable environment, which attracts good teachers and talented students to the Department. At the same time more opportunities for academic and professional development of the teaching staff would be welcome. For example, the Research and Design Office should do more to address the needs of the Design faculty members.

A fundamental difficulty in the Department is the small number of tenured (or tenure track) faculty members, and senior faculty in particular. Only 6 out of 36 members of the teaching staff are tenured or hold tenure-track positions. Thirty members of the staff are adjuncts. This probably contributes to the low profile of the Department within the Institute as a whole. Because the great majority of teaching staff members are not senior faculty, Department Heads are often chosen from amongst young faculty members. Since little incentive remuneration is granted for carrying out Department Head responsibilities, it is challenging to find willing and qualified Department Heads. Despite heroic efforts, Department Heads receive neither the stature nor the necessary institutional support to allow for optimal leadership. The requirement to hold a PhD degree as a prerequisite for tenure and promotion is not realistic in Industrial Design, and is partially responsible for the small number of senior faculty. This requirement, a "leftover" from HIT's affiliation with Tel Aviv University, should be revised. Independent and domain-specific promotion criteria need to be developed to attract, develop, and support expertise within the field. Criteria for promotion should be adapted to standards for a Design Department, rather than general criteria for the entire Institute, a practice that places designers at a significant disadvantage.

In addition to the small number of senior faculty the overall number of faculty members is inadequate relative to the large number of students and recent rapid enrollment growth within the Department [183 students in 2002/3 compared to 282 in 2006/7 as listed on pp 11 and 12 of self-evaluationreport]. We mention this point elsewhere in this report, but the Committee would like to emphasize here that this overcrowding creates an unreasonable load on the teaching staff, which is accentuated by the adjunct teaching staff's feeling that they are poorly paid compared to other institutions (we did not corroborate this in our visit). It was made clear, though, that teachers are not paid for the many hours they spend in the studio beyond official hours, time that is necessary to commit in order to accommodate the large number of students in their classes. In addition they are not paid for the time they devote to reviews and presentations in their colleagues' studio courses. Their willingness for broad participation contributes

to the strong sense of unity within the Department, but is unfair. The excess time that teaching staff has to contribute beyond contracted hours to educate their students fairly is not a model for quality education. Teachers should be properly compensated for the hours they need to teach all of their students.

Adjunct teaching staff is also negatively affected by late communication about teaching contracts, which interferes with good academic planning and course content development. For example, in the "Local and Cultural Creative Design" route, teachers often set up partnered projects with local community and cultural organizations, but cannot construct meaningful engagements when they are only notified about teaching decisions a week or two before the semester begins.

We heard many comments about a sense of isolation of the major HIT programs' administrators and faculty members from each other, as well as lack of knowledge of the Faculties about each other within the Institute. This perception does not encourage either spontaneous or planned interdisciplinary ventures. Engineering activities and curricula are little known within the Design Faculty, even though administrators emphasize the benefits of Design within an Institute that features a strong Engineering Faculty. Clearly this is an area that needs strategic improvement.

The lack of any kind of budgeting process that is transparent for academic leaders in Faculties or Departments is counterproductive and untenable for carrying out best education practices. The Committee suggests that the Institute should allocate budgets to both the Dean and the Department Head that they can manage in advance of the academic year so that they can implement better academic planning and resource management. They need both the responsibility and the authority to manage their budgets well and to maximize stringent resources in a timely, communicable, and academically effective manner.

Students and Learning

As stated earlier, student work is accomplished, and students are well prepared to work in industry. Alumni appear to have strong records of success and are achieving top placements in their field. The Committee found that the greatest impediment to good learning outcomes is the unacceptable levels of overcrowding in classes. Student enrollment growth has occurred very quickly in a short period, but faculty growth as well as systems and procedures have not followed suit, resulting in a serious challenge to maintaining the quality of the program and the strength of the academic experience.

Students have no designated studio home space, which means that the ability to develop work as a group of peers over a period of time is non-existent due

to space limitations. Moreover, due to the character of the Israeli student body, [where students are often employed, are older in age, and often have family responsibilities] there is a problem of students not spending full time in the studios. There is in HIT a shortage of individual stations for students, or even clustered work areas where students can develop projects or exchange ideas and learn from each other. Working primarily at home makes any extended period for side-by-side or "team" benefits, difficult if not impossible. Scheduling and expectations could be adjusted to create certain days or periods within the schedule where more full-time participation is expected and required (perhaps 2-3 days a week or some such structure).

