The following is a translation of the "Technion Undergraduate Studies Rules and Regulations" as they appear in the 2007/08 Study Catalog (pages 26-34), with the exception of Appendices A, B and C. Although effort was made to adhere to the original text, in case of a discrepancy between the original Hebrew version and the translated version, the Hebrew version shall prevail.

# **Undergraduate Studies**

### **Technion Senate**

The Technion Senate is the authority that determines all academic matters of the Institute regarding the constitution, statutes, academic rules and regulations, including the curricula, degrees and rules and regulations by which the studies are administered.

# **Undergraduate Studies**

The Dean of Undergraduate Studies is elected by the Senate from among the full professors with tenure and is entrusted by the Senate with the responsibility for undergraduate studies. The Secretary of Undergraduate Studies, Ms Edna Adler, administers the Undergraduate Studies Secretariat located on the 4<sup>th</sup> floor of the Ullmann Teaching Center (Tel.: 8292018), which includes the following units: Student Unit headed by Ms Orit Vekstein (Tel.: 8292732, 8292898), Teaching Unit headed by Ms Yafa Benvenisti (Tel.:8292530/1), and Secretary of the Disciplinary Court, Ms Ada Sales.

# **Admissions, Study and Degree Tracks**

The Technion offers undergraduate studies leading to a BSc or BA degree, and graduate studies leading to MSc and PhD degrees. This publication lists all undergraduate study tracks. A separate catalog details graduate study programs. Students applying to a specific study track become affiliated with a particular academic unit. Each academic unit offers at least one degree-oriented study track. A table in the catalog presents all of the tracks with their affiliated academic units. The table also details all possible study tracks with the number of years of study required and the degrees conferred upon a successful completion of the study tracks.

Most study tracks require four years of study and confer a Bachelor of Science (BSc) degree in a specific field. There are also three-year tracks leading to a Bachelor of Science (BSc) or Bachelor of Arts (BA) degree. The exceptions are Architecture, requiring five years, and Medicine, requiring six years (after three years a BSc in Medical Sciences is awarded; after the sixth year and one year of internship, an MD is conferred).

#### **General Studies**

Students can also apply directly to a General Studies program. After completing one year with sufficiently high grades, they may transfer to one of the regular study tracks. For details, see the Applicant's Information Booklet.

# **Conditions for Admission to Undergraduate Studies**

The Dean of Undergraduate Studies is responsible for admission to the Technion. The terms of acceptance and instructions for applying to the undergraduate study programs are given in the Applicant's Information Booklet distributed by the Technion's Registration and Admissions Center (Ullmann Teaching Center, 4<sup>th</sup> floor, Tel.: 8293306). Acceptance information follows.

## **Applicants without Previous University-Level Studies**

Applicants with Israeli matriculation certificates will be evaluated on the basis of their matriculation grades and psychometric examination marks, and in required instances, also on their placement examination results.

Applicants with non-Israeli matriculation certificates are accepted on the basis of Technion examination grades in mathematics, physics, Hebrew and English, and their psychometric examination marks. All applicants to the Faculty of Architecture and Town Planning are required to take architecture placement examinations. All applicants to the Faculty of Medicine will also be required to undergo additional testing.

# **Applicants with Previous University-Level Studies**

Students whose studies at the Technion were voluntarily or involuntarily terminated are eligible for re-acceptance on the basis of their initial terms of acceptance and their past achievements in the Technion. The academic unit to which they are applying presents its recommendations to the Dean of Undergraduate Studies. If the applicant is accepted, the academic unit will decide whether to impose supplementary study requirements based on changes in the study program and considering the number of years since suspension of studies. In addition, the head of the academic unit may recommend to the Dean of Undergraduate Studies that the student repeat certain courses. (Generally, this is done for courses in which the grade was less than 65.) Applicants who studied or are presently studying in other institutes of higher education are required to provide the Registration and Admissions Center with complete information regarding their studies, including course syllabi, grades and all relevant academic decisions. Acceptance to the Technion will be based on these past achievements and on psychometric examination results. The academic unit will recommend to the Dean of Undergraduate Studies regarding acceptance of the applicant. Once accepted. these applicants may apply for credit for courses successfully completed that are relevant to their proposed study program. The unit will recommend to the Dean of Undergraduate Studies whether to grant credit. Frequently, receiving credit will be contingent on the student achieving appropriate grades during the course of study. No academic credits (either a grade or deferment) will be given for courses studied during the period in which the student was expelled from the Technion on disciplinary grounds.

# **Course of Study**

The following is a review of the Undergraduate Studies Program.

## **Commencement of Study**

Candidates must commence studying in the semester immediately following their acceptance. Only the Dean of Undergraduate Studies is authorized to permit candidates, in exceptional circumstances, to postpone commencement of their studies by one semester. Candidates accepted to the winter semester may begin studying in the preceding summer semester.

#### **Semesters**

The Technion has two regular semesters: winter and spring. Each semester is approximately 14 weeks long, excluding holidays and vacations. There is also a non-obligatory, seven-week summer semester during which a limited number of courses are given. Students may use this semester to fill in gaps or accelerate their study program. Since the summer semester is short, each course has double the weekly hours of instruction of the regular semesters. Students begin studying in either the winter or spring semester, except in those academic units that conduct registration only once a year (see the Applicant's Information Booklet).

### **Semester Courses**

The basic instruction unit is a single semester course. Students who complete the course are tested, graded, and, if they pass, are given course credits. Failure in a course means that no credit is given.

