

Please note: This translation is for the convenience of our foreign students and staff. In case of inconsistencies the Hebrew version shall prevail.

Part B

Undergraduate Studies

Admission Tracks, Study Tracks, and Degree Tracks

Bachelor's Degree Admission Requirements at the Technion

Course of Studies

Undergraduate Degree Admission and Study Tracks

Undergraduate Studies Procedures and Regulations

Specializations at the Technion

Bachelor's Degree Admission Tracks and Study Tracks

Faculty/Department	Admission Track	Study Track	Years of Study	Degree Awarded		
Civil and Environmental Engineering	Civil Engineering	Civil Engineering	4	Bachelor of Science in Civil Engineering	B.Sc.	
		Civil Engineering – Structural	4	Bachelor of Science in Civil Engineering - Structural	B.Sc.	
		Civil Engineering – Transportation Engineering	4	Bachelor of Science in Civil Engineering – Transportation Engineering	B.Sc.	
		Civil Engineering – Water Engineering	4	Bachelor of Science in Civil Engineering – Water Engineering	B.Sc.	
		Civil Engineering – Management and Construction	4	Bachelor of Science in Civil Engineering – Management and Construction	B.Sc.	
	Mapping and Geo-information Engineering	Mapping and Geo-Information Engineering	4	Bachelor of Science in Mapping and Geo-Information Engineering	B.Sc.	
		Mapping and Geo-Information Engineering	3	Bachelor of Science in Mapping and Geo-Information Engineering	B.Sc.	
	Environmental Engineering	Environmental Engineering	4	Bachelor of Science in Environmental Engineering	B.Sc.	
Mechanical Engineering	Mechanical Engineering	Mechanical Engineering	4	Bachelor of Science in Mechanical Engineering	B.Sc.	
Electrical and Computer Engineering	Electrical Engineering	Electrical Engineering	4	Bachelor of Science in Electrical Engineering	B.Sc.	
		Computer Engineering	4	Bachelor of Science in Computer Engineering	B.Sc.	
		Computer and Software Engineering	4	Bachelor of Science in Computer and Software Engineering	B.Sc.	
	Electrical Engineering and Physics	Electrical Engineering and Physics	4	Bachelor of Science in Electrical Engineering and Physics	B.Sc.	
Chemical Engineering	Chemical Engineering	Chemical Engineering	4	Bachelor of Science in Chemical Engineering	B.Sc.	
	Chemical Engineering	Biochemical Engineering	4	Bachelor of Science in Biochemical Engineering	B.Sc.	
Biotechnology and Food Engineering	Biotechnology and Food Engineering	Biotechnology and Food Engineering	4	Bachelor of Science in Biotechnology and Food Engineering	B.Sc.	
Aerospace Engineering	Aerospace Engineering	Aerospace Engineering	4	Bachelor of Science in Aerospace Engineering	B.Sc.	
	Aerospace Engineering and a Post-Graduate Program in Physics	Aerospace Engineering and a Post-Graduate Program in Physics	4	Bachelor of Science in Aerospace Engineering and Bachelor of Science in Physics (joint program)	B.Sc.	
Industrial Engineering and Management	Industrial Engineering and Management	Industrial Engineering and Management	4	Bachelor of Science in Industrial Engineering and Management	B.Sc.	
	Data Systems Engineering	Data Systems Engineering	4	Bachelor of Science in Data Systems Engineering	B.Sc.	
	Economics and Management	Economics and Management (four-year)	4	Bachelor of Science in Economics and Management	B.Sc.	
		Economics and Management (three-year)	3	Bachelor of Arts in Economics and Management	B.A.	
	Data and Information Engineering	Data and Information Engineering	4	Bachelor of Science in Data and Information Engineering	B.Sc.	
Mathematics	Mathematics	Mathematics (four-year)	4	Bachelor of Science in Mathematics	B.Sc.	
		Mathematics (three-year)	3	Bachelor of Science in Mathematics	B.Sc.	
		Applied Mathematics (four-year)	4	Bachelor of Science in Applied Mathematics	B.Sc.	
		Applied Mathematics (three-year)	3	Bachelor of Science in Applied Mathematics	B.Sc.	
		Mathematics with Computer Science (four-year)	4	Bachelor of Science in Mathematics with Computer Science	B.Sc.	
	Mathematics with Computer Science	Mathematics with Computer Science (three-year)	3	Bachelor of Science in Mathematics with Computer Science	B.Sc.	
		Mathematics-Physics	Mathematics-Physics	3	Bachelor of Science in Mathematics-Physics	B.Sc.
		Mathematics with Statistics and Operations Research	Mathematics with Statistics and Operations Research	3	Bachelor of Science in Mathematics with Statistics and Operations Research	B.Sc.
		Computer Science and Mathematics	Computer Science and Mathematics	3	Bachelor of Science in Computer Science and Mathematics	B.Sc.
	Physics	Physics	Physics (four-year)	4	Bachelor of Science in Physics	B.Sc.
Physics (three-year)			3	Bachelor of Science in Physics	B.Sc.	
Mathematics-Physics			Mathematics-Physics	3	Bachelor of Science in Mathematics-Physics	B.Sc.

Undergraduate Studies | 2021-2022

Faculty/Department	Admission Track	Study Track	Years of Study	Degree Awarded		
	Aerospace Engineering and a Post-Graduate Program in Physics	Aerospace Engineering and a Post-Graduate Program in Physics	4	Bachelor of Science in Aerospace Engineering and Bachelor of Science in Physics (joint program) B.Sc.		
	Biomedical Engineering and Physics	Biomedical Engineering and Physics	4	Bachelor of Science in Biomedical Engineering and Physics B.Sc.		
	Electrical Engineering and Physics	Electrical Engineering and Physics	4	Bachelor of Science in Electrical Engineering and Physics B.Sc.		
	Computer Science and Physics	Computer Science and Physics		Bachelor of Science in Computer Science and Physics		
	Chemistry	Chemistry	Chemistry	3	Bachelor of Science in Chemistry B.Sc.	
	Molecular Biochemistry	Molecular Biochemistry	3	Bachelor of Science in Molecular Biochemistry B.Sc.		
	Biology	Biology	3	Bachelor of Science in Biology B.Sc.		
	Molecular Biochemistry	Molecular Biochemistry	3	Bachelor of Science in Molecular Biochemistry B.Sc.		
	Architecture and Town Planning	Architecture	Architecture	4	Bachelor of Science in Architectural Sciences B.Sc.	
	Architecture	Architecture	5	Bachelor of Architecture B.Arch.		
	Landscape Architecture	Landscape Architecture	4	Bachelor of Landscape Architecture B.L.A.		
		Computer Science	Computer Science (four-year)	4	Bachelor of Science in Computer Science B.Sc.	
Computer Science (three-year)			3	Bachelor of Science in Computer Science B.Sc.		
Computer Engineering			4	Bachelor of Science in Computer Engineering B.Sc.		
Software Engineering			4	Bachelor of Science in Software Engineering B.Sc.		
Computer Science with a Concentration in Bioinformatics			4	Bachelor of Science in Computer Science B.Sc.		
Computer Science and Mathematics			Computer Science and Mathematics		Bachelor of Science in Computer Science and Mathematics	
	Computer Science and Physics	Computer Science and Physics		Bachelor of Science in Computer Science and Physics		
	Science and Technology Education	Mathematics Education	4	Master of Science in Teaching (Mathematics) B.Sc.Ed		
		Physics Education	4	Master of Science in Teaching (Physics) B.Sc.Ed		
		Chemistry Education	4	Master of Science in Teaching (Chemistry) B.Sc.Ed		
		Biology Education	4	Master of Science in Teaching (Biology) B.Sc.Ed		
		Computer Science Education	4	Master of Science in Teaching (Computer Science) B.Sc.Ed		
		Technology-Mechanical Engineering Education	4	Master of Science in Teaching (Technology-Mechanical) B.Sc.Ed		
		Electrical Engineering Education	4	Master of Science in Teaching (Electrical) B.Sc.Ed		
		Environmental Sciences Education	4	Master of Science in Teaching (Environmental Sciences) B.Sc.Ed		
		Post-Graduate Program in Science and Technology Education	1.5	Post-Graduate Program in Science and Technology Education B.Sc.Ed		
			Medicine	Medical Sciences (three-year)	3	Bachelor of Science in Medical Sciences B.Sc.
Bachelor of Science in Medical Sciences – Medical Concentration	3			Bachelor of Science in Medical Sciences – Medical Concentration B.Sc.		
Bachelor of Science in Medical Sciences – Scientific Concentration (this program is not open to new applicants)	3			B.Sc.		
Medicine (six-year program)	6			Medical Doctor M.D.		
	Materials Science and Engineering	Science and Engineering of Materials	Materials Engineering	4	Bachelor of Science in Materials Engineering B.Sc.	
		Materials Engineering and Biology	Materials Engineering and Biology	4	Bachelor of Science in Materials Engineering and Biology B.Sc.	
		Materials Engineering and Chemistry	Materials Engineering and Chemistry	4	Bachelor of Science in Materials Engineering and Chemistry B.Sc.	
		Materials Engineering and Physics	Materials Engineering and Physics	4	Bachelor of Science in Materials Engineering and Physics B.Sc.	
		Biomedical Engineering	Biomedical Engineering	4	Bachelor of Science in Biomedical Engineering B.Sc.	
	Biomedical Engineering	Biomedical Engineering and Physics	Biomedical Engineering and Physics	4	Bachelor of Science in Biomedical Engineering and Physics B.Sc.	
		Occupational Therapy*	Occupational Therapy	3	Bachelor of Occupational Therapy B.O.T.	