Certain equipment that students need to accomplish their work is lacking (detailed in Infrastructure and Resources section), which results in students having to pay personally for outside fabrication. If this equipment were developed as an onsite resource, equipment would be more easily adapted to particular student needs providing broader learning opportunities, and could be managed, maintained and adapted to curricular needs.

Teaching staff is working well beyond their designated hours just to deal with the large numbers of students, and still students feel that they are getting minimal individual time with their teachers. Numbers of 25-27 students in one studio class, with one teacher, are counter to program excellence; in fact they are two times higher than the international norm. Since courses are overcrowded and there is no designated studio workspace associated with core classes, students are not able to create a rich academic environment for sharing ideas in developmental stages. Currently, most students work primarily at home. This results in learning outcomes that are dependent on information gained mostly from final presentations rather than utilizing learning moments from development of peer work in progress. Although the teaching staff is admirably dedicated to the students, (students and alumni reinforced this fact in conversations with the Committee), all teaching staff are practicing professionals and have time demands beyond their teaching. Therefore, even though students have inadequate individual time with teaching staff during classes, students do not want to further disturb teachers during their own professional time outside of designated class time.

International standards for studio staff/student ratios in Industrial Design Studio courses are generally 1:15. The Committee recommends that enrollment ratios at ID at HIT should strive to meet the international averages. This either means lowering enrollment slightly in a planned pattern of decreased numbers, or increasing teaching resources. A solution must be part of the strategic planning process. For courses with higher enrollments, teaching assistants should be hired until standards are achieved. The high caliber of alumni in the area provides a great pool to draw on for this role.

Students who have participated in international exchange programs appear to have benefited from them and openly express their value. However, exchange opportunities are open only to the more affluent students since related expenses are considerable and there is almost no institutional support available to less wealthy students. Providing support for students eligible for participation in the exchange program, on a competitive basis would motivate students to excel in their studies in order to win an exchange scholarship.

Teachers expressed some frustration in grading procedures and the ability to counsel students out of the program that were not performing at an adequate level. Therefore, they feel as though standards are compromised, and that there is a growing number of mediocre or underqualified students. Further, because of high student numbers in each class it is nearly impossible to provide additional assistance for weak students. Although there are adequate reviews at each level of study, teachers feel that the Institute makes it very hard to expel students, and that standards are not always supported at the higher levels of academic management, even for students who are failing. One reason that this occurs is that there is no real system of academic advising currently. Students do not have access to staff advisors, and rely on informal advice and haphazard systems of tracking overall academic program assessment. Teaching staff excels in assisting in individual courses, but do not have a process for overall assessment in the progress of courses toward achieving the degree.

Student work is assessed at regular intervals, primarily through presentations and through portfolio review. A greater use of outside panels, including alumni, industry representatives, and teaching staff from other HIT Departments or even Faculties would enliven the rigor of assessment criteria as well as cognizance of the caliber of student work to the outside world. Additionally, students would gain broadened perspective from other constituencies. An advising system would also allow more awareness about achievement in General Studies courses relative to achievement in Industrial Design courses.

Stronger published grading criteria need to be developed and enforced, with probationary systems built in. A structure for academic advising must be created, with clear communication between students and advisors. Each study year could have a designated advisor to track student progress at that level. An example of improved progress criteria would be a policy whereby students would not be allowed to begin a final fourth-year project unless they have passed all prerequisite requirements. Currently, there is a required portfolio review at that stage, but that review should be integrated with transcript advising. Students receive only grades for each course. Written evaluations in major studio courses that detail grade assessments would be beneficial for further developing clear feedback. Policies must be enforced so that the quality of an HIT degree does not become diluted.

Some projects in the curriculum are run in partnership with industry. This practice was praised by all parties involved, cited as being very beneficial for students. In many cases these ventures also bear monetary prizes for the best projects. However, students complained that prizes are awarded with great delays and without any ceremony, while in the meantime, the money is deposited in a general institutional account. This situation should be amended so that award funds might not be used for any other purpose, and an appropriate protocol must be developed for award giving. This would promote an aspiration for excellence and would also encourage industry partners to invest in student support.