Before registering for a course, all prerequisites must be completed. Students taking a comprehensive or an incorporated course lose the credits of the prior course.

### **Placement Examinations**

Prior to studying at the Technion, students take placement examinations in English (as part of their psychometric examination). Students who do not have Israeli matriculation certificates must also take the Hebrew placement examination. Some students may also have to take the physics placement examination.

#### **English Placement**

English placement examinations are compulsory for all students accepted to the Technion. The English part of the psychometric examination, or the "Amir" examination, determines the level in which the student will be placed. There is a minimum level of English beneath which an applicant cannot be accepted to the Technion.

Students will be classified at one of the following levels: Scientific English 1, Scientific English 2, Technical English, or exemption.

# **Physics Placement**

The physics placement examination has two sections: mechanics and Students at the Technion must pass both sections of this examination. Each is a prerequisite incumbent on all students that must be met prior to their registration for regular physics courses, with the exception of students in the following programs: architecture, landscape architecture. economics, biology, education in technology and science (in the biology, mathematics teaching and computer science teaching programs), medical laboratory sciences, and general studies. Students who, as part of their Israeli matriculation, took four physics units and had grades of at least 70 are also exempt, as are students who successfully finished a physics program at another university either in Israel or abroad, and students who studied physics in foreign high schools and whose application for exemption has been authorized by the Committee for Certificate Authenticity. An exemption from the mechanics section will be given to students who have taken, as part of the Technology for Technicians Program, the mechanics or agricultural mechanics track and passed the external examinations in technical mechanics with a grade of at least 70. An exemption from the theory of electricity section will be given to students who took, as part of the Technology for Technicians Program, either the electronics or instrumentation and control track, and passed the external examinations in the primary course with a grade of at least 70. An exemption from both sections is given to students who have taken the courses Basic Physics A (20113) and Basic Physics B (20114), or Basic Physics (20125) of the Open University and received a grade of at least 70. An exemption from the mechanics section will be given to students who have taken the course Basic Physics A (20113) of the Open University and received a grade of at least 70. Note: for exemption from the electricity section, it does not suffice to have taken the course Basic Physics B (20114).

#### **Hebrew Placement**

Technion students who do not have Israeli matriculation certificates must take a Hebrew placement examination. There is a minimum level of Hebrew beneath which one cannot be accepted to the Technion. The placement levels are: Hebrew 2, Advanced Hebrew 2, or exemption, which does not confer academic credit. In addition, each student who must take the Hebrew placement examination must also take the course Selected Topics in the History of Israel (324055).

# **Degree-Oriented Study Programs**

Each study track is comprised of required courses, recommended elective courses and free elective courses available in any field the student selects. The description also lists the number of credits required for its completion.

This catalog provides detailed descriptions of the study tracks with recommended courses for each semester. The recommendations assume that students will complete approximately 20 credits per semester. Students may advance at a different pace than the recommendation; they should proceed at the pace best suited to them, their talents and situations. Prior to each semester, students, preferably with the assistance of an adviser, select and register for their individual semester study program. After the semester starts, students may make changes in their program until the deadline set for making changes during that semester.

All students are advised to complete the Technical English course as soon as possible to enable them to read professional literature in English. Students are also recommended to select humanities courses as part of their free elective credit requirements in order to broaden their perspective. Students should verify that their personal program meets the degree requirements by consulting their academic unit's undergraduate administration secretariat. They will verify that at the end of their studies, students will have met all their academic requirements.

Students excelling in their studies will be placed on the "Dean's List" or the "President's List" of Outstanding Students; the latter receives a cash award. Each academic unit will make appropriate recommendations to the Dean of Undergraduate Studies regarding students failing in their studies. The Dean of Undergraduate Studies makes the final decision regarding termination of studies.

# **Degree Conferment**

After a student has successfully met all his degree requirements, the academic unit will recommend to the Dean of Undergraduate Studies that the student be awarded a degree. Students receive confirmation of completion of studies, and commencement ceremonies are held once a year in June. Students who have completed their studies with distinction will have this noted on their degree certificates (*cum laude* or *summa cum laude*).

# **Undergraduate Studies Rules and Regulations**

#### Introduction

Undergraduate studies at the Technion are administered by the Dean of Undergraduate Studies in consultation with the academic units and in accordance with the decisions of the Academic Assembly and the Senate.

# 1. Regulations Regarding Teaching

# 1.1. Study Programs

#### 1.1.1 Semesters

Studies take place during winter, spring and summer semesters. The winter and spring semesters will each be approximately 14 weeks long. The summer semester will be about seven weeks long, and generally only a limited number of courses will be offered. An examination period will follow at the end of each semester.

# 1.1.2 Academic Unit Study Programs

Study programs toward a first degree (undergraduate studies) are determined by the academic unit and must be approved by the Senate. The study program leading to the Bachelor of Science degree is based on four years of study and requires 155-165 credits. The Architecture program leading to the Bachelor of Architecture degree is based on five years of study and requires 195-205 credits. Certain other divisions (mathematics, physics, geodetics, computer science, economics and management) have three-year study programs that require 116-124 credits and also lead to a Bachelor of Science degree. Chemistry and Biology only offer three-year study programs.

In addition to detailing the number of credits required for a degree, the study program also includes the number of credits of basic courses, compulsory courses and divisional elective courses each student must complete. The remaining credits required for a degree (a minimum of 10 credits in the four-year program, eight credits in the three-year program) consist of free electives that may be chosen from among all the courses offered by the Technion, including courses in the Department of Humanities and Arts.