*Joint program between the Technion and the University of Haifa.

At the Technion, it is possible to study for a dual degree or two separate degrees simultaneously, for example Medical Sciences-Biomedical Engineering, Medical Sciences-Computer Science, Medical Sciences-Materials Engineering or a Post-Graduate Program in Science and Technology Education. Students will receive a diploma for each degree completed.

Undergraduate Studies

Technion Senate

The Technion Senate is the authority that determines all academic matters of the institution in accordance with the constitution and bylaws, regulations, academic regulations and academic procedures, including the curricula, degrees, as well as the regulations and procedures related to teaching and studying at the Technion.

Undergraduate Studies

The Dean of Undergraduate studies is elected by the full-time tenured professors within the Senate and is entrusted by the Senate to oversee undergraduate studies at the Technion. The Undergraduate Academic Secretary, Ms. Efrat Nativ-Ronen, manages the Undergraduate Studies Center located in the Ullman building, 4th floor, which includes the following activities:

Candidate Assessment Unit headed by Ms. Estee Cohen, Student Unit headed by Ms. Tamar Nissimov, Teaching Unit headed by Ms. Nava Berger, Exam Unit headed by Ms. Limor Arzuan, Process Evaluation and Information Unit headed by Ms. Orit Wakstein, and the Computerized Documentation Unit headed by Mr. Reuben Malka.

Admission Tracks, Study Tracks, and Degree Tracks

The Technion offers bachelor's degree programs (undergraduate studies) as well as master's and doctoral degree programs (graduate studies). This catalogue is specific to undergraduate studies and graduate studies. Students who apply and are accepted to a bachelor's degree program in one of the admission tracks are thus considered to belong to one of the academic units. Each unit has either **one** or **several study tracks** per degree. The table presents all admission tracks and the unit with which they are affiliated. In addition, the table presents all possible **study tracks**, along with the years of study and the name of the degree that students will receive upon successful completion of the track.

Most of the study tracks are four years long, and the degree awarded is called a "**Bachelor of Science in...**". There are also three-year degree programs that earn the title of "**Bachelor of Science in...**". The medical degree is the exception; it is six years long (after three years, the student will earn a Bachelor of Science in Medical Sciences, and upon completion of the sixth year and an internship, the student will be awarded an M.D. degree.

Bachelor's Degree Admission Requirements at the Technion

The Dean of Undergraduate Studies is responsible for accepting candidates to the Technion. Admission requirements and information about how to apply for admission to undergraduate studies at the Technion are detailed on the Technion's Admissions website (Ulman Building, 4th floor, phone: 077-8873306). Below are additional details regarding admission.

Applicants with no previous academic background

Admission to undergraduate studies at the Technion among those who hold a Bagrut certificate (certificate that indicates that a student has successfully passed Israel's high school matriculation exam) will be based on students' Bagrut grades, scores on the Psychometric University Entrance Test, and if necessary, also on entrance exams and language proficiency tests (for example, the AMIR test or the YAEL test). Additional admission routes are periodically published on the Registration website.

Applicants who have a different type of matriculation certificate are admitted to the Technion on the basis of technical exams in mathematics, physics, Hebrew, English, and their psychometric exam scores. All applicants to the Faculty of Architecture and Town Planning must also take an entrance exam in landscape architecture. All applicants to the Faculty of Medicine must also take admission test.

Applicants with a previous academic background

Students who have already studied at the Technion and discontinued their studies on their own accord, or whose studies had been discontinued, will need to be re-admitted to the Technion on the basis of their initial admission data and on the basis of their academic performance at the Technion. Applicants who are currently studying, or have previously studied, at another institution of higher education must submit, to the Candidate Assessment Unit, comprehensive information regarding their previous studies, including course syllabi, grades, and all academic evaluations. Decisions regarding the admission of applicants will be made on the basis of their past academic performance and on the basis of the initial admissions criteria (for more information, see section 3.1.6). Students will not receive any credits (grades or exemptions) for courses taken during the time in which they were expelled from the Technion, as per the student disciplinary regulations.

Course of Study

The following is an overview of the course of study for a bachelor's degree:

In accordance with the Senate's decision that was made on May 19, 2013 and June 2, 2013 – the recommendations provided by

the committee for evaluating the curriculum and the study load at the Technion were approved; these recommendations focused on various issues including the academic calendar (shortening the semester to 13 weeks, determining the dates of Hannukah vacation, and a shortened exam period); the lack of readiness among students who are accepted to the Technion (completing mandatory courses prior to the start of their studies, increasing the course completion requirements, refresher courses, etc.); foundational studies and courses in the faculties, etc.

The Technion began implementing the above recommendations in the 2014-2014 academic year.

Beginning one's studies

Applicants who have been accepted must begin their studies in the semester for which they have been accepted. Students are accepted to begin in either the winter or spring semester. Deferring admission for one semester is only possible with the approval of the Dean of Undergraduate Studies, and approval will only be provided in exceptional cases. Applicants who are accepted for the winter semester may start their studies during the previous summer semester.

Semesters

Studies take place across two semesters: the winter semester (starts each year in October) and spring semester (starts each year in March). Each semester is 13 weeks, not including holidays and vacations. The summer semester lasts about 7 weeks. In the summer semester, which is an official semester, a limited number of courses are taught; this allows students to close any gaps that they may have in their studies or to progress at a faster pace. Due to the short time span of the semester, the number of weekly teaching hours for each course is double that of a regular semester. It is possible to start one's studies in any semester (including the summer semester), except for units in which admission occurs only once a year.

Semester-long courses

The basic unit of study is a semester-long course, i.e., a course that takes place over the course of one semester. Students are expected to complete the course, take an exam in the course and receive a grade. Students who successfully pass a course, will receive the allotted number of credits for that course. Students who fail the course will not receive credit for the course.

Prior to enrolling in a course, students must pass all the prerequisites. Students who take a complementary course or a course that is similar to one that they have already taken, will have the credits they earned in the previous course cancelled and then the credits and grade earned in the more recent course will replace it.

Placement exams

Prior to beginning one's studies at the Technion, applicants must pass an English placement exam (either via the psychometric test or the AMIR test). Applicants who do not have a Bagrut certificate must pass a Hebrew placement exam. Some applicants must also take a placement exam in Physics and Chemistry.

English placement exam

Taking an English placement exam is mandatory for anyone who has been accepted to the Technion; this requirement can be met either with the "English" portion of the psychometric test or the "AMIR" test. A minimum level of knowledge in English is necessary in order to begin one's studies at the Technion. The different placement levels are: Advanced English A, Advanced Technical English B, or Exempt.

Physics placement exam

The Physics placement exam consists of two parts: mechanics and electricity. Passing the mechanics portion of the exam is a prerequisite for physics- mechanics courses and passing the electricity portion of the exam is a prerequisite for physics-electricity courses.

Exemption from the physics placement exam will be granted in the following circumstances: Students who have been accepted to a program in Architecture, Landscape Architecture, Economics, Education in Science and Technology (in the biology, mathematics, or computer science track), or Medicine; students who have earned at least 4 units of study in physics on the Bagrut and received a grade of 70 or above. Exemption from the mechanics portion of the exam will be granted for students who were enrolled in the technological track for practical engineers, specializing in mechanics or agricultural mechanics, and who have received a grade of 70 or above on the external exams in technical mechanics. Exemption from the electricity portion of the exam will be granted to students who were enrolled in the technological track for practical engineers with one of the following specializations: Electronics, Instrumentation, or Evaluation, and who received a passing grade of 70 or above on the external exams. Exemption from both parts of the exam will be granted if students earned a grade of 70 or above in the following courses at the Open University: Fundamentals of Physics A (20113) and Fundamentals of Physics B (20114) or Fundamentals of Physics (20125). Exemption from the mechanics portion of the exam will be granted for students who earned a grade of 70 or above in the Open University's Fundamentals of Physics A (20113) course. Note: To receive an exemption from the electricity portion of the exam, passing the Fundamentals of Physics B (20114) course only is not sufficient.

Hebrew placement exam

For all admitted students who have taken the psychometric test in a language other than Hebrew, or who attended a high school in which the language of instruction was not in Hebrew, must take a Hebrew proficiency test (YAEL test). A minimum level of knowledge in Hebrew is necessary in order to begin one's studies at the Technion. The different placement levels are: Hebrew 3 or Exempt with no credit points.