Tracking of alumni success and job placement seems insufficient. An archive of student work would assist in good relationship building and better exposure of student achievements, awards, and portfolios. This would be an added beneficial tool for recruiting the best students. Many students expressed that the only way that they heard about HIT was from friends who had gone through the program or from practicing industrial designers. The feeling is that promotion of the program is insufficient. In general, the Committee heard that the External Relations area needs to be strengthened, particularly in the case of industry-sponsored projects, where the school does not document projects well or even provide appropriate space for presentations to prestigious companies. As the alumni base builds, more and more sponsorships should be coming to the Department, but these relationships need careful cultivation and attention. Properly managed, they can provide not only program enhancement on a curricular level, but streams of increased funding. Students and teachers commented that when the recent HIT public campaign was implemented, Design was hardly integrated at all. This is a serious disservice to an excellent component within the Institute, and suggests a harmful institutional hierarchy. A system for enhancing the profile of the ID Department through documentation of student work and achievements including a more evident presence on the website must be authorized and undertaken. Strategies for cultivating and hosting appropriate industry partners need improved planning.

Research

Before the committee comments on its findings concerning research, it would like to make clear that it is aware of, and accepts, a clear distinction between research oriented institutions and teaching institutions. In industrial design, however, applied research and practice-based research are typical key components in developing new designs. Additional forms of practice-based research activity might include research on materials in new applications, on user-centered design issues, or research into trends that reflect cultural and population changes. Students of Industrial Design are required and encouraged

to carry out research in these contexts, defined by the gathering of information, related investigations, and experimentation as part of design development, problem solving, and innovation. In this report 'research' is construed in this sense.

Professor Langholz, the new President of Holon Institute of Technology, started our Committee's first meeting with expression of his vision to grow HIT into a research institution with multiple, non-thesis based master programs. His administration is committed to foster interdisciplinary teaching and research collaborations across faculties and departments.

This commitment is a key departure from previous priorities and practices. The Committee recognizes that colleges or non-university institutions are not budgeted in the same way as research universities. However, because of the potential capacity to undertake partnered, sponsored research with industry, research is still possible to conduct within beneficial academic parameters. These opportunities can sometimes attract funds, awards for students, or even new kinds of equipment or access to such, and also mirror a "real life" experience for students like those that they might face as professionals, but achieved at the student stage with teacher guidance. As was mentioned earlier in this report, this kind of research is underdeveloped and underutilized currently within the ID Department as well as within the potential of inter-Faculty collaborative projects. In our meetings with upper administration we heard that faculty research is encouraged at HIT, but ID teaching staff do not feel that they are adequately included in these opportunities.

According to faculty statements only two interdisciplinary teaching collaborations were realized between the Industrial Design Department and others at HIT, the last one only last year after championed by a young member of the teaching staff. These teaching activities need to be fostered, as they will also lay the groundwork for interdisciplinary research projects while motivating teaching staff development.

Research in the ID Department is currently understood as preparing undergraduate students in developing and shaping their hands-on design projects. This takes the form of background literature and web research, interviews with people (end-users) related to their products and environments, as well as material and formal explorations. The Committee understands the limitations of undergraduate research practices, but recommends that research be expanded to utilize more in-depth participatory, observational and inquisitive design methods (such as design ethnography, prototyping, and usability testing). Key will be the integration of analytical and synthetic research practices.

Since research is not clearly supported institutionally for Industrial Design teaching staff, there is no opportunity for students to assist in their research except outside of school. There is no place to conduct research, no laboratories or designated spaces or staff. Student research criteria and opportunities within the curriculum are also ripe for improvement. The Committee feels more research provisions would directly impact the caliber of the program for teaching staff and students both, and would greatly enhance innovation and program content. Though research support exists elsewhere in the Institute, the charge of the Research and Development Office should be required to broaden to include Industrial Design and to integrate specific opportunities and procedures relevant to the field. Some additional training within that Office may be necessary to achieve this desired advancement.

Developing a Committee for Research as part of the strategic planning initiative would be a good mechanism for bringing together different HIT Faculties in an effort to encourage joint research, which as stated previously, the Committee feels could really distinguish HIT as a unique resource in Israel.

Interdisciplinary research laboratories such as an "interaction lab'" or "materials lab" could foster HIT collaborations across different departments and faculties as well as Holon-based initiatives with community partners such as the Material Library at the Mediatheque of the Israeli Design Center. These labs could also facilitate multi-semester industry collaborations expanding the current timeframe and enabling iterative research stages.

Infrastructure and Resources

Supportive adequate infrastructure in terms of space, staff, laboratories, and the library is a key factor in attaining academic excellence in higher education. In the programs of design, and particularly Industrial Design, where the ultimate expressions and results of study are typically the creation and presentation of actual models, proposals and 3-dimensional works, these resources are particularly essential. Any gaps or deficiencies have a negative impact on creative productivity and can defeat the mission and goals of the program.