The procedure for an academic unit to submit a study program appears in Appendix A.

### 1.1.3 Tracks and Options

An academic unit may be responsible for a number of study programs. When a unit's study program leads to a separate degree, it is termed a "track." Specialized studies within study programs are termed "options."

The procedure for the establishment of new tracks and options appears in Appendix B.

#### 1.1.4 Basic Courses

The basic subjects are mathematics, physics, chemistry, biology, English and computer science. Syllabi for the basic courses are determined by the academic units responsible for teaching them (Mathematics, Physics, Chemistry, Biology, Humanities and Arts, and Computer Science, respectively). These courses are offered to all units at the Technion, as detailed in Appendix C.

# 1.1.5 Compulsory Courses

These are courses that, in addition to the basic courses, must be completed for graduation. They are determined by each academic unit's council.

#### 1.1.6 Unit Elective Courses

Elective courses are chosen from lists prepared by the academic units. Students must choose courses from their unit's list in order to fulfill their credit requirements. The number of such courses should not constitute fewer than 30 credits for a four-year program and 20 credits for a three-year program.

#### 1.1.7 Free Elective Courses

These are courses from all the undergraduate courses offered at the Technion, including the Department of Humanities and Arts. Each unit's study program must include a minimum of 10 free elective course credits (eight credits for a three-year program).

### 1.1.8 Physical Education

Students are required to take at least two credits of physical education courses. Students may meet this requirement any time during their study program, but may not take more than one physical education credit per semester. Students who have medical authorization stating that they are unable to participate in physical education courses will be exempt from this requirement and will not receive any credits.

# 1.1.9 Acceptable Student Study Program

A student's study program that has been approved by the Senate is deemed acceptable if the following conditions are met: the program appears in the undergraduate catalog for the year in which the student began studying; the program appears in a subsequent undergraduate catalog; or the program is created from a combination of catalogs, has been recommended by the academic unit, and is approved by the Dean of Undergraduate Studies.

# 1.2 Course Syllabi

# 1.2.1 Syllabi

Syllabi for every course are determined by the academic unit councils and must be approved by the Senate. Each academic unit must appoint a teaching committee responsible for updating syllabi and textbook lists. Syllabi of service courses (courses given by one unit for students from another unit) must be reviewed in conjunction with delegates of the unit receiving the course. The council of the academic unit providing the service is responsible for its execution. Syllabi must state the course aims, list the topics to be covered, and specify the main topics to be taught in the course. Syllabi will be defined according to chapters in a textbook or books, and supplementary material that may be distributed to students. A copy of the official course syllabus will be distributed to each student enrolled in the course. Every academic unit must review and update its study program, when necessary, and at least once every three years.

### 1.2.2 Course Credits

The credit value of a course is determined as follows: one lecture hour = 1 credit; one tutorial hour = 1/2 credit; one laboratory hour = 1/3 credit (aside from projects). Credits must be rounded to the nearest 1/2 credit. More credits can be added for more hours of work, but credit value cannot be less than the above-mentioned value. As of now, courses in the Department of Humanities and Arts of two lecture hours are worth 1.5 credits. The principle is that 50 to 60 hours of work per week is equal to 20 credits.

#### 1.2.3 Relations between Courses

### a. Prerequisite Course

A prerequisite course is a course that must be studied and passed prior to the course in question. Registration in the course will not be invalidated if the prerequisite is not fulfilled. However, appropriate notice will be sent to the course instructor who has the right (despite the adviser's approval) not to allow the student to study the course. Advisers are requested to carefully consider making such recommendations, and limit them to good students.

# b. Linked Courses

Linked courses are courses taken in tandem. Regulations regarding exceptions are the same as those for prerequisite courses (above).

#### c. Courses without Additional Credit

Courses containing a large degree of essentially similar material are defined as courses without additional credit. No additional credits will be awarded to a student who has registered for two such courses. A student cannot register simultaneously for two courses defined as having no additional credit. If a student successfully completes a certain course and later registers for a course that does not allow additional credit, his grade and credits in the first course will be cancelled, and his grade and credits will be determined by that

of the second course. The number of credits obtained upon successfully completing a course will be according to the last course studied.

Whenever material in a course without additional credit contains all the material in a second course, in addition to other material, the first course will be referred to as "containing" and the second as "contained."

# 1.3 Supplementary Courses

#### 1.3.1 Standard Level

Each academic unit, with the authorization of the Senate, will determine the necessary academic level at which core course study can begin (hereinafter called the "standard level"). The recommended study program is structured based on this standard level. In addition, the unit will determine whether meeting the standard level is the sole condition for a student's acceptance into the program, and whether candidates who do not meet the standard level can be accepted on condition that they complete the material lacking via supplementary courses. Supplementary courses become prerequisites for relevant courses in the study program. Hebrew studies are not considered supplementary courses. Students who must take supplementary courses are advised to reduce their study program.

## 1.3.2 Physics Placement Examinations (Mechanics and Electricity)

All students must successfully complete section A (mechanics) of the physics placement examination before the start of their third semester of studies, and section B (electricity) of the physics placement examination before the start of their fourth semester. In addition, each academic unit is permitted, with the approval of the Dean of Undergraduate Studies, to decide upon an earlier date by which time the student must complete both sections of the physics placement examination. Students who do not meet this requirement will be deemed as students whose academic status is "unsatisfactory" (see section 3.1.5, as follows).