Chemistry placement exam

Students who have been admitted to tracks in Chemical Engineering, Biotechnology and Food Engineering, Biology, Environmental Engineering, or Biochemical Engineering, and who have *not* taken an exam of 3 units in chemistry and received a grade of 70 or above, will need to take the chemistry placement exam. Students who have been admitted to these tracks but do not pass the placement exam will not be able to enroll in the chemistry courses taught during the first semester. Information on preparation courses for the placement exams and registration for them can be found on the Undergraduate Studies website.

Faculty members offering private lessons to students at the Technion

See page [52](#).

Accommodations due to fertility treatments, pregnancy, childbirth, adoption, guardianship, or foster care

The Technion recognizes the importance of the principles set forth in the Students' Rights Act and the rules established by the Council of Education, which increase access to higher education and provide equal opportunities in higher education for students on the basis of fertility treatment, pregnancy, childbirth, adoption, guardianship, or foster care of a child. As such, the Standing Committee of Undergraduate Studies and of Graduate Studies has approved, based on the decision made by the academic plenum on August 14, 2012, procedures regarding accommodations due to fertility treatments, pregnancy, childbirth, adoption, guardianship, or foster care. The full text of these procedures can be found in the Appendix labeled Accommodations Due to Fertility, Pregnancy, Childbirth, Adoption, Guardianship, or Foster Care at the end of this catalogue. The procedures are designed to address the unique difficulties faced by students in these circumstances and to identify the assistance and accommodations to which they are entitled.

Curriculum

Each course of study has a defined curriculum consisting of courses that include: mandatory courses, faculty electives, and general Technion electives that students can take in any field of

their choice. Additionally, the curriculum details the credit points required to obtain the specific degree.

Part C of this catalogue includes the recommended curriculum per semester for each course of study. The recommended schedule of course is based on an average rate of progression of approximately 20 credits per semester. Students can progress at a faster or slower pace than the average, in accordance with their personal preferences and circumstances. Prior to each semester, students (preferably with the guidance of an advisor) will choose their own course schedule for the semester and will be responsible for registering for all courses themselves. Once the semester begins, students may still make changes to their course schedule, up until the course change deadline.

It is highly recommended that students who are required to enroll in an English language course do so at the start of their studies so that they can best utilize the professional literature in English during their studies. It is also recommended that students take humanities courses as part of their elective credits; this is recommended so that students broaden their horizons. In order to confirm that students meet all their degree requirements, students will be asked – prior to enrolling in their final semester – to contact the Undergraduate Academic Secretary of their unit to check whether they will have completed all degree requirements by the end of the final semester.

Students who excel in their studies will be awarded the “Dean’s Excellence Award” or the “President’s Excellence Award” and receive a monetary prize. Students who fail will have their circumstances discussed by the academic unit which will consider whether to terminate their studies and then will pass on their recommendation to the Dean of Undergraduate Studies; this may or may not lead to a discontinuation of their studies.

Degree conferral

Students who have successfully met all the degree requirements will receive a recommendation from the unit to have their degree awarded, which will then be passed to the Dean of Undergraduate Studies for approval. Students will receive a confirmation that they have completed their degree, and once a year – in June – a graduation ceremony will be held for all graduates. Students who have graduated with honors (e.g., magna cum laude) will have this noted on their diploma.

Undergraduate Studies Regulations and Procedures

Introduction

Undergraduate Studies at the Technion are managed by the Dean of Undergraduate Studies, in consultation with the academic units and in accordance with the decisions of the Academic Plenum and the Senate.

1. Regulations Regarding the Structure of Teaching

1.1. Course of Study

1.1.1 Semesters

Studies take place during the winter semester, the spring semester and the summer semester. The winter and spring semesters each last approximately 13 weeks. The summer semester lasts approximately 7 weeks and typically includes limited course offerings. At the end each semester, there is an exam period.

1.1.2 Curriculum

The curriculum that must be completed in order to obtain a bachelor's degree (undergraduate studies) is determined by the academic unit and approved by the Senate. The curriculum for a "Bachelor of Science" degree is based on 4 years of study, amounting to 155-165 credits. The curriculum in the Faculty of Architecture and Town Planning for a "Bachelor of Architecture" degree is based on 5 years of study, amounting to 195-205 credits. The curriculum for a "Bachelor of Science" degree that is based on 3 years of study that amount to 116-124 credits.

In addition to determining the credits required to complete the curriculum, each program will include a list of foundational courses, mandatory courses, and faculty elective courses (as indicated in Sections 1.1.4-1.1.6 below), as well as the number of credits required for each category.

The remaining credits required for completing the curriculum will be fulfilled through general elective courses at the Technion, as specified in Section 1.1.7 below.

The curriculum submission procedure is specified in Appendix A.

1.1.3 Tracks and specializations

One academic unit can be responsible for several curricula. When the different curricula of the unit lead to separate degrees, they are defined as separate "tracks." If the curriculum includes a particular concentration, it is defined as a "specialization."

The procedure for establishing new tracks and specializations is specified in Appendix B.

1.1.4 Foundational courses

Foundational courses include mathematics, physics, chemistry, biology, English, and computer science. The syllabi for the foundational courses are determined by the units responsible for teaching the courses (mathematics, physics, biology, humanities, and computer science).

The courses that are offered to all units within the Technion are specified in Appendix C.

1.1.5 Mandatory courses

Mandatory courses, as well as foundational courses, are determined by the Academic Unit's Council.

1.1.6 Elective courses in the unit

The list of elective courses that students can enroll in to complete their credit quota are specified in the list or lists prepared by the academic unit. The number of elective course credits shall not be less than 30 credits in a four-year program or 20 credits in a three-year program.

1.1.7 Free-choice elective courses

Each study program will include at least 12 credits (10 credits in a three-year program) that are to be fulfilled through general free-choice elective courses that can be taken throughout the departments of the Technion. Of these total credits, at least 6 credits must be taken from courses defined as enrichment studies (except for study tracks within the Faculty of Medicine and the Faculty of Architecture and Town Planning), and at least 2 credits must be fulfilled through physical education courses. Students' enrollment in free-choice elective courses that are offered through the Technion are subject to the rules of registration for that course. Surplus credits and credits earned for social activities and reserve service will be recognized for the purpose of fulfilling the general Technion elective credits.

1.1.8 Physical education

Students are required to take 2 credits of physical education courses. Students can fulfill this requirement throughout all their years of study at the Technion, but may not take more than 1.5 credits per semester. Students who are unable to engage in physical education courses due to health reasons that are verified by a doctor's note will be exempt from this requirement but will not receive any credits.

1.1.9 Approved student curriculum

A curriculum that has been approved by the Senate will be designated as valid for a particular student if it meets the following condition: The curriculum was published in the Undergraduate Studies Catalogue in the year that the student began his/her studies or in the catalogue of any academic year after that, or a curriculum that draws on multiple catalogues and has been recommended by the unit and approved by the Dean of Undergraduate Studies.

1.2 Syllabi

1.2.1 Syllabi

The Unit's Council will determine the syllabus for each course, which then must be approved by the Senate. Each academic unit will arrange for there to be a teaching committee, which will be responsible for updating the syllabi and the list of textbooks. Syllabi for service courses (courses that are provided to another unit) should be created in conjunction with representatives of the receiving unit. The council of the unit providing the service will be responsible for its implementation. Each syllabus will include course objectives, outlined by topic, and will emphasize the principles that will be taught in the course. Each syllabus will be outlined according to chapters in the book or textbook, as well as other supplementary material that will be distributed to students. A copy of the official syllabus will be distributed to each student enrolled in the course. Each academic unit must review and, if necessary, update the curriculum at least once every three years.

1.2.2 Determining the number of credits per course

This guide is to be used to determine the number of credits per course: one lecture hour = 1 credit; one practicum hour = ½ credit; one lab hour = 1/3 credit (except for projects). The credit amount should be rounded to the nearest half point. Credits can be increased for increased workloads. However, the number of credits cannot be less than the number determined by the above guide. Currently, courses in the Humanities and Arts that include 2 hours of lecture can be worth 1.5 credits. Course credits are determined according to the hours of work required of the student in practice. In general, 50-60 hours of work per week is equivalent to 20 credits.

1.2.3 Connection between courses

A. Prerequisites

A prerequisite is a course that must be completed (and passed) prior to enrolling in the course in question. Registration to the course will not be denied if the prerequisite requirement is not fulfilled. However, the instructor will receive a notification and will be able to deny the student enrollment in the course (despite the advisor's approval). Advisors are asked to carefully consider each approval and limit it to students in good standing only.

B. Corresponding courses

The course in question should not be taken before its corresponding course. All guidelines regarding approval for enrolling in a course for which the prerequisites were not fulfilled, also applies in this circumstance.

C. Courses without additional credit

Courses that contain a lot of similar material are defined as courses without additional credit. That is, students who enroll in two such courses will not receive any additional credits. Students will not be able to simultaneously enroll in two courses that are specified as courses without additional credit.

If a student has successfully passed a specific course and then enrolls in a course without additional credit, the credits that he/she earned in the first course will be revoked and the grade earned in the second course will prevail. If the student passes the course, the number of credits that he/she will earn will be in accordance with the most recent course taken.