In addition to specific needs listed in the written self-study, the Committee's tour of the campus and discussions with faculty, students and alumni show a varied picture. Classrooms, studios, workshops and the library (particularly in the new building) range from adequate to quite good. Teaching staff and some students express a need for additional, sophisticated workshops and equipment. Equipment needs within the field of Industrial Design have expanded to include digital output. For students to learn the most current language of their field, the Institute needs to update its labs and workshops to include current technologies. As HIT strives to provide students with educational preparation

for the modern design industries of Israel, essential new equipment such as a rapid prototype machine, large-scale plotter and CNC router should be acquired and installed as soon as possible. Other enhancements (modest robotics station) and similar requests by the Department Head should be urgently responded to and planned for. Additional computing peripherals are needed to support the curriculum. A comprehensive capital plan needs to be instituted so that new equipment can be prioritized, planned for, and acquired in upcoming budgets.

In our brief tour, safety and health procedures, warning and precaution signs, and the wearing of chemical and dust filter masks, eye and ear protection, and protective face shields appeared to be in mixed use or, in some instances, dangerously missing. These shortcomings must be attended to immediately, as institutions of higher learning have an obligation to protect the health and safety of their students and staff. Good practices for health and safety procedures should be made curricular and should be practiced and enforced by students, teachers and technicians as a College responsibility.

Classroom spaces and lesson presentations via electronic media seem up-to-date and contemporary in some cases; however, the number of classrooms and the general condition of teaching spaces was inadequate to support the curriculum and the current enrollment. Additionally, the absence of dedicated office space for a Department Head is unacceptable. This lack of administrative space should be addressed immediately. The Industrial Design Head needs a dedicated secretary considering management of 36 staff and some 300 students. It is remarkable that the level of achievement that exists currently has been possible without appropriate space and support resources, but this is only because of inordinate commitment by the current Department Head, under conditions that are not acceptable in an institution of this caliber. The glaring contrast of impressive open areas in the new building to the cramped equivalent of 2.5 rooms housing the Dean, three secretaries and three administrative heads is highly problematic. There is also a noted lack of space for teaching staff in which to perform course preparation, to store course materials, to advise students, and to undertake research.

To these planning and architectural oversights, one may add a number of overlooked (perhaps non-consultive) needs such as heavy loading dock/area, adequate ventilation for toxic paint fumes in some spaces, disability access and other desired improvements reinforced by the Dean during our tour. On a campus where new studio buildings have been erected, most often an architect/designer/faculty person is engaged for a few seasons (or years) to devote part-time attention to addressing the inevitable discoveries that require re-designed adjustments to spaces as use is actually realized. There is never a perfect fit, regardless of how well intentioned the early planning may have been. Rather than fixing blame, one fixes the problem. Plans for necessary helpful revisions

should be undertaken immediately now that the new building has been occupied and patterns of use and unresolved problems are becoming clear. (Note: in our brief exit interview, the President expressed his awareness and intentions in this area of concern).

The library is attractive, well staffed and pleasant, yet staff seems, in contrast to similar colleges, to be accepting the view that students depend more on the Internet than on books and periodicals. That dependence may be true, but it is not the prevailing, desired, universal mode in respected higher education institutions. On a positive commendable note, the librarian told us that with cooperation of the telephone company, students do have direct access to the library from their homes. However, integration of resource uses needs curricular reinforcement beyond technological access support. Since the library budget is adequate, teachers should consider inhibiting or restricting student search and study which is solely dependent on Internet sources (particularly texts). They can urge a deeper exploration of the riches to be found in books and journals. "Cut-and-paste" submissions are not acceptable individual student research, and deeper use of broader resources should be required.

In terms of promoting the excellence of the Industrial Design Department, the use of exhibition/publication funds to produce impressive, valuable and enhancing books, catalogs, and documents of student design work and projects is commendable. It was noted, however (and mentioned previously in this report), that in the recent public promotion campaign for the College, Design appears not to have been included or featured. Students also voiced a concern that Design at HIT is not well enough known. The promotional materials that have been produced have been departmentally initiated, and their high quality serves the Institute well. Greater "visibility" that is institutionally supported and funded is desired and seems a worthwhile investment. Positive visibility helps to attract the best students and teaching staff, as well as potential sponsors for research, competitions, and even scholarships.

Although a review of budgeting procedures is not in evaluation guidelines, requests for much of what is detailed above could be part of both annual and longer term planning in prioritized, phased consideration so that resource availability is clearer to the Dean, Department Head and colleagues than it is at present.