The physics placement examination is compulsory for all students accepted to the Technion (except architecture and town planning, economics and biology students), with the following exceptions:

- **a.** Students who, as part of their Israeli matriculation, completed four physics units with a grade of at least 70.
- b. Any student who studied in the mechanics or agricultural mechanics track of the Technology for Technicians program and passed external examinations in technical mechanics with a grade of at least 70 will be exempt from section A of the placement examination (mechanics). Any student who studied in either the electronics or instrumentation and control study track of the Technology for Technicians program and passed the external examinations in the track's primary course with a grade of at least 70 will be exempt from section B of the placement examination (electricity).

- **c.** Any student who studied and passed physics in an Israeli or foreign university according to the criteria of that university will be fully exempt from the physics placement examination.
- **d.** New immigrants and any student who completed high school abroad may appeal to the Committee for Certificate Authenticity for an exemption. The Committee will make its recommendation to the Faculty of Physics, which will issue an exemption on the basis of the recommendation.

In order to enroll in the Physics 1, Physics 1M or Physics 1R courses, students must pass the first section of the physics placement examination or be exempt from it. In order to enroll in the Physics 2, Physics 2MM or Physics 2R courses, students must pass the second section of the physics placement examination or be exempt from it.

# 1.3.3 English Studies

Placement examinations in English are compulsory for all students accepted to the Technion. The English part of the psychometric examination, or the "Amir" examination, determines the level at which the student will be placed. There is a minimum level of English beneath which an applicant cannot be accepted to the Technion. Students will be classified at one of the following levels: Scientific English 1, Scientific English 2, Technical English, or exemption. An exemption is given to those students with the appropriate mark in the English part of the psychometric examination, the "Amir" examination, or in previous studies. The Scientific English 1 and Scientific English 2 courses will be given within the framework of the Center for Pre-University Education ("Mechina"). The Technical English course will be given by the Department of Humanities and Arts. The Scientific English 1 course is a prerequisite for the Scientific English 2 course, and the Scientific English 2 course is a prerequisite for the Technical English course. The Scientific English 1 and Scientific English 2 courses confer no credits. The Technical English course confers three credits (with a grade). Exemption from the English courses confers three credits (without a grade).

A student will be considered as having completed his English requirements if he has successfully completed the Technical English course or received an exemption. A student who does not complete his English requirements before the end of his fourth semester of studies will be deemed as a student whose academic status is "unsatisfactory" (see section 3.1.5(b)(5), as follows).

### 1.3.4 Hebrew Studies

Students accepted to the Technion who do not have an Israeli matriculation certificate or who did not take the psychometric examination in Hebrew must take a Hebrew placement examination. There is a minimum level of Hebrew beneath which one cannot be accepted to the Technion.

The placement levels are Hebrew 2, Advanced Hebrew 2, or exemption from Hebrew, which does not confer academic credit. The Hebrew 2 and Advanced Hebrew 2 courses will be given within the framework of the Center for Pre-University Education ("Mechina"). A pass grade in the Hebrew 2 or Advanced Hebrew 2 courses confer 3 credit units without a grade (P+). These credits are considered as part of the free elective course credits. A student who does not complete his Hebrew requirements before the end of his second semester of studies will be deemed as a student whose academic status is "unsatisfactory" (see section 3.1.5(b)(6), as follows).

Each student who must take the Hebrew placement examination, as defined above, must also take the course Selected Topics in the History of Israel (324055). The credits for this course are considered part of the free elective course credits. An exemption from this requirement (which confers no academic credits) will be given on the basis of a suitable academic background.

# 1.3.5 Grades in Supplementary Courses

No credits are given for supplementary courses. Grades are pass/fail. Supplementary courses are prerequisites for the relevant courses.

# 2. Regulations Regarding Instruction

#### 2.1 Instruction

## 2.1.1 Course Teaching Method

Instructors may choose to lecture on material from the syllabus, from material distributed to students during lectures, or from any other material they consider suitable. However, the examination will be based on material from the official course syllabus, including those sections not lectured on by the instructors.

# 2.1.2 Supervised Reading

If there is no regular instruction in a particular course during a semester, and if the course can be studied through supervised reading, then supervised reading may be given after the unit head approves it. Supervised reading means holding meetings at fixed times (at least once a week) with the instructor and handing in assignments according to requirements. The course syllabus will be defined in section 1.2.1.

### 2.1.3 Instructor Responsible for the Course

For every course taught by more than one instructor, the unit head will appoint one instructor who will be responsible for the course, as well as the course's examinations and grades.

#### 2.2 Examinations

### 2.2.1 Evaluation of Achievement

It is the duty of the instructors to evaluate the level of the student's studies. Examinations are one method of doing so. However, instructors are not obligated to give an examination at the end of the course.

### 2.2.2 Uniform Evaluation

If the course is taught concurrently by a number of instructors, the instructor responsible for the course will ensure that the examination is uniform and that the method of evaluation is identical, and will approve the grades given by the instructors who taught the course and by those who checked the examinations.

#### 2.2.3 Examination Periods

A first three-week examination period takes place at the end of each semester. There is also a second examination period. During the examination periods, no examinations will be conducted in courses whose credit value does not exceed 1.5. Grades for these courses will be based on examinations and/or quizzes given during the semester. Dates of final semester examinations cannot be advanced, especially not to the last week of the semester. In courses where course work constitutes the major part of the grade, and quizzes are held throughout the semester, a final quiz may be given during the last week of the semester, but only on condition that it be given during regular instruction hours in a format similar to that of previous quizzes.