When the material taught in the course without additional credit includes all the material from the second course, as well as additional material, the first course will be termed "inclusive" and the second course will be called "included."

1.3 Courses to be Completed Prior to Starting One's Studies

1.3.1 Standard level

Each unit will determine, with the Senate's approval, the required level to begin taking foundational courses (hereinafter, the standard level). Based on this determination, a recommended curriculum will be constructed. This will also determine whether the specified level is a firm condition for student admission or whether candidates with a sub-standard level can be accepted, so long as they complete the missing requirements. These courses will be prerequisites for the relevant course in the curriculum. Hebrew studies are not considered to be a prerequisite for starting one's degree program. We recommend that students who are required to fulfill these prerequisite course requirements enroll in a more limited course of study.

1.3.2 Placement exams in physics (Mechanics + Electricity)

Students must pass Part A of the Placement Exam (Mechanics) prior to the start of the third semester of their studies and Part B of the Placement Exam (Electricity) prior to the start of the fourth semester of their studies. In addition, each unit may, with the approval of the Dean of Undergraduate Studies, set an earlier date by which students must pass the two parts of the placement exam in physics. Students who do not fulfill this requirement will be considered to be in "poor academic standing" (see Regulation 3.1.5).

The placement exam in physics is mandatory for all students who are admitted to the Technion, except for students admitted to programs in Architecture, Landscape Architecture, Economics, Education in Science and Technology (in the biology, mathematics, or computer science track), or Medicine. Additional exceptions include:

A. Students who have completed at least 4 units of physics in the matriculation (Bagrut) exam and received a grade of 70 or above.

B. Exemption from Part A of the Placement Exam (Mechanics) will be provided to students who have completed the technological track for practical engineers, specializing in mechanics or agricultural mechanics, and who have received a grade of 70 or above on the external exams in technical

mechanics. Exemption from Part B of the placement exam (Electrical) will be granted to students who completed the technological track for practical engineers with one of the following specializations: Electronics, Instrumentation, or Evaluation, took their exams, and received a score of 70 or above on their external exams in their primary area of the specialization.

C. Anyone who has studied physics at the university level in Israel or abroad and who received a passing grade, according to what is customary in the relevant institution, will receive full exemption from the physics placement exam.

D. New immigrants who went to high school abroad will submit their application for exemption to the Committee for the Examination of Diplomas, which will consult with the Faculty of Physics as necessary. The exemption will be approved as per the recommendations of the committee.

Passing Part A of the placement exam in Physics or being exempt from it is a condition for taking the following courses: Physics 1 or Physics 1M or Physics 1R or Physics 1P. Passing Part B of the placement exam in Physics or being exempt from it is a condition for taking the following courses: Physics 1 or Physics 1M or Physics 1R or Physics 1P.

1.3.3 English studies

The Placement Exam in English is mandatory for anyone accepted to the Technion. The “English” portion of the psychometric exam or on the “AMIR” test or on the SAT is considered to be a placement exam. A minimum level of knowledge in English is necessary in order to be accepted to the Technion. The different placement levels are: Advanced English A, Advanced Technical English B, or Exempt. Exemption from the Placement Exam in English will be granted to those who have earned a satisfactory grade on the English portion of the psychometric exam, the AMIR test, the SAT exam, or in previous coursework. The “Advanced English A” course and the “Advanced Technical English B” courses are offered through the Department of Humanities and Arts at the Technion. The “Advanced English A” course is a prerequisite for the “Advanced Technical English B” course. The “Advanced English A” course does not grant any course credits. The “Advanced Technical English B” course grants 3 credits (with a grade). Exemption from the English course requirement grants 3 credits (without a grade).

All students who begin their studies at the Technion starting in the 2021-2022 academic year must take at least 2 English language courses during their undergraduate studies. This requirement can be fulfilled by taking two English language learning courses (Advanced A and B) or two content courses that are taught in the English language, or one English language learning course and one content course that is taught in English. This requirement will be determined in accordance with students’ placement level that is determined at the start of their

studies. The content courses that are taught in English will be academic courses that are part of the student’s standard curriculum. The English language learning courses must be completed within a maximum of four semesters. A student who has not fulfilled this requirement will be considered to be a student in “poor academic standing” [see Section 3.1.5.A (5)]. Students who have not completed two of the aforementioned English courses will not be able to complete their studies/receive their degree.

1.3.4 Hebrew studies

All admitted students who did not take the psychometric exam in Hebrew must pass a Hebrew placement exam. A minimum level of knowledge in Hebrew is necessary in order to be accepted into the Technion -113.

The different placement levels are: Hebrew 3 or Exempt (which does not grant any credit points). The “Hebrew 3” course will be offered through the Pre-Academic Education Center (preparatory). A passing grade in the “Hebrew 3” course will grant 3 credit points (without a grade; P+). These credits are considered to be part of the Technion general elective credits. Students who do not fulfill the Hebrew language requirements by the end of their second semester at the Technion will be considered to be a student in “poor academic standing” [see Section 3.1.5.(B) (6)].

1.3.5 Grades in courses that must be completed prior to starting one’s studies

Courses that must be completed prior to beginning one’s studies do not result in a grade; rather, these courses are pass/fail. These courses are prerequisites for the relevant courses/subjects.

2. Regulations Relating to the Provision of Instruction

2.1 Instruction

2.1.1 Teaching methods

Instructors will choose which material they will present to students during their lectures from the syllabus, and can lecture on any other material that they see fit. However, the exams will be based upon the official syllabus, including chapters/sections that the instructor did not lecture on.

2.1.2 Guided reading

If there is no standard form of instruction for a particular subject/course in one of the semesters, and if the nature of the subject lends itself to learning in a guided reading format, students can be instructed in this way after special approval is given by the head of the unit. Guided reading consists of: holding regular meetings (at least once a week) with the instructor in charge, as well as submitting assignments as

required. The syllabus will be set in accordance with the points specified in Section 1.2.1.

2.1.3 Instructor responsible for the course

Each course that is offered by more than one instructor, will have one instructor who is appointed by the head of the unit to which the instructors belong to be the instructor responsible for that course. In addition to being responsible for course instruction, this instructor will also be responsible for the exam and grades in the particular course.

2.2 Exams

2.2.1 Evaluating course performance

Instructors are responsible for assessing students' level of learning and the course exam can be used as one of the means to achieve this goal; however, the instructor is not obligated to hold an exam at the end of the course.

2.2.2 Standardized evaluation

To the extent that the course is taught by several different instructors at the same time, the head instructor will be responsible for ensuring that the exam is standardized across instructors, and that the method of evaluation is identical. In addition, the head instructor will be the one to approve the grades given to students.

2.2.3 Exam dates

At the end of each semester, there will be a period of three weeks during which the first exam dates (Moed A) and then the second exam dates (Moed B) for all courses will be held. During the period of time designated for exams, no exams will be held for courses worth fewer than 1.5 credits. In these courses, grades will be determined on the basis of tests and/or exams that were held during the course of the semester. There is no option to hold these final exams earlier in the semester, and definitely not during the last week of the semester. In courses in which weight is given to grades provided throughout the semesters and tests are held throughout the duration of the semester, it will be possible to hold a test during the last week of the semester, provided that it is held during the standard course time and is similar in scope to the other tests.

2.2.4 Exam Procedures

The Undergraduate Academic Secretary will determine and publish the exam schedule and locations, as well as the seating arrangements for the exams and the division of students between the rooms. Each student will receive an exam card in which details of his/her exams in each course for which they are enrolled in that semester is specified.

2.2.5 Mid Exams

The number of mid exams for a given course is limited as follows: No more than three mid exams can be given in a course for which the mid exam replace a final exam, and no more than one valid mid exam can be given in a course for which there is a final exam. Each mid exam shall not exceed two hours and for

each valid mid exam that is given, there must be a second date (Moed B) on which students can take the test.

2.3 Credits and Grades

2.3.1 Semester-long courses

The course of study for a degree consists of semester-long courses. Students (besides those in the Faculty of Medicine) will be allowed to register for more than 29 credits per semester only if the head of the unit has recommended this and the Dean of Undergraduate Studies has approved it. Students who are enrolled in a course receive a university grade at the end of the semester that reflects their performance in the course: A grade of 55 or above reflects a passing grade and the student will receive the allotted number of credits for the course. A grade below 55 will reflect a failing grade and the student will not receive any course credit. In both cases, the score will be included in the calculation of the student's weighted cumulative average. There are a small number of courses in which the grading system is binary -- pass/fail. A passing grade entitles the student to credits whereas a failing grade does not grant the student any credits. A binary grade does not influence the cumulative average. A student who is registered for a course but does not fulfill one of the requirements of the course, such as a final exam or submission of a project, might not receive a final grade, as per the discretion of the lecturer. Such a course will be counted in the "Course Success Rate" (see Section 3.1.5 below). Eight weeks after the start of the following semester, the student will receive an "incomplete" for that course. For similar projects and courses, in which assignments last more than one semester, the Dean of Undergraduate Studies may delay the recording of the "incomplete" grade until the end of the following semester. Students who are not registered for a course will not be able to receive a grade in that course.