Self-study Process

The Committee found that HIT and the ID Department did an excellent job of preparing for the self-study report and assessment process. Many different members of staff were directly involved in writing the self-evaluation report, and all reviewed it at different stages. The candid comments demonstrate a commendable atmosphere of academic freedom. We believe that there was wide representation of points of view within the department in preparation of the materials, and that preparations were thorough and genuine. The process helped teachers and students to learn more about the overall program, and to reflect on goals and outcomes. The accompanying materials were very useful. The site visit was well organized and the Committee's needs were well provided for by HIT. The enormous task of coordinating such a big process by the Department Head should not go unnoticed, as he achieved a very successful self-evaluation report and visit based on his hard work as coordinator and organizer. To do so without staff support is very difficult, and we wish to acknowledge his success and dedication to the process.

Miscellaneous

The location of the Institute in Holon provides some exciting potential opportunities for advancement and an elevated profile for Industrial Design. The location of the Israeli Design Center at the Mediatheque positions Holon as a design center city in Israel. The planned Design Museum, and the new municipal library and Materials Library are extremely special resources for designers and students. The Committee visited the Materials Library and was impressed with the professional caliber, expert management, and unique resources offered for design. Since Holon has a dynamic Mayor who is encouraging Holon's development as an Israeli center for design, it is imperative that linkages be made with the Institute to enable Design at HIT to be an academic partner with these initiatives. This kind of featured partnership would likely increase the quality of students applying to the program, as well as that of industry partners and related research opportunities in collaboration with Industrial Design at HIT. To devise planning without attention to municipal characteristics would be an unwise loss of potential and almost a refuting of civic engagement. We recommend that these considerations be addressed directly in strategic planning.

Summary

Strengths The Industrial Design Department at HIT is an important program in Israel that is providing a high quality of education for a broad number of students. Students are producing some very good work. They express a great level of satisfaction with their education and tremendous loyalty to the Institute. Job placement at top firms is high, and teaching staff is dedicated and committed to achieving the highest level of academic achievement within the current confines of the systems at HIT. The campus is located in a city that is growing in reputation as a design center. The Faculty has some very good equipment and a new building that has improved some of the teaching and learning conditions. The ID Department has identified particular areas of specialization that it supports well through professional expertise within its teaching staff. The Department has created a very healthy and positive educational environment, and should be commended for its successful outcomes.

New leadership in the Institute has initiated a strategic planning process. The new President is committed to advancing HIT, and has the experience and vision to accomplish an ambitious plan for improvement. HIT leadership is inclusive and considerate, allowing for broad participation and a range of opinions to inform the planning process.

Weaknesses Significant growth has occurred at HIT rapidly without the accompanying resources and procedures to support such growth. As a result, management systems and learning environments are inadequate. Courses are overcrowded and facilities are not adequate for the large numbers of students using them. New technologies are not integrated into the program, with the result that only students with ample economic means can produce prototypes and models by paying sub-contractors. This sets up an unfortunate “class system” within the department that needs to be addressed. Student numbers are too high in each class, compromising learning outcomes and causing teaching staff to work well beyond their paid hours. Health and safety procedures in workshops are lacking in practice and enforcement.

The interdisciplinary development of the department and the Design Faculty is not utilizing the full resources of the Institute. There is a serious missed opportunity here, and this should be remedied. Additionally, research is not conducted at the level of capability and improvements here should be part of the strategic planning vision.

Departmental management is difficult currently, as the Department Head is undercompensated and is managing over 300 students and 36 teaching staff without an office or a support person. This is not a reasonable working condition and needs to be changed immediately. This is a good example of structures that have not kept up with the pace of growth. The Department Head

and Faculty Dean also have no ability to manage the budgets that impact the degree of course of study. This is a difficult way to manage academic program effectively and to use resources to full academically integrated advantage. The Committee believes that sound fiscal management should be achievable within the responsibilities of the department Head and Dean, and that more transparency and authority here would strengthen educational opportunities and smooth running of the program.

Our Committee noted that currently HIT is overenrolled. While this is admirable on some level, it is a shortcoming when the current population is not adequately served. Evidence leads us to believe that this has become the reality. The Dean informed us that HIT has enrolled more than the budgeted number of students. This is a problem that the Institution needs to address in order have the resources to educate each student.

The promotion of the ID department should be integrated into the overall planning profile of HIT, which would help to strengthen opportunities for research and other industry sponsorship—areas that are currently underdeveloped.