### 2.2.4 Examination Schedule

The Undergraduate Studies Secretariat will determine and publish the examination schedule, which includes times and rooms, seating arrangements during examinations, and the student distribution between rooms. Each student will receive a personal examination card that lists the examinations for the courses in which the student is enrolled.

#### 2.2.5 Quizzes

The number of in-class quizzes per semester is limited as follows: no more than three quizzes may be given in courses in which there is no final examination; no more than one valid quiz in a course in which there is a final examination.

### 2.3 Credits and Grades

#### 2.3.1 Semester Courses

The undergraduate study program is comprised of semester courses. A student (except those in the Faculty of Medicine) is entitled to register for more than 29 credits per semester only with the recommendation of the head of his academic unit and with the approval of the Dean of Undergraduate Studies. A student will receive a numeric grade at the end of the semester reflecting his

achievements in the courses in which he was enrolled. A grade of at least 55 is a "pass" and awards the student course credits. A grade of less than 55 is a "fail" and the student does not receive any credit. In both cases, the grade is included in the calculation of the cumulative weighted grade average. In a small number of courses, the grade is binary, i.e., pass/fail. A pass grade awards credits and a fail does not. A binary grade does not affect the cumulative weighted grade average. A student who registered for a course (numeric or binary) and did not fulfill the course requirements (e.g., failed to take a final examination or submit an assigned project) may not receive a grade, at the discretion of the instructor. Such a course will be counted as a failure in the "course success rate" (see section 3.1.5, as follows). Eight weeks after the beginning of the next semester, a grade of "incomplete" will be recorded for that course. In projects and similar courses in which assignments continue after the semester ends, the Dean of Undergraduate Studies is authorized to defer recording the "incomplete" grade until the end of the subsequent semester. A student who is not registered in a course cannot receive a grade in that course.

# 2.3.2 Course Exemption

A student may obtain exemption from studying courses by virtue of proven knowledge, such as previous studies (not including high school studies) or an examination. The exemption can be with credit (P+) or without credit (P-) according to a recommendation by the undergraduate studies coordinator in the student's academic unit.

An exemption will not be granted for courses studied at any institute during the period in which the student was suspended from the Technion on disciplinary grounds.

## 2.3.3 Reserves Duty

The Technion Senate is cognizant of the fact that a student's learning is harmed by reserves duty during a semester and/or examination period. The Senate calls upon all heads of academic units and lecturers to ease the burden of those serving in the reserves, and first and foremost, those serving for long periods during a semester or examination period. Academic units are requested to make efforts to permit these students to complete course requirements in the same semester in which they are registered. The Senate appeals to all official bodies dealing with this subject to do all they can in order to minimize the damage. The aim of the Senate's decisions is to contribute its share in minimizing the harm caused to students during their studies while fulfilling their reserves duty.

A student who finds himself harmed (or assumes he will be harmed) as a result of lengthy reserves duty during a semester or examination period will approach his course instructor who will try to find a way of minimizing the damage to the student's studies, to his examination grade, and to the length of his studies. A solution complying with the course demands (laboratory, tutorials, examinations, etc.) can include examinations, exercises, extra work, etc. In any case, the course instructor must find a solution for the student whose studies were seriously disrupted if at least one of the following conditions holds:

- **a.** The student served in reserves duty during one of the regularly scheduled final examinations, or any other examination, and as a consequence thereof could not attend the examination.
- **b.** The student did not attend a regularly scheduled examination, or any other examination, because of reserves duty immediately prior to the examination date.
- **c.** The student served in reserves duty for several weeks during the semester.

A student can appeal the decision of the course instructor to the head of the academic unit responsible for the course. The decision of the academic unit head is binding.

A student who still considers himself harmed can address the Dean of Students who will make his recommendation to the Dean of Undergraduate Studies. The decision of the Dean of Undergraduate Studies is final and binding.

Immediately at the start of the process, the student can submit a request to the teaching secretariat of his academic unit that because of lengthy reserves duty:

- **a.** All partial grades be transferred to the next semester.
- **b.** The student not be obligated regarding prerequisites for the courses to which the student was registered and did not complete. These requests should be honored by the academic unit.

A student who, due to reserves duty, was unable to meet all the course requirements during the semester in which he was registered may cancel his registration in the course. Alternatively, the grade "incomplete (M)" can be entered into the student's transcript. A course having the grade "incomplete (M)" will not be included in the "course success rate" calculation. Should the student meet the course requirements by the end of the subsequent semester, the grade will be entered into the transcript for the semester during which the course requirements were met.

#### 2.3.4 Publication of Grades

The course instructor must submit the grades for the enrolled students within seven days of the examination date. The same is true for examinations held in the second examination period. The instructor will submit the grades to the head of the academic unit responsible for the course, and if the latter has no reservations, the grades will be transmitted to the Undergraduate Studies Secretariat. The grades will simultaneously be posted on a notice board without listing the students' names. Students can also receive a printout of their grades.

# 2.3.5 Appeal of End of Semester Examination Grades

An appeal regarding an examination grade may generally be made within two weeks of publication of the semester grade. The student will submit his appeal, in writing or verbally, as per the instructor's request. In order to make an appeal, the student will be permitted to obtain a copy of his examination booklet. The answer to the appeal will be given as soon as possible.