2.3.2 Course exemptions

Students will be able to receive an exemption from courses if they can prove their knowledge in the subject in the following ways: Previous coursework (excluding high school studies) or by way of an exam. Exemption can be granted with credit (P+) or without credit (P-), as per the recommendation of the unit's undergraduate studies center.

Exemptions will not be granted for courses taken at any institution during the period in which a student was expelled from the Technion due to a violation of disciplinary regulations.

2.3.3 Publication of grades and appeals of final exam grades

2.3.3.1 The course instructor will send all students their exam score within 10 days of the exam.

2.3.3.2 The course instructor will submit the list of grades in the course to the individual responsible for the course's instruction in the unit, and if there are no reservations, the list of grades will be forwarded on to the Undergraduate Academic

Secretary. At the same time, the information will be communicated to the students.

2.3.3.3 Students who wish to appeal their grade, may do so within four days from when a copy of their exam booklet was made available. For the purpose of filing the appeal, students will be entitled to receive a copy of their exam booklet. Students will submit their request for appeal either orally or in writing, as per the instructions of the instructor.

2.3.3.4 The course instructor will submit a response to the student regarding his/her appeal of the score on the first exam (Moed A), which is to be submitted in the period specified above, no later than one week before the second date of the exam (Moed B). If no response is provided, the student will be entitled to take the exam again (Moed B) on a special date, which will be at least one week after the student receives a response to their appeal, provided that it is before the exam period of the following semester.

2.3.3.5 In exceptional cases, changes to this procedure will be approved by the Dean of Undergraduate Studies, especially for courses in which the period of time between the first and second date of the exam is short. In these cases, an effort shall be made to coordinate with the student representatives.

2.4 Reserve Duty

The Senate recognizes the disruption to students' studies that results from reserve service and from service within the framework of the academic reserve (hereinafter: reserve duty) during the course of the semester and/or the exam period. The Senate calls on the heads of the academic units and lecturers to alleviate the distress of those serving in the reserves and particularly to those serving for long periods of time during the semester (including the exam period). The academic units must make every effort to allow students to complete the course material and all course requirements in the semester in which they are enrolled. The Senate asks all bodies that deal with this matter to do everything in their power so that the disruption is minimized. The purpose of this regulation is to try and minimize the harm to students' studies among those who are serving in the reserves.

Students who serve in the reserves during the semester will be entitled to solutions that will minimize any harm to their studies, the grades that they deserve or the duration of their studies. These solutions, in regard to ensuring that students are able to fulfill course requirements (e.g., tests/exams, labs, practicums), may include a test/exam, practicum, additional work, permission to bring a formula page to the exam, etc., as specified below:

Absence from an exam

Students are entitled to not take an exam during the exam period and to receive an alternative solution, such as taking the exam at a different date, if one of the following conditions are met:

- Reserve service on the day of the exam (except for conferences/interviews in which one can choose the date of participation);
- Reserve service of at least three days per week prior to the exam date;
- Reserve service of at least 10 consecutive days or 14 days in total during the semester, up until the start of the exam period;
- Reserve service of at least 10 days in total during the exam period.

If the course instructor sets another date for the exam as a solution, the date of the alternative exam shall be no later than five weeks after the publication of grades of the second exam date (Moed B). The faculties are responsible for setting the date of the exam for reservists while taking into account the tests and exam dates of other courses in the current semester.

The above instructions also apply to valid tests.

In the case of a "protective" exam, the solution offered will be the responsibility of, and at the discretion of, the lecturer, and will be implemented in such a way that does not harm the student.

Instead of a taking the exam on the alternative date, students will be able to cancel their course registration or can choose to repeat the course at a later time.

In the case that the student chooses to repeat the course:

- The recorded grade will be "incomplete".
- The course will not be included in the course success rate calculation.
- The grade will be recorded in the semester in which the requirements are completed.

Students will be eligible to transfer the course grades they received during the course of the semester in which they had reserve duty, in accordance with the course requirements for the semester to which they are transferring the grades; the instructor shall help the student do so in a way that does not harm the student nor the efforts he/she has invested during the semester in which he/she had reserve duty. The request will be honored by the unit offering the course.

Regulations regarding prerequisites of subsequent courses will not be implemented.

Exam appeals

Students who are not around during the appeal period due to reserve duty, will receive an extension for the date by which the appeal must be filed in accordance with the number of days that they were in reserve duty.

Assignments

Students who are absent due to reserve duty in the two weeks prior to the submission deadline of an assignment will receive an extension for at least the number of days that they were in reserve duty. In the case that the new submission date falls during the exam period, the deadline will be postponed until after the exam period.

The extension will also apply to the students' partners on a group assignment.

For students who missed the submission deadline of a significant number of assignments in the course due to reserve duty of 14 days or longer, the instructor will determine an alternative solution for submitting the assignments.

Time extensions

Students will be eligible to receive 25% additional time on the first exam that they take in each course during the current semester if one of the following conditions is met:

Active reserve duty for a cumulative period of 14 days during the semester, up until the start of the exam period;

Active reserve duty for a period of 10 days or more in the four weeks prior to the exam period;

Active reserve duty for 10 consecutive days or more during the exam period.

2.5 Recognized Social Activity in Exchange for Academic Credits

Undergraduate students who participated in a recognized social activity for the benefit of the community, without receipt of compensation, in the amount of 26 hours per semester during the course of the year will be eligible to receive one credit towards the general Technion elective credit requirement for their degree.

Undergraduate students who participated in a recognized social activity for the benefit of the community, without receipt of compensation, in the amount of 30 hours throughout the year or served in active reserve duty for at least 14 days throughout the year will be eligible to receive two credits towards the general Technion elective credit requirement for their degree.

The maximum number of credits in regard to Regulation 2.5 that can be granted during the student's degree studies is 2 credits.

3. Student Regulations

3.1 Course of Studies in a Bachelor's Degree Program

3.1.1 Counseling

We recommend that all students utilize academic counseling in their unit to help them to choose a program of study and to assist them with all other academic matters.

3.1.2 Course registration

Students shall enroll for courses for the winter and spring semesters prior to the start of each semester. For courses that are not project-based or laboratory-based, students may make changes to their course list/schedule of classes within the first two weeks of the semester. After the registration and course

change period ends (that is, from the start of the semester for project-based and laboratory-based courses and from the start of the 3rd week of the semester for all other courses), changes can only be made in accordance with the guidelines specified in advance by the unit responsible for the course and with the approval of the Dean of Undergraduate Studies.

Starting from the end of the 4th week of the semester, or 3 weeks after the end of the second exam date (Moed B) of the previous semester (whichever comes later), no additional changes can be made except for in exceptional cases and with the approval of the Dean of Undergraduate Studies.

New students who do not enroll in any courses in their first semester will not have their place saved at the Technion. In exceptional circumstances, the Dean of Undergraduate Studies will approve of an extension to the start of studies for such students.

3.1.3 Exams and re-enrollment in courses

A. Students may take the exam on the first date that it is offered (Moed A) and/or the second date that it is offered (Moed B).

B. Students may re-enroll in any course that they have previous taken in order to improve their grade in the course in the two semesters following the one in which they earned a "passing" grade for the first time.

C. In exceptional circumstances, additional exam dates will be approved for the purpose of improving one's grade, with the recommendation of the academic unit and the approval of the Dean of Undergraduate Studies. Special consideration will be given to matters related to courses that are offered annually.

D. Students may re-enroll in any mandatory courses of their curriculum if the last grade they received in the course was a "failing" grade.

E. Students may enroll in advanced project courses or laboratory-based courses (e.g., a "studio" course in the Faculty of Architecture and Town Planning) up to two times at most. The list of courses to which this provision applies will be periodically updated by the Dean of Undergraduate Studies.

F. In any case, the last score received is the determining score.

3.1.4 Academic excellence

A. The study tracks will be periodically divided, by the Dean of Undergraduate Studies and in consultation with the heads of the academic units, into groups that, for the purposes of this section, are called "study routes." The list of study routes will be published on the Undergraduate Studies website.

B. The Dean of Undergraduate Studies will determine and publish, prior to the President's Excellence Awards ceremony held each semester, the numerical thresholds for eligibility for the President's Excellence and Dean's Excellence Awards for each study route. The thresholds will be determined on the basis of academic performance in the previous semester. The thresholds will be set in such a way such that, in each study

route, there will be approximately 3% of students who will receive the President's Excellence Award and approximately an additional 15% of students who will receive the Dean's Excellence Award (including those receiving the President's Excellence Award) – and under the condition that the threshold does not fall under 91 (President's Excellence) and 84 (Dean's Excellence).

C. The criteria for receiving the President's Excellence Award are a minimum of 18 accumulated credits earned in courses included in the curriculum for the current semester and an average grade of 91 or above, provided that this average grade does not fall below the threshold set forth in Section B above. The criteria for the Dean's Excellence Award are a minimum of 18 credits earned in courses included in the curriculum for the current semester and an average grade of 84 or above, provided that the average grade does not fall below the threshold set forth in Section B above.