The relationship between Theory and History and other "general studies" courses as well as research practices within the overall curriculum should be carefully studied and improved. The credit balance structure of courses may need to be revised. New courses currently not existing such as a Contemporary Design Theory and a better Design History course should be considered, as should certain areas of study complementary to the three routes (i.e. environmental studies). Designated research facilities should be created (could be aided in funding by industry, particularly if joint Faculties are involved) and supported. Teaching staff should raise the expectations for academic research, and should provide better orientation and more stringent research requirements. Additional forms of courses such as smaller seminars rather than only large frontal lecture courses must be introduced to allow students to develop academic depth and greater expertise.

Conclusion

Industrial Design at the Holon Institute of Technology is an impressive department that has, in some ways, been the victim of its own success. Through this assessment process, we have come to believe that significant attention needs to be paid to overcome overenrolled courses, lack of support, ineffective budgeting procedures, and missed opportunities for research, industry partnerships, and interdisciplinary study within HIT. If advances can be made in these areas, we believe that HIT will continue its reputation for excellence and will distinguish itself in the international arena. If some significant effort isn't made to address current problems, the department will suffer in ways that will compromise educational outcomes. Industrial Design at HIT has too strong a basis of excellence and too much potential for further distinguishing the Institute to allow that to happen. Therefore, we encourage the visionary new leadership to implement a planning process to address and correct the concerns raised through this assessment process.

Prioritized Action Steps

Though we have attempted to prioritize these suggested areas for improvement, as several of these recommendations need to be acted on with urgency at the same time, we suggest that the following steps be used as a guide for prioritization, but that subsequent steps be initiated even if prior ones are not yet complete. We suggest that 18-24 months be targeted for achieving these changes, and that a three-year progress report with results of these changes indicated be submitted to the CHE.

1. Address overcrowding issues immediately. An enrollment planning process should be instituted, with an attempt to meet international standards of teacher-student studio ratios of 1:15. Resulting adjustments in teaching and facility resources must be part of the planning process. Regulate the number of hired adjunct teachers according to actual student enrollment.

2. Designate an office and a support staff person for the Industrial Design Department Head. Teaching staff also needs enhanced access to administrative space.

3. Create a general student advising system that is implemented and enforced. Create thresholds in the curriculum that serve as checkpoints for advancement. Tighten student standards and support instances where teaching staff feels that students should not advance but rather should be counseled out.

4. Implement safety and health procedures for students and staff in workshops and workspaces. These standards should be integrated into curricula, and enforced and practiced by students, teachers and technicians as a College responsibility.

5. Encourage interdisciplinary academic programming and projects between Departments and Faculties. As a first step, the new President could, via his Council of Deans, urge and initiate "open house" visits and other exhibition/presentations where Deans, Faculty and students can see the accomplishments of each other across the campus and learn about mutual academic goals and shared opportunities for collaborative excellence. Research undertakings should include Industrial Design.

6. Develop hiring, promotion and tenure criteria that honor the expertise and achievements of an ID Department within a technological institute. Address the issue of so many young and adjunct members in the teaching staff. In addition, junior faculty need to be added to the teaching staff.

7. Organize a colloquium or some form of working session for teaching staff interchange to facilitate communication between Industrial Design and Theory and History with the goal of better relevance and integration, as well as development of new courses with additional forms for increased research and writing capabilities.

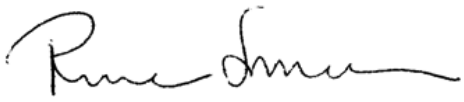
8. Designate budgets to academic managers (Deans and Department Head) as well as teaching resources to allow for better advance planning and academic resource management.

9. Evolve better external promotion and external relations exposure and support for Industrial Design, including increased exposure on the website and hosting of industry partners involved in sponsored research. Assist in promoting student work nationally and internationally in publications and exhibitions.

10. Include as part of the strategic planning process a cultural liaison relationship as the academic partner with some of the civic design initiatives in planning stages. Develop distinct programming that integrates the school with these other civic partners.

11. Increase students' opportunities to experience other work and study opportunities through exchange programs as well as partnerships with industry and with other HIT departments and faculties.

Signed by

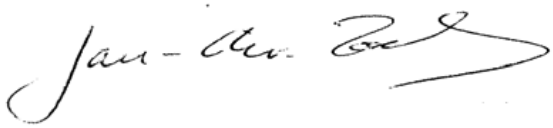


Prof. Rosanne Somerson
Committee Chair

Prof. Gabriela Goldschmidt
Committee Co-Chair

Prof. Edward Colker

Prof. Haim Finkelstein



Prof. Jan-Christoph Zoels

מדינת ישראל

STATE OF ISRAEL

October 10, 2007

Minister of Education

Professor Rosanne Somerson
Department of Furniture Design
Rhode Island School of Design
Two College Street
Providence, RI 02903
USA

Dear Professor Somerson,

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, particularly as our nation reaches maturity in its 60th year.