# 3. Regulations Pertaining to Students

# 3.1 Undergraduate Course of Study

## 3.1.1 Counseling

It is recommended that each student receive academic counseling from the student's academic unit in choosing his study program and on any academic matter.

# 3.1.2 Registration for a Study Program

A student will register for his study program in the winter and spring semesters prior to the beginning of each semester. The student may make changes in his study program within the first two weeks of the semester in courses that are not labs or projects. After the registration and change period (that is, from the beginning of the semester for labs and projects, and the beginning of the third week for other courses), changes may be made only according to guidelines published by the academic unit responsible for the course and with the approval of the Dean of Undergraduate Studies.

Starting from the fourth week of the semester or three weeks after the completion of the second examination period of the previous semester (the later of the two), changes will not be permitted, except in extraordinary cases and with the approval of the Dean of Undergraduate Studies.

If a new student does not register for any course in the first semester of his studies, his place at the Technion will not be reserved. In exceptional cases, the Dean of Undergraduate Studies can approve deferment of commencement of a student's studies.

### 3.1.3 Examinations and Repetition of Studies

- **a.** A student is permitted to attend examinations in the first and/or second examination period.
- b. A student may register again for any course that he has already studied to improve his grade in that course during the two consecutive semesters following the semester in which he first received a "pass" grade in the course.
- c. In special cases, additional time will be approved for improving the grade, subject to a recommendation from the academic unit and approval by the Dean of Undergraduate Studies. Special consideration will be given to problems related to first-year courses and courses given only once a year.
- **d.** A student may reregister for any compulsory course in his study program if the last grade he received in that course was a "fail."
- e. A student may study advanced projects or labs (such as "Overall Planning" in the Faculty of Architecture and Town Planning) twice at most. The list of courses to which this section applies will be updated periodically by the Dean of Undergraduate Studies.
- **f.** In any event, the last grade is the binding grade.

#### 3.1.4 Academic Distinction

- a. Study tracks at the Technion will be divided periodically by the Dean of Undergraduate Studies in consultation with the heads of the academic units into groups that will be referred to in this section as "study channels." The list of the study channels will be published on the Undergraduate Studies website.
- b. Prior to the "President's List" Ceremony held each semester, the Dean of Undergraduate Studies will determine and publish numerical thresholds for inclusion on the "President's List" and the "Dean's List" in each study channel. These thresholds will be based on achievements in the previous semester, and be determined in such a way that in each study channel approximately 3% of the students will be included on the "President's List" and approximately 15% on the "Dean's List" (including those on the "President's List"), and on condition that the numerical thresholds are not below 91 (for the "President's List") and 84 (for the "Dean's List").
- c. The criterion for inclusion on the "President's List" will be the accumulation of at least 18 credits in the semester program with an average grade of 91 or higher as long as it is not lower than the threshold defined in section b above. The criterion for inclusion on the "Deans' List" will be the accumulation of at least 18 credits in the semester program with an average grade of 84 or higher as long as it is not lower than the threshold defined in section b above.

# 3.1.5 Students with an Unsatisfactory Academic Status

- **a.** A student's academic status will be deemed "unsatisfactory" if at least one of the following conditions holds:
  - 1. The cumulative weighted grade average is less than 65.
  - The "course success rate" is less than 66%.
  - The student's status was unsatisfactory in the previous semester, and he has not successfully completed the program of studies determined for him.
  - 4. The student did not complete his physics placement exams within the necessary time period (see section 1.3.2).
  - 5. The student did not complete his English requirements by the end of his fourth semester of studies (see section 1.3.3).
  - 6. The student did not complete his Hebrew studies by the end of his second semester of studies (see section 1.3.4).
  - 7. The student has been studying for two or more years beyond the nominal period for obtaining his degree, i.e., from semester 13 (in a four-year degree program), from semester 11 (in a three-year degree program), etc.
  - 8. In the first two semesters of his studies, the student has accumulated less than 27 credits of the recommended courses in the study track in which he is registered. For the purpose of this section:

- the Scientific English 1 and Scientific English 2 courses will be recognized as the equivalent of two academic credits, and completing the physics placement examination will be recognized as the equivalent of four academic credits. A student who is exempt from studying Technical English (or if the course does not appear in the first year of his study program) is obligated to take 24 such academic credits.
- A student who has to study Hebrew must accumulate 27 credits within the four first semesters of his studies.
- This section does not apply to students whose admittance was based upon previous university studies.
- **b.** The progress of all students will be reviewed at the end of the first and second semesters of studies, and in later years, once a year at the end of the summer semester, and as required in other semesters by the regulations.
- c. A student whose academic status is unsatisfactory will be invited to his academic unit for counseling and guidance. The academic unit will hold a discussion, and according to the severity of the student's situation, will recommend conditions to the Dean of Undergraduate Studies for the continuation of his studies (such as, the determination of a mandatory study program for one semester or one year, or other requirements), or that his studies be terminated. During these deliberations, special circumstances such as reserves duty will be taken into consideration.
- **d.** A student whose academic status was unsatisfactory when his studies were terminated or when he terminated his studies may submit a request to return to his studies two years after the date of termination of his studies (see section 3.1.6).