3.1.5 Students in poor academic standing

A. Students will be considered to be in poor academic standing if they meet at least one of the following conditions:

1. A weighted cumulative GPA of less than 65.
2. A course success rate of less than 66%.
3. The student was in poor academic standing in the prior semester and did not fulfill the curriculum set forth for him/her.
4. The student did not fulfill his/her obligation to take the Physics Placement Exam by the required deadline (see Regulation 1.3.2).
5. The student did not complete his/her English studies requirement by the end of the fourth semester of his/her studies (see Regulation 1.3.3).
6. The student did not complete his/her Hebrew studies requirement by the end of the second semester of his/her studies (see Regulation 1.3.4).
7. The student has been studying for the degree for two years or more beyond the standard number of years designated for the degree; that is, the student is in his/her 13th semester or beyond (of a four-year degree program) or in the 11th semester or beyond (of a three-year degree program), and so on.
8. The student has accumulated fewer than 27 credits during the first two semesters of his/her studies from the recommended course schedule of the study track in which they are enrolled. For the purpose of this clause:

- The English requirement will be recognized as an accumulation of 2 credits, and the Physics requirement will be recognized as an accumulation of 4 credits. Students who are exempt from taking the Technical English course or for whom the course does not appear on the course list for their first year of the study track, will be "debited" 24 credits.

- This clause does not apply to students who have been admitted to the Technion on the basis of their academic background.

B. Students' progress in their degree program will be evaluated at the end of the first and second semesters and, in more advanced years, also at the end of the summer semester, and after other semesters as required by regulations.

C. Students who are in poor academic standing will be invited to their academic unit for counseling and guidance. The academic unit will hold a discussion and, depending on the severity of the student's situation, will recommend – to the Dean of Undergraduate Studies – conditions for continuing on in the program (e.g., specifying a mandatory course of study/curriculum for one semester or one year, or other requirements) or will recommend that the student's studies be terminated. During the course of the discussions, the student will have the right to make his/her arguments. In addition, consideration will be given to the opinion of the Student Counseling and Support Center as well as to special circumstances such as reserve duty. The academic unit will inform the student of its recommendation, which will be shared with the Dean of Undergraduate Studies who will make a decision about how to proceed. The academic unit will determine the responsible body for providing counseling and guidance, as well as the procedure for the discussions regarding discontinuing students' studies, and will be responsible for informing the students and the Dean of Undergraduate Studies of these decisions. A student whose studies have been terminated will be entitled to appeal the decision in writing or orally to the Dean of Undergraduate Studies.

D. Students who were in poor academic standing when their studies were terminated or when they discontinued their studies on their own accord will be able to apply to return to their study program after two years from the date that their studies were discontinued (see Regulation 3.1.6).

3.1.6 Admission for students with a prior academic background, and returning to studies after a break

Students in good academic standing who discontinue their studies on their own accord will be able to apply to return to their studies at any time. If they have already completed one or two semesters, they will be able to choose between an admission procedure that is based upon an agreement or an admission procedure that is based on the unit's recommendation and the approval of the Dean of Undergraduate Studies. If students have completed at least three semesters, they will be admitted to the Technion on the basis of the unit's recommendation and with the approval of the Dean of Undergraduate Studies. The unit will recommend to the student a course schedule to follow to complete his/her degree and may add specific requirements such as repeating courses in which the grade earned was less than 65, the extent of prior courses that need to be completed, and the duration of studies.

Students who return to their studies after a prolonged break (over 3 years) will have a plan determined for them regarding courses that need to be completed in the scope of 10-25 credits. The unit's recommendation will be sent to the Dean of Undergraduate Studies for approval, who will be in charge of making the final decision.

Students who were in poor academic standing when their studies were terminated or when they discontinued their studies on their own accord at the Technion or any other institution, will be able to apply to return to their study program two years from the date at which their studies were discontinued. Students who discontinued their studies on their own accord after only one semester will be able to request a shorter break period, however, this is subject to the approval of the academic unit. Admission for students whose studies have been terminated or who discontinued their studies on their own accord after completing only one semester will be based on the standard admission requirements of the unit to which the student wants to be accepted. Requests to return to one's studies among students who have completed at least two semesters require the approval of the Dean of Undergraduate Studies in addition to meeting the admission requirements. Requests to return to one's studies for students who have completed three or more semesters will be discussed by the academic unit to which the student wants to be accepted. The academic unit may require that the student take courses in an external setting during the years in which they are on a break from their studies at the Technion, and may specify an agreement stating that completion of these courses will serve as additional condition for admission. The academic unit will determine the required curriculum for the degree, and may add specific requirements such as a requirement to repeat courses in which the grade earned was less than 65, the extent of prior courses that need to be completed, and the duration of studies. Students who return to their studies after a prolonged break (over 3 years) will have a plan determined for them regarding courses that need to be completed in the scope of 10-25 credits. The unit's recommendation will be sent to the Dean of Undergraduate Studies for approval, who will be in charge of making the final decision.

3.1.7 Transferring admission tracks

Students will be able to transfer from one admission track to another, in accordance with the following guidelines: Up until the end of the second semester of their studies at the Technion, students will be able to transfer if their admission data meet the admission threshold set by the unit. The transfer will be conditional on their academic standing after they have fulfilled the requirements of the semester in which the application is submitted (a GPA of at least 65, a course success rate of at least 66%).

Students who have completed at least two semesters at the Technion and have taken courses from the standard course

basket (as approved by the Senate on May 23, 1993) and whose performance ranks at the top 25% of the corresponding group of students within the study track to which they wish to transfer, will be admitted to their desired study track.

Applications from students who have completed at least two semesters at the Technion but whose performance is not in the top 25%, or who have not taken courses from the relevant course basket, as well as applications from students who have not yet completed two semesters at the Technion and who are in poor academic standing, will be forwarded on to the unit. The unit will submit a recommendation to the Dean of Undergraduate Studies regarding their admission on the basis of their academic performance at the Technion and their initial admission data.

3.2 Bachelor's Degree Completion

3.2.1 Degree eligibility

Students who have completed an approved degree program with a GPA of 65 or above are eligible to receive their degree.

3.2.2 Additional degree and a post-graduate program

A. Additional degree

Students who are studying at the Technion and who wish to pursue an additional bachelor's degree will be able to apply for enrollment in the integrated study track in the additional unit in which they wish to study. Their application will be considered only after they have accumulated at least 72 credits.

The second unit in which the student wishes to study must submit their recommendation to the Dean of Undergraduate Studies for approval, on the basis of the student's academic performance, and the unit will determine the curriculum that the student will need to complete which will include all mandatory content for the additional track, with the exception of courses that the student has already completed or will complete in the track of his/her "home" faculty. The minimum credit points that the student must accumulate in both tracks will be 0.75 of the total points that must be accumulated in each track.

For example, if a student is studying in a track at the Technion in which 160 points must be accumulated, and wants to study for another degree in a track in which 120 points must be accumulated, then in total, he/she must accumulate at least 210 points, and therefore, the remaining credits that the student must complete will consist of at least 50 points.

The program of study in the secondary track will be approved by the Dean of Undergraduate Studies. Students who complete the requirements of the track will be awarded the additional degree if their GPA in the secondary program is 65 or above, and only after they complete their studies in their home faculty.

B. Post-graduate program

Technion students and graduates of the Technion or other recognized academic institutions can learn an additional field of study in addition to that in which they earned their first

degree through the framework of the “Post-Graduate Program.” Students will receive an additional certificate, that will constitute an addition to the original diploma. This diploma is not a separate degree but rather a “postgraduate” certificate.

The scope of studies in the “Post-Graduate Program” after a 3-year degree includes at least 45 credits. The scope of studies in the “Post-Graduate Program” after a 4-year degree includes at least 56 credits. In the Faculty of Education for Science and Technion, it is possible to earn a certificate within the context of the “Post-Graduate Program” by completing 36 credits.

3.2.3 Minimum Technion credits

This regulation applies to students who studied at another academic institution but did not complete their undergraduate studies at that institution. Students who have received credits for their previous studies at any academic institution will be required to complete at least 40 credits at the Technion in order to receive a bachelor’s degree from the Technion. The curriculum will be determined by the unit to which the student was admitted.

3.2.4 Levels of academic distinction

The study tracks will be periodically divided by the Dean of Undergraduate Studies, in consultation with the heads of the academic units, into groups which will be called “study routes” for the purposes of this section. The list of study routes will be published on the Undergraduate Studies website.

The Dean of Undergraduate Studies will determine and publish, prior to the graduation ceremony held each year, the numerical thresholds for the academic distinction of summa cum laude and cum laude for each study route for the year leading up to the ceremony in the following year. The thresholds for the following year will be determined on the basis of the academic performance of graduates in that study route in the previous semester. The thresholds will be set in such a way that, in each study route, approximately 3% of students will graduate summa cum laude and approximately 15% of students will graduate cum laude (including those who graduate summa cum laude). The determination of each graduate’s level of distinction will be made upon confirmation of graduation.