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 Chair of the Council for Higher Education's Committee for the Evaluation of Academic Quality for Industrial Design Studies.
The composition of the Committee will be as follows: Prof. Rosanne Somerson - Chair, Prof. Gabriela Goldschmidt Co-Chair, Prof. Ed Colker, Prof. Haim Finkelstein and Prof. Jan-Cristoph Zoels.
Ms. Alisa Elon will coordinate the Committee's activities.

In your capacity as a member 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 a member of this most important committee.

Sincerely,

Professor Yuli Tamir
Minister of Education, Culture and Sport
and Chairperson of the Council for Higher Education

Enclosures: Appendix to the Appointment Letter of Evaluation Committees

cc: Ms. Riki Mendelzvaig, Secretary of the Council for Higher Education
ms. Michal Neumann, Head of the Quality Assessment Unit

34 Shivtei Israel St. Jerusalem 91911 Israel Tel: 972-2-5602330 Fax: 972-2-5602246
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October 07

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. Within this framework, study-programs are to be evaluated every six years and institutions every eight years. The quality assessment system came into effect in the academic year of 2004-2005.

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 of the importance of quality evaluation and to develop internal self-evaluation mechanisms on a regular basis;
- 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 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 institution and the academic unit being evaluated – if possible - within 3-4 months of receiving the self-evaluation report. 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, the administrative staff, and any other persons it considers necessary.

2.3 In a meeting at the beginning of the visit, the committee will meet with the heads of the institution (president/rector, dean), the heads of the academic unit and the study-programs, in order to explain the purpose of the visit. At the end of the visit, the committee will summarize its findings, and formulate its recommendations.

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

2.5 Following the visit, the committee will write its final report, including its recommendations, which will be delivered to the institution and the academic unit for their response.

2.6 In the event that a member of the committee is also a faculty member in an institution being evaluated, he will not take part in discussions regarding that institution.

3. The Individual Reports

3.1 The final reports of the evaluation committee shall address every institution separately.

3.2 The final reports shall include recommendations on topics listed in the guidelines for self –evaluation, such as:

- The goals and aims of the evaluated academic unit and study programs.
- The study program.
- The academic staff.
- The students.
- The organizational structure.
- 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.

4. The structure of the reports

4.1 Part A – General background and an executive summary:

4.1.1 General background concerning the evaluation process, the names of the members of the committee, a general description of the institution and the academic unit being assessed, and the committee's work.

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

4.2 Part B – In-depth description of subjects examined:

4.2.1 This part will be composed according to the topics examined by the evaluation committee, and based on the self-evaluation report submitted by the institution.

4.2.2 For each topic examined the report will present a summary of the findings, the relevant information and analysis.

4.3 Part C –Recommendations:

4.3.1 Comprehensive conclusions and recommendations regarding the evaluated academic unit and the study program according to the topics in part B.

4.3.2 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.***

4.4 Part D - Appendices:

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

5. <u>The General report</u>

In addition to the individual reports concerning each study program, the committee shall submit to the CHE the following documents:

5.1 A general report regarding the status of the evaluated field of study within the Israeli institutions of higher education.

5.2 Recommendations for standards in the evaluated field of study.

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

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מכון טכנולוגי חולון
Holon Institute of Technology

Holon Institute of Technology – Department of Industrial Design – Schedule of site visit