### 3.1.6 Returning to Studies

A student whose academic status is satisfactory and who terminated his studies at his own initiative may submit a request to resume his studies at any time. A student whose academic status was unsatisfactory when his studies were terminated or when he terminated his studies may submit a request to return to his studies two years after the date of termination of his studies. For students who completed at least two semesters at the Technion, their request to resume studies will be discussed in the academic unit in which they wish to study. The academic unit will determine a required study program for obtaining a degree, and may add specific requirements such as repeating courses in which the grade was below 65, the scope of completion of studies, and the duration of the studies. For a student returning to studies after an extended period (more than three years), a completion program of 10-25 credits will be determined. The recommendation of the academic unit will be submitted to the Dean of Undergraduate Studies, whose decision will be final.

# 3.1.7 Changing Study Programs

Students may transfer from one study track to another according to the following rules: students may transfer until the end of the second semester of their studies if their admission data meet the new study track's admission threshold. This transfer is dependent upon the students' satisfactory academic status upon completion of their obligations in the semester in which the application was submitted (cumulative weighted grade average of at least 65, course success rate of at least 66%).

Students who have completed at least two semesters at the Technion and have studied the set of fixed courses (as approved by the Senate on May 23, 1993) and whose achievements have placed them in the upper quarter of a parallel group of students studying in the study track to which the students wish to transfer, will be accepted to the desired study track.

Applications by students who have completed at least two semesters at the Technion and whose achievements have not reached the upper quarter or who have not studied the appropriate courses, as well as applications by students who have not yet completed two semesters at the Technion and whose academic status is unsatisfactory, will be forwarded to the academic units. The unit will recommend to the Dean for Undergraduate Studies regarding their admission based on their academic achievements at the Technion and their initial admission data.

These rules do not apply to transfers to the Faculties of Medicine or Architecture and Town Planning. Specific rules will be published separately for these units.

# 3.1.8 Students with Previous University-Level Studies

Students with previous university-level studies, i.e., who have studied in another institute of higher education, will be admitted to the Technion upon recommendation by the academic unit and approval by the Dean of Undergraduate Studies. The academic unit will recommend to the student a study program of at least 40 credits, with a set timeframe for completion of studies. The Dean of Undergraduate Studies must approve the program.

# 3.2 Completion of Undergraduate Studies

### 3.2.1 Eligibility for a Degree

A student who has completed an approved study program and has a cumulative weighted grade average of 65 or higher is eligible to receive a degree.

## 3.2.2 Additional Degree

A student who is studying at the Technion and who wishes to study for an additional degree may apply to the academic unit of the additional degree for permission to register. Applications will be considered for students who have accumulated at least 72 credits. The unit will recommend to the Dean of Undergraduate Studies regarding admission on the basis of academic achievement. The second unit will present a supplementary study program that must contain at least 36 academic credits for a second four-year degree, and at least 22 academic credits for a second three-year degree. The Dean of Undergraduate Studies must approve the supplementary program. Students fulfilling the academic demands of the additional degree will be awarded the degree only if their cumulative weighted grade average in the supplementary program is 65 or higher and after they have completed their studies in the first unit.

# 3.2.3 Minimum Study at the Technion

Students who have received Technion credit for studies at another academic institute must complete a supplementary study program of at least 40 academic credits in order to be awarded a degree of the Technion. The supplementary study program will be determined by the unit admitting the student.

## 3.2.4 Degree Distinction

Study tracks at the Technion will be divided periodically by the Dean of Undergraduate Studies, in consultation with the heads of the academic units, into groups that will be referred to in this section as "study channels." The list of study channels will be published on the Undergraduate Studies website.

After the annual graduation ceremony, the Dean of Undergraduate Studies will determine and publish numerical thresholds for *summa cum laude* and *cum laude* honors for each study channel during the year up to the subsequent graduation ceremony. These thresholds will be determined based on achievements in this study channel in previous years: in each study channel, approximately 3% of the students will graduate *summa cum laude* and approximately 15% *cum laude* (including *summa cum laude*). The right to this honor will be determined based on the student's formal completion of his studies.

The criterion for graduating *summa cum laude* will be an average grade of 91 or higher, provided it is above the threshold defined for graduating *summa cum laude* in the student's study channel. The criterion for graduating *cum laude* will be an average grade of 84 or higher, provided it is above the threshold defined for graduating *cum laude* in the student's study channel (and the student is not entitled to graduate *summa cum laude*). This regulation will be first applied in the graduation ceremony of June 2008.

# 3.2.5 Completion Dates

The date of the student's completion of studies is determined by the date when his last grade was received, and will be the first day of the following month. The confirmation of completion is given by the Dean of Undergraduate Studies.

# 3.2.6 Certificate of Completion

When all the degree requirements have been met, a student will classify all his courses into those courses required for the degree and those courses that exceed this requirement. The certificate of completion will include all the courses listed as degree courses in ascending order (by course number), as well as the list of all courses not required. If a student repeated a course, only the last time the course was completed will appear on the certificate of completion. (A course that was not completed will not appear on the list. However, if the student had a prior grade, this grade is valid and will appear on the list.)