The criterion for distinction is the student’s GPA for the list of courses for their degree, which must be 91 or above, provided that this GPA is above the threshold set for the summa cum laude distinction in his/her study route. The criterion for honors is the student’s GPA for the list of courses for their degree, which must be 84 or above, provided that this GPA is above the threshold set for the cum laude distinction in his/her study route (and the student is not eligible to receive a degree with summa cum laude). This is in effect from the 2007-2008 class year, June 2008 graduation ceremony.

3.2.5 Graduation dates

Each student’s date of graduation is determined on the basis of the date on which the last grade was received, and will be set for the first of the month following that date. Confirmation of

graduation will be provided by the Dean of Undergraduate Studies.

3.2.6 Diplomas

Upon completion of all degree requirements, students will specify all the courses that they took towards their degree and all courses that they took beyond the requirements. The diploma will include all courses classified as degree courses and will appear in ascending order (by course number), as well as a list of all courses classified as being beyond the requirements. If a student has repeated a course, only the most recent time that the course was taken will appear on the diploma (any courses that were not completed will not appear on the lists, but if the course was taken previously and the student received a grade, that grade is valid and will appear on the lists).

Appendix A: Procedure for Submitting a Curriculum

This procedure refers to the preparation of curricula, which are submitted by the council of the academic units to the Standing Committee for Undergraduate and Graduate Studies, via the Central Committee. A curriculum proposal must include the following components:

A. Summary of study program requirements for the degree

1. The total number of credits, between 155-165 (or between 116-124 for a three-year degree). In units in which the bachelor’s degree requires additional content credits, the number of credits will be updated accordingly.
2. Mandatory course requirements and a list of mandatory courses (including foundational courses, in accordance with the requirements of the Senate).
3. Requirements for elective courses and a list of the elective courses, and the extent of it, as determined by the unit. The total elective course requirements, as per this clause, will not be less than 30 credits for a four-year program (20 credits in programs that award dual or combined degrees, which are not in a single-program format as defined by The Council for Higher Education) and 20 credits for three-year programs (15 credits in programs that award dual or combined degrees, which are not in a single-program format as defined by The Council for Higher Education); in addition, there must be a reasonable number of choices from which students can select the elective courses.
4. Completion of requirements through enrollment in general elective courses, amounting to at least 12 credits (10 credits in a three-year program), of which 6 credits are for mandatory enrichment courses.

B. Recommended course of study/curriculum

1. The unit must submit a recommended course of study for 8 semesters (6 semesters in a three-year program).

2. The recommended curriculum will apply to students who begin their studies in the winter semester or spring semester following the approved curriculum.

3. The curriculum must meet the following criteria:

- Completion of fundamental courses within the first 5 semesters.
- The curriculum must comply with the prerequisites and corresponding requirements, as specified in the syllabus.
- The number of credits per semester will be between 18-22 (18-20 in the first semester), and attention should be paid for ensuring that the number of contact hours is reasonable; 30 contact hours is typically the maximum.
- The number of final exams per semester in the recommended curriculum should not exceed 7.
- The “Advanced Technical English B” course was included in one of the first three semesters.

C. Syllabi for new courses or changes to a syllabus

D. Additional guidelines

1. The curriculum and prerequisites should allow a competent student to complete their studies within 7 semesters, without enrolling in a summer semester; the recommended curriculum should be examined through the perspective of the student.

2. Making changes to foundational courses will be possible once every 3 years, with the exception of turning a mandatory course into an elective course.

E. Disclaimer

An explicit statement that the curriculum meets the credit accrual guidelines, as well as the requirements and criteria included in detail below. If there are any deviations, the statement must indicate this explicitly and the matter will be brought up for discussion within the Standing Committee for Undergraduate and Graduate Studies.

Appendix B: Procedure for Establishing Tracks and New Specializations

Definitions:

- Track – a program of study that leads to a separate degree.
- Specialization – a program of study with a particular concentration for which the student’s participation is recorded only on the transcript.

When an academic unit, with the approval of its council, proposes to establish a new track that leads to a separate degree, a proposal for approval shall be submitted to the Standing Committee through the Academic Development Committee. When an academic unit decides, through its council, to establish a new specialization within the framework of the study program, it shall be sent to the Standing Committee for approval. Approval for new courses within the same

specialization shall be carried out in accordance with the existing procedure for approving courses.

Appendix C: Decisions of the Kogan Committee for Foundational Studies

1. Foundational courses will be offered to all academic units at the Technion. There will be no course adjustments for academic units due to special arrangements. The topics in the foundational courses will be determined by the units responsible for them (mathematics, physics, chemistry, biology, English, and computer science) in collaboration with committees that will be determined by the Senior Vice President for each of the units. These committees will condense the needs brought up by the units receiving the services, thus assisting in the construction of the foundational courses.

2. The Faculty of Architecture and Town Planning, the Faculty of Medicine, the Faculty of Biology, and the area of Economics and Management in the Faculty of Industrial Engineering and Management will be exceptions. Committees shall be established that will discuss the framework for foundational courses in their units.

3. There will be a requirement to complete 40 credits of foundational courses. These credits will be divided as follows:

15 credits in mathematics courses,

12 credits in the natural sciences (Physics, Chemistry, and Biology),

4 credits in Introduction to Computers,

3 credits for Technical English,

6 credits to be selected from Mathematics courses and Natural Sciences courses.

4. In the Science units (Mathematics, Physics, Chemistry, and Biology), it will be mandatory to take courses that total a minimum of 6 credits from the basket of courses in the Natural Sciences, which are not offered by the unit itself.

5. The choice of courses from the Mathematics and Natural Sciences baskets will be made by each unit, in accordance with its needs. For example, a unit can choose some of the courses from the baskets of natural sciences and physics, and some of the courses from chemistry or biology.

6. Within the framework of general studies, special divisions will be organized and each of them will include a number of relevant courses.

Appendix D: Exam Procedures and the Provision of Grades

1. Purpose

The purpose of this procedure is to establish rules for exams and the provision of grades, as is customary at the Technion.

2. Instructor responsible for the course; standardized assessment

For each course that is offered by more than one instructor, the head of the unit offering the course will appoint an instructor who will be responsible for that particular course. In addition to the instructor's role of being responsible for the course, this instructor will also be responsible for the exam, grades, and grade appeals in the course; will ensure that the exam is uniform across all instructors; and will ensure that the assessment method is identical for all students enrolled in the course. The Dean of Undergraduate Studies may approve exceptions to these instructions. The instructor in charge will be the one who will approve the grades given by the instructors who teach the course and the graders of the exam.

3. Method of teaching for the course; exams; grade components

At the start of the course, teachers must specify the teaching objectives and requirements to the students of the course, including attendance requirements, exams, assignments, quizzes, tours, etc., as well as the implications arising from partial fulfillment of course requirements. The details of the material that will be taught in the course will be included on the course syllabus, as determined by the course instructor, in addition to the material that will be taught in class. At the start of the course, and at the latest within the first two weeks of the semester, the instructor will determine the components of the final grade, the weight of each component and how each component will be weighed, and will inform the students of this in writing or on the course website. If exams will be held in the course, the instructor must inform the students in advance what type of exams will be included. The instructor of the course cannot change the components of the final grade during the semester, except in exceptional circumstances and with the approval of the head of the academic unit. The instructor appointed to be responsible for the course will also be responsible for all that is stated in this section (see point 2 above).

Exams are typically held at the end of each semester. Students who have fulfilled the academic requirements of the course and paid tuition, in accordance with their obligation and subject to tuition regulations, will be permitted to take the exam. Final exams include a first date of exam (Moed A) and a second date of exam (Moed B). Tests given during the course of the semester typically only have one date on which students can take the test.

4. Exam arrangements; performance evaluations; multiple-choice exams

- 4.1 The purpose of the exam is to evaluate students' understanding of the course material.
- 4.2 In accordance with the schedule, as determined by the Undergraduate Studies Secretariat, the instructor responsible for the course will prepare the exam. It is advisable for the instructor in charge of the course to consult with the other instructors, who are also proficient in the course material, to ensure that the exam addresses the material specified in the syllabus, that there are no errors in the questions and that they are clearly worded, that the duration of the exam is reasonable and that the exam content matches with the course content. The instructor will be in charge of getting the exam printed and copied, as well as for holding onto it and bringing it to the exam location. If necessary, the instructor will be able to enlist the services of the Undergraduate Studies Secretariat to make copies of the exam while ensuring its confidentiality.
- 4.3 The relative weight of each question should be specified in the exam questionnaire. It is also recommended that the relative weight of each component of the question, if applicable, be specified in the exam questionnaire.
- 4.4 Any exams that include multiple-choice questions ("American" style questions) should have at least three exam versions. In other words, there must be at least three exam forms that will have the questions and/or answer choices appear in different orders.
- 4.5 For oral exams, it is recommended that they be conducted in the presence of at least two examiners/graders.

