



**Committee for the Evaluation of Business Administration
Study-Programs**

Technion – Israel Institute of Technology

**The William M. Davidson Faculty of Industrial Engineering and Management
MBA – Master of Business Administration with emphasis on Hi-Tech Companies**

Evaluation Report

April 2007

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Chapter 1 - Background

At its meeting on March 8th, 2005 the Council for Higher Education (CHE) decided to evaluate study programs in the fields of Business Administration during the academic year 2005-2006.

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:

- ***Professor Stuart I. Greenbaum*** - Former dean and Bank of America, Emeritus Professor of Managerial Leadership, U.S.A, Committee Chairperson.
- ***Professor Arnoud W.A. Boot*** - Faculty of Economics and Econometrics, University of Amsterdam, the Netherlands.
- ***Professor Arie Goldman*** - KMART Chaired Professor in Marketing, The Jerusalem School of Business Administration, the Hebrew University of Jerusalem.
- ***Professor Dr. Peter Leeflang*** - Frank M. Bass Professor of Marketing, Department of Economics, University of Groningen, the Netherlands.
- ***Professor Thomas Z. Lys*** - Eric L. Kohler Chair in Accounting, Accounting Information and Management, Kellogg School of Management, Northwestern University, USA
- ***Professor Yair E. Orgler*** - Former Chairman of The Tel-Aviv Stock Exchange, and former Vice-Rector, Tel - Aviv University, Committee Deputy Chair.
- ***Professor David A. Walker*** - John A. Largay Professor, McDonough School of Business, Georgetown University, Washington DC, U.S.A.

Ms. Chen Hadad - Coordinator of the committee on behalf of the Council for Higher Education.

Within the framework of its activity, the committee was requested to¹:

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

¹The Document with Terms of Reference of the committee is attached as **Appendix 1**

2. Present the CHE with reports for the evaluated academic units and study programs - a separate report for each institution, including the committee's findings and recommendations.
3. Submit to the CHE a separate report regarding the examined field of study within the Israeli system of higher education.

The entire process was conducted in accordance with the CHE's Guidelines for Self-Evaluation (of October 2005) and on the basis of the Specific Questions for the Fields of Business Administration which were compiled by the committee.

Chapter 2 - Committee Procedures

The Committee held its first meeting on January 11, 2006, during which it discussed fundamental issues concerning Business Administration study programs in Israel and the quality assessment activity.

During the months of June-July 2006, the committee members received the self-evaluation reports and in September 2006 they began to hold discussions regarding these reports.

In November-December 2006, the committee members visited the institutions. During the visits, the committee met with officials of each institution as well as faculty and students.

In accordance with the committee's request, each institution publicized in advance the committee's visit and it invited academic staff members, administrative staff and students to meet with the committee in order to express their opinions concerning the Business Administration study programs.

This report deals with the **Technion – Israel Institute of Technology, the William M. Davidson Faculty of Industrial Engineering and Management - The MBA program.**

The committee's visit to the Technion took place on December 18, 2006. 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 the Technion and the William M. Davidson Faculty of Industrial Engineering and Management for their self-evaluation report and for their hospitality towards the committee during its visit to the institution.

Chapter 3: Evaluation of the Technion – Israel Institute of Technology, the William M. Davidson Faculty of Industrial Engineering and Management

The evaluation is based on the information and the data provided in the self-evaluation report, the committee's visit to the institution and the general impressions of the committee.

Background

The Technion Israel Institute of Technology (Technion) is a publicly funded university with approximately 13,000 students. The great majority study a laboratory science or engineering. Technion offers a part-time MBA program. The Institute also offers undergraduate economics-management programs.

The Technion has developed a niche strategy for its management programs. The programs are consistent with the analytical emphasis of the University. Technion does not deliver broad based management programs with strengths in traditional disciplines such as finance, marketing, or accounting. The Technion niches are in the management of technology. Emphasizing financial engineering and business-to-business marketing builds on Technion's natural strengths, but they are narrow perspectives.

Faculty and Administration

The business faculty is within the department of industrial engineering and management (IE&M). The faculty is led by a dean, three associate deans, and three professors who serve in administrative capacities. Faculty governance is the focus of the Faculty Council. There is a faculty preparatory committee that handles appointment and promotion issues.

The MBA program operates with 14 full-time faculty, 20 adjuncts, and two full-time visitors. The program is administratively housed within IE&M. Approximately 40 percent of the IE&M faculty teach in the MBA program. Approximately half of the courses in the MBA program are taught by adjunct and visiting faculty.

Full-time management faculty develop new courses, maintain quality in existing courses, and sustain a vigorous research agenda. Many of the faculty publish in top-tier or major quantitative business and economics journals on a regular basis. In some places the self evaluation report implies that research is the major faculty endeavor, but teaching commitments are important. Full-time faculty members also are active in mentoring younger faculty members.

The self evaluation report states that Technion needs to increase the number of senior, full-time faculty teaching in the MBA program and to recruit faculty in the functional business areas. It appears that virtually all of the accounting and marketing courses in the MBA program are taught by adjuncts or visitors. Corporate finance is currently taught exclusively by adjunct faculty. Two new faculty are already recruited; one in marketing and the other in strategy. External funding is currently being pursued to fund six new academic positions.

Programs

The IE&M Faculty began its degree programs in 1978 and began to offer a part-time MBA program in 1995. MBA classes meet Thursday evening and Friday morning and are offered in both Haifa and Tel Aviv. The program in Tel Aviv has not been evaluated because it is not authorized by the CHE.