# **Appendix D: Procedure for Setting Examinations and Grading**

### 1. General

- **a.** One of the instructors' tasks is to evaluate the student's academic level. Examinations are one means of accomplishing this. However, instructors are not obligated to give examinations at the end of the semester. When an examination is given, it constitutes an integral part of the course, and, as such, setting the examination is the responsibility of the course instructor.
- **b.** When an instructor decides to give an examination, it is advisable that the examination results be only a reasonable part of the student's grade, and that students' other academic achievements during the semester, such as tutorials, general evaluation, etc., also be taken into account. It is important to minimize, to the greatest extent possible, the pressure placed on students by examinations. An oral examination is permitted (this type of examination is certainly possible for courses with less than 30 students), or where suitable, an instructor may combine an oral examination with questions students answer and then explain verbally. Other recommended examination methods are take-home examinations, which students submit directly to the instructor and at the same time discuss their results, or open-book examinations (with appropriate questions), where the emphasis is more on understanding the concepts than on memorization.

- **c.** For every course given by more than one instructor, the head of the academic unit will appoint one instructor who is responsible for the course, as well as for the course examination and grades. If there are a number of instructors teaching the course concurrently, the instructor-in-charge must ensure that the examination is uniform and that the marking system is identical. The instructor-in-charge is the one who approves the grades given by the course instructors and the examination markers.
- **d.** In courses given by more than one instructor to the same students, there will be only one examination in which all of the instructors will present their questions jointly.

# 2. Preparing the Written Examination

According to the schedule determined by the Undergraduate Studies Secretariat, an instructor who has decided to give a written examination must prepare the examination. Instructors are advised to consult colleagues who are familiar with the course to ensure that the examination covers the material outlined in the syllabus, that there are no mistakes in the questions, that the questions are formulated clearly and that the average student will have enough time to complete the examination. The instructor must see that the examination is typed and that sufficient copies are supplied, that the examination is kept secret and that it is brought to the exam room. If necessary, the instructor may ask for assistance from the Undergraduate Studies Secretariat in typing the material and making copies while maintaining confidentiality. In that case, a messenger from the Secretariat will bring the examination copies to the exam room.

## 3. Examination Schedule and Location

- **a.** The examination schedule and location will be designated by the Undergraduate Studies Secretariat after it receives the list of examinations from the unit head. The list will include the duration of the examination, the requested date for the examination, the number of students taking the examination and any other requirements.
- **b.** The Undergraduate Studies Secretariat will inform the heads of the academic units as to the number of examination monitors needed in each room.

## 4. Monitoring the Examinations

- a. As stated above, the course instructor or instructor-in-charge of the course is responsible for organizing the examination, including all that this entails (preparation, monitoring, checking, marking and submitting the marks to the Undergraduate Studies Secretariat on the designated date). Accordingly, the instructor responsible for the course will monitor the examination (or act as chief monitor, if there are several monitors), and will be present in the exam room (or will rotate among the rooms, if the examination is being held in more than one room) during the entire time the examination is being written. If necessary, the instructor can use as additional monitors other teachers or teaching assistants who have helped teach the course and its tutorials.
- **b.** When additional monitors are necessary, aside from course instructors and their assistants, the unit head will select other monitors from the list of teaching assistants and unit instructors in his unit.
- **c.** Adjunct instructors can monitor examinations only for courses they teach. The remainder of the unit's instructors, teaching assistants and supplementary instructors can also be monitors, as instructed to do so by the unit head.
- d. If for any special reason (e.g., a large number of courses given by adjuncts, a small number of academic staff and/or assistants, etc.), the unit head needs additional examination monitors, a request detailing the reasons should be submitted to the Vice President for Academic Affairs by a date specified by the latter. The Undergraduate Studies Secretariat will receive the authorized applications and will supply personnel hired specifically for this purpose.

# 5. Marking the Examinations and Submitting the Grades

The instructor is personally responsible for marking the examinations in accordance with the schedule set by the Undergraduate Studies Secretariat (if the instructor was not present during the examination, the examination papers are to be collected and transferred to the Undergraduate Studies Secretariat, which will see to it that the course instructor receives them). The instructor responsible for the course may obtain assistance from the assistant instructors in noting mistakes, but the instructor must give the final grade. If, for technical reasons this is impossible, then marking should be done by a senior instructor who is appointed by the unit head. After marking, the instructor must keep the examination papers for one year. After this period, the examination papers are to be destroyed. The course instructor is personally responsible for submitting the list of student grades for the course to the Undergraduate Studies Secretariat in accordance with the schedule set by the Dean of Undergraduate Studies.

#### 6. Course Grade

- a. The examination mark constitutes only part of the course grade. The final grade must reflect the degree to which the student successfully learned the course material, and it must be given by the instructor on the basis of the instructor's overall evaluation of the student's studies (including the opinion of junior instructors who may have more contact with the students, quizzes scores, tutorials, papers and the final examination). The instructor decides how much weight to give each of the various components. If the instructor decides to give quizzes during the semester, the students must be informed in advance. At the start of the semester, the instructor must inform the students about the basis for grade determination (i.e., homework, projects, quizzes, a final examination, etc., or a combination of these factors). However, the instructor may deviate from the abovementioned guidelines, changing the grade based on the instructor's personal impression of the student's progress.
- **b.** In each course, a grade of between 0 and 100 will be awarded, as determined by the instructor-in-charge. A grade of 70 is a reasonable achievement for an average student.
- c. Courses for which numeric grades cannot be determined (such as physical education, study trips to industry, etc.) are marked as "pass" or "fail." These marks are not included in the calculation of a student's cumulative weighted grade average.
- **d.** An instructor who wishes to change a grade should submit a detailed recommendation to the Dean of Undergraduate Studies for his approval.

#### 7. Posting Semester Grades

The instructor must present the grades to the head of the academic unit responsible for the course. If he has no reservations, the unit head will post the grades.