5. Exam dates; exam rooms; exam duration

- 5.1 The exam schedule will be determined and published for the students to see prior to the course registration period. After the exam schedule is published, it is strictly forbidden to make changes/cancellations/additions. If a need arises to make changes/cancellations/additions due to justifiable reasons, a written process will take place (as opposed to a verbal one) such that the faculty teaching the course will submit an organized request to the Dean of Undergraduate Studies. The instructor will commit to solving any problems that arise as a result of the change. The request will be approved if the following conditions are met:
 1. All students provide their consent in writing.
 2. The change is acceptable to the instructor.
 3. There are available rooms to hold the exam.
 4. The faculty making the request will take care of announcing the change.
- 5.2 The exam schedule and exam rooms will be determined by the Secretary of Undergraduate Studies, after receiving, in

advance, the list of exams, including exam durations, dates, and other requirements, from the unit.

5.3 As a general rule, the time allotted for the exam may not exceed three hours in total. Any deviation from this rule requires the approval of the unit's undergraduate division and the Dean of Undergraduate Studies.

6. Identification of examinees; instructions for examinees; instructions for exam supervisors; exam supervision

6.1 Examinees must arrive to the exam room at least 10 minutes prior to the start of the exam with their student ID or their ID card. Students who do not have an ID card can only take the exam after the course instructor identifies them, or if an appropriate arrangement has been made between the student and the instructor.

6.2 Students must be seated in specified room that they were assigned to take the exam, and not in a room of their choosing. If a list of seating arrangements has been prepared, students must sit only in the seat designated for them and not in another seat of their choosing.

6.3 The Secretary of Undergraduate Studies shall notify the heads of the units regarding the number of supervisors that are required to be in each room.

6.4 Students will act in accordance with the instructions given by the exam supervisors while in the exam room. The exam supervisor may, at his/her discretion, move a student to another seat at any time. Upon entering the exam rooms, students will leave their belongings at the entrance (including electronic means of communication which must be turned off). They will only come into the exam room with the material that is permitted for the exam, will sit in the place designated for them by the supervisor and will avoid having any conversations. During the entirety of the exam, it is forbidden to have within reach, in the exam room, or next to the exam room any material that is related to the exam itself or the subject of the exam, except for material that has been permitted by the instructor. If a calculator is needed for the exam, only simple scientific calculators that have no means of communication can be used.

6.5 A student who enters the exam room and receives the exam is considered to have participated in the exam. Students may not leave the exam room during the first hour except for going to the bathroom, as specified in Section 6.7 below. Students will not be allowed to enter the exam room after 30 minutes or more have passed during the start of the exam.

6.6 The course instructor, or someone appointed by him/her, must be present at the start of the exam and be available throughout the exam to answer students' questions. In cases in which the exam is supervised by external supervisors, the instructor must arrive to the exam room

prior to the start of the exam to guide the supervisors. The role of external supervisors is to oversee the exam only. Any deviation from the guidelines for supervisors is conditional on the approval of the Dean of Undergraduate Studies and with prior coordination.

6.7 For exams that last two or more hours, bathroom breaks will be permitted during the middle third of the exam. Bathroom breaks will be conducted in an orderly manner by the supervisors.

6.8 In very exceptional circumstances, the instructor in charge, or someone on his/her behalf, may decide to provide extra time on the exam for all students. Extra time for certain students will be given on the basis of approval from the Dean of Undergraduate Studies only; the instructor must respect this approval. The student must bring with him/her the time extension approval and present it to the supervisors at the exam. All students eligible for time extensions will sit in a separate room (if possible) that will be devoted for time extensions.

6.9 If additional supervisors are needed (in addition to the external supervisors and the course instructors and their assistants), the head of the unit will utilize the list of assistants and instructors in the unit and divide the supervision load among them. Adjunct instructors will only supervise exams that they teach. The remainder of the instructors in the unit and all the assistants and facilitators will supervise the exams in the unit, in accordance with the instructions of the head of the unit. For exams in which there are no external supervisors, the supervisors will receive a copy of the "Instructions for Exam Supervisors" document from the Undergraduate Studies Secretariat and will fulfill their role accordingly. Any unusual event during the exam will be reported on the supervision form.

7. Grading exams; publishing grades

7.1 The instructor in charge of the course is responsible for the grading of the exams. Written exams and tests conducted at the exam dates stipulated in Section 2.2.3 of the Undergraduate Studies Regulations and Procedures will be graded without seeing the name of the examinee on the exam notebook. The instructor in charge of the course can be assisted by assistant instructors, but the final grade must be provided by him/her only. If there is no option to do so logistically, then it will be done by another senior instructor, as determined by the head of the unit. It is recommended that teaching assistants and undergraduate students who grade practicums do not grade final exams.

7.2 The instructor in charge of the course will be personally responsible for submitting the list of students' scores in the course to the unit's Undergraduate Studies Secretary. The grades will be sent from the instructor to the head of the academic unit responsible for teaching the course, and if

he/she has no reservations, the grades will be sent for publication. The course instructor is responsible for publishing course grades within 10 days from the date of the exam.

7.3 Students may take the exam on the first date that it is offered (Moed A) and/or the second date that it is offered (Moed B). It is recommended that students take the exam on the first date. Students are not allowed to take three exams for the same course in the same semester. In all cases in which a student takes more than one exam in a given course, the last grade that they received will be the final grade.

7.4 Students may receive a photocopied or scanned copy of their exam notebook within a reasonable amount of time following the publication of grades.

8. Grade appeals

8.1 Students may file an appeal within 4 days of when a copy of their exam notebook becomes available.

8.2 The appeal must be submitted in writing on a form that can be obtained from the unit. The student must specify his/her reasons for filing the appeal on the form. The student filing

the appeal will be made aware that the entire exam may be re-graded, and not just the sections that he/she specified in the appeal. Thus, the appeal may result in no change to the grade, a higher score or a lower score. There is no right to appeal a grade on an oral exam.

8.3 The course instructor must respond to appeals within a reasonable amount of time (no later than one week before the second exam date). An instructor who wishes to change a grade, must submit a reasoned request to be approved by the Dean of Undergraduate Studies. Any grade change requests submitted to the Undergraduate Studies Secretary long after the publication of the grade, must be reasoned and detailed and must receive approval from the undergraduate studies division in the unit. These types of requests will be brought for approval by the Dean of Undergraduate Studies.

9. Holding on to exam notebooks

After the exams, exam notebooks are to be kept by the instructor for one year. After this period of time, the notebooks can be destroyed.



International Program Students at the Graduation Ceremony

Specializations at the Technion

Secondary Specialization in Entrepreneurial Leadership

A new program designed for students across all faculties at the Technion.

The secondary specialization in entrepreneurial leadership will consist of three academic layers (worth a total of 10 credits):

1. Faculty courses on entrepreneurship in the field of knowledge of the faculty – mandatory (2 credits).
2. Entrepreneurial leadership course in the Department of Humanities in collaboration with the Center for Entrepreneurship and Innovation at the Technion – mandatory (2 credits).
3. Cluster of elective courses (6 credits, choice of 3 courses from a total of 10 courses that are offered) in the Department of Humanities in collaboration with the Center for Entrepreneurship and Innovation at the Technion.

The specialization is intended for undergraduate students of the Technion. As part of the specialization, students will take courses on a variety of topics covering the theory, practical experience, and application of 'entrepreneurial leadership'.

Admission Requirements

Undergraduate students at the Technion who meet the following conditions will be able to apply:

1. Successfully completed courses totaling at least 36 credits.
2. Cumulative GPA above 75.

Each student's application must be submitted to the Undergraduate Studies Secretariat of the faculty.

Eligibility for the Specialization Certificate

As part of the specialization, students must complete at least 10 credits, 5 of which will be from the framework of the student's degree and the rest will be considered to be beyond the degree requirements. In order to receive a specialization certificate, the following requirements must be met:

- A. Completing the degree requirements of the primary degree program in which the student is enrolled.
- B. Completion of the mandatory courses:
 1. Entrepreneurial Leadership – 2 credits
 2. Technological/Scientific Leadership in the faculty within the field of knowledge required – 2 credits
- C. At least 3 elective courses from the 'Entrepreneurial Leadership' basket of courses. These courses are recognized as courses of The Council for Higher Education:
 1. Fundamentals of Entrepreneurship – 2 credits
 2. Management of Entrepreneurial Projects – 2 credits
 3. Leadership and Social Entrepreneurship – 2 credits
 4. Business Entrepreneurship – 2 credits
 5. Harnessing the Business Ecosystem – 2 credits
 6. Entrepreneurial Leadership in Organizations – Developments and Trends – 2 credits
 7. Legal Aspects of Business Entrepreneurship – 2 credits
 8. Marketing for Entrepreneurs – 2 credits
 9. High-Tech in Israel – A Strategy for Preserving Global Leadership – 2 credits
 10. Usability of Software Interfaces – 2 credits
 11. Design Thinking – 2 credits
 12. Creativity, Innovation and Happiness – 2 credits