The IE&M Faculty is organized across eight areas and spans the usual disciplines of business administration. The economics and management program includes heavy quantitative requirements that are consistent with the emphasis of the Technion.

The MBA program has three tracks, ranging from 48 to 60.5 credits. Students are assigned a track upon admission, depending on their analytical and economics preparation. The 48 credit program is intended for students whose background is in engineering, mathematics, and physical sciences. The longer programs include technology enrichment courses for students with less technical backgrounds.

The MBA program compares its curriculum and course materials to those at INSEAD, MIT, and Michigan to maintain quality. According to the self evaluation, the Technion MBA program satisfies CHE requirements.

One recent program adaptation increases emphasis on international business. The program now includes a six credit global strategy project. Technion students have study abroad opportunities in France and China, but the part-time nature of the MBA program makes study abroad difficult.

Two courses (marketing management and human resource management) in the Technion MBA program are taught in English. This encourages students to develop English language skills and to participate in international business ventures. Teaching more of the Technion MBA program in English would enhance students' English language skills and should help attract visiting faculty.

A new program has been approved in human resources management. Previous plans for an internal auditing program are not proceeding. The new program will require additional faculty, especially in the functional areas of business. Otherwise, the already, serious under-staffing will be exacerbated.

A proposal for Technion to offer an executive MBA program has been developed. Among its benefits will be stronger links to the Israeli business community.

The bachelor's degree programs are: industrial engineering and management, information systems engineering, and three-year and four-year programs in economics and management. The four-year economics-management program graduated only five students in 2005, which raises the question of cost effectiveness.

Technion should consider pursuing AACSB or EFM accreditation for its management programs. This would require expanding the faculty and broadening the programs to include more courses in the traditional business disciplines. Accreditation would enhance the programs' stature in the international academic and business communities.

Students

The typical student entering the Technion MBA program has an engineering undergraduate degree (90 percent), a GMAT above 610, three years work experience, and is employed full-time. Slightly more than 50 percent of applicants are admitted. Approximately 85 MBAs graduate each year, and the enrollment totals approximately 160 students. In Haifa, it is expected that most students will complete the MBA program in 5 semesters (two years).

MBA required courses have up to 100 students, although many are considerably smaller. Electives usually have approximately 35 students.

The self evaluation report praises the quality of the undergraduate students at Technion. Only one-third of the undergraduate IE&M applicants are accepted. The undergraduate IE&M program enrolls approximately 640 undergraduates. Information systems engineering, economics, and management each have 160 students.

The self evaluation report indicates that the Institute needs to improve relationships with alumni. Alumni can be major sources of financial support, new students, internships and full-time employment.

Resources

The most critical resource need for the business programs is full-time faculty in the core disciplines- marketing, finance, and accounting.

The business faculty at Technion has extensive databases, library materials, and research support. The high quality and wide range of analytical and technical publications by the faculty suggest that resources are not deterring the faculty from research.

It appears that Technion and the business programs make excellent use of technology. This enables students and faculty to maintain contact, which is especially critical for the part-time program. Each classroom is equipped with state-of-the-art technology.

The self evaluation report suggests that the physical facilities for the business programs at Technion are adequate, but that more administrative space and conference space are needed.

Self Evaluation Report

The self evaluation report provides an in-depth perspective of the Technion MBA program. The self-evaluation team was led by the incoming dean of IE&M and included professors, senior MBA staff, a statistician, and others.

The administrative structure, the undergraduate and graduate programs, the faculty accomplishments, students' credentials, graduation data, admissions, and courses are described in detail.


Several student and faculty questionnaires were developed especially for the self evaluation. The University used the self evaluation as an opportunity to gain insights into the MBA program's strengths and weaknesses.

Recommendations

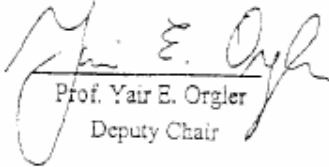
- Management education should be organized as a separate faculty within Technion. This will elevate the autonomy, priority, and long-term success of management education at the Technion.
- The Institute employs 14 full-time faculty and 22 adjuncts or visiting faculty in the MBA program. Full-time faculty should be freed from administrative responsibilities wherever possible. Integration of adjunct faculty with full-time faculty can be improved.

- More full-time, tenure-track professors are needed in core business disciplines. This is especially true in accounting, finance, and marketing, where almost all MBA teaching is done by adjuncts or visitors.
- The research accomplishments of the business faculty are admirable in several more technical disciplines, but few publications from Technion appear in the top journals in marketing, finance, management, or accounting.
- To prepare Technion students to compete in global business, more of the MBA program should be taught in English. Students would expand their English language experience and more international visiting faculty might be attracted.
- Technion should consider pursuing AACSB or EFM accreditation for its management and MBA programs. This may require broadening of the niche of the current program. Accreditation would enhance the international stature of the programs.
- Technion should consider employing a retired business executive, perhaps an MBA alum, to build the relationships between the MBA program and industry. The retired executive will understand the needs and interests of the business community.


Signed by:



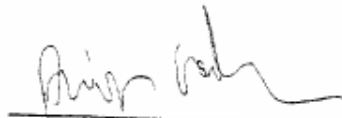
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Prof. Yair E. Orgler
Deputy Chair



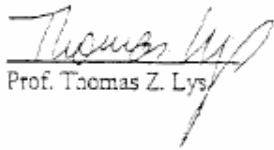
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