First day - Monday, December 10, 2007

revision: 4.12.2007

Time	Subject	Participants	Location
09:00-09:30	Opening session with the heads of the institution and the senior staff member appointed to deal with quality assessment. (incl. brief presentation of the Institute - Holon Institute of Technology- 15 min.)	**Heads of Institute:** Prof. Gideon Langholz – President, HIT Prof. Josiah Kahane – Vice president, HIT; Quality Assurance Coordinator	Management Conference Room, Rubinstein Bldg. 3rd floor
09:30-10:30	Meeting with the academic and administrative heads of the department (incl. presentation of the Department of Industrial Design – 20 min.)	**Faculty of Design:** Mr. Avram Grant – Dean, Faculty of Design Mr. Ofer Zick – Head, Department of Industrial Design **Administration:** Mr. Yehuda Shimony – Head, Design Faculty Administration	Management Conference Room, Rubinstein Bldg. 3rd floor
10:30-12:15	Meeting with representatives of relevant committees * Attendees: Faculty of Design, members of HIT committees	**Admissions Committee:** Mr. Yhuda Hofshy **Teaching Committee:** Mr. Victor Frostig **Curriculum Committee:** Prof. Gad Charney **Student Disciplinary Committee:** Arch. Hagay Tamir **Nominations & promotions Committee:** Prof. Boaz Tal **Teaching Assessment & Advancement:** Dr. Moti Frank	Management Conference Room, Rubinstein Bldg. 3rd floor
12:15-13:00	Lunch informal discussion with committee members over lunch	**ID Faculty:** Prof. Gad Charny, Mr. Ofer Zick, Mr. David Raved **Adjunct Faculty:** Ms. Naama Shteinbuk, Mr. Yosi Ben-Harush, Mr. Ori Ben-Zvi **Students:** Ms. Maayan Fuss, Ms. Naama Futerman, Mr.Shir Atar, Ms. Neta Furberg	Please note - a different location: 2nd floor Conference Room, Rubinstein Bldg.
Time	Subject	Participants	Location

13:00-14:15	Tour of campus (Including classes, workshops, studios, exhibition space, library, offices of faculty members, computer labs etc.)	Mr. Avram Grant – Dean, Faculty of Design Mr. Ofer Zick – Head, Department of Industrial Design Mr. Eilon Armon –Facilities coordinator Mrs. Ruth Maftul – Head Librarian Mr. Ron Halperin – Computer labs & Art studios Manager Mr. Yaakov Peri, Mr. Itzhak Naor - Workshop Managers	Main stops: a. Old ID workshop b. Central Library c. Eylon Bldg. (Offices,lecture & studio halls, Auditorium, Gallery) d. Peress Bldg. (Workshops, studios, Computer Center)
14:15-15:00	Closed-door working meeting of the evaluation committee		Management Conference Room, Rubinstein Bldg. 3rd floor

Second day - Tuesday, December 11, 2007

Time	Subject	Participants	Location
09:00-10:00	Meeting with senior academic staff*	**ID Faculty:** Mr. Ofer Zick – Head, Prof. Gad Charny, Prof. Josiah Kahane, Mr. Avram Grant, Mr. Victor Frostig, Mr. Eilon Armon, Mr. David Raved, Ms. Michal Rinott	Management Conference Room, Rubinstein Bldg. 3rd floor
------	Meeting with junior academic staff*	ID Dept. has no junior academic staff	
10:00-11:00	Meeting with adjunct lecturers*	**Adjunct Lecturers:** Ms. Naama Steinbuk, Mr. Ori Ben-Zvi, Mr. Adi Kitry, Mr. Mel Byars, Mr. David Peer, Mr. Sholy Strauss, Mr. Yosi Ben-Harush, Mr. Erez Steinberg, Mr. Luka Ori Or	Management Conference Room, Rubinstein Bldg. 3rd floor
Time	Subject	Participants	Location

11:00-12:15	Presentation of projects by students**	6 students will present their projects (8 minutes presentation time per student) followed by a short (5 min) discussion by the other students. (Faculty may participate in this session but is not required to do so.) **Seniors:** Ms. Ravid Rovner, Ms. Meytal Perlman, Ms. Hila Raved, Mr. Yaniv Adir, Mr. Ori Shaashua, Mr. Itay Ohali	Management Conference Room, Rubinstein Bldg. 3rd floor
12:15-13:15	Meeting with students* **	Up to 12 students from all years of the study program. (The students who will be chosen by the institution must reflect a mix of all levels) *List of students to be arranged separately*	Management Conference Room, Rubinstein Bldg. 3rd floor
13:15-14:00	Lunch	If possible, please invite a few graduates of the program for an informal discussion with committee members over lunch **Graduates:** Mr. Ziv Botzer (class of 2006), Mr. Dror Holinger (2006), Ms. Dafne Ofir (2005), Mr. Dor Carmon (2004), Mr. Eyal Tzur (2002)	Management Conference Room, Rubinstein Bldg. 3rd floor
14:00-14:30	Summation meeting with heads of the institution and of the department	Prof. Gideon Langholz – President, HIT Prof. Josiah Kahane – Vice president, HIT; Quality Assurance Coordinator Mr. Avram Grant – Dean, Faculty of Design Mr. Ofer Zick – Head, Department of Industrial Design	Management Conference Room, Rubinstein Bldg. 3rd floor
14:30-15:00	Closed-door working meeting of the evaluation committee		Management Conference Room, Rubinstein Bldg. 3rd floor

* 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.