

Engineering Geology

Course No.	Course Title	Weekly teaching hours	Weekly tutorial hours	Weekly lab hours	Field Exc.	No. of Credits	Semester
201-19091	Introduction to Probability A	2	1	-	-	2.5	A
201-19141	Calculus C1	4	2	-	-	5	A
201-19151	Calculus C2	4	2	-	-	5	B
201-19281	Introduction to Linear Algebra C	3	1	-	-	3.5	B
201-19421	Introduction to Statistics A	2	1	-	-	2.5	B
206-12071	Introduction To Geomechanics	2	1	-	-	2.5	A
206-23921	Rock Mechanics	2	1	-	-	2.5	A
374-11021	Introduction to Structural Mechanics	3	2	-	-	4	A
374-11051	Strength of Materials 1 for Structural Engineers	3	2	-	-	4	B

Required courses for acceptance to the Engineering track, for students with a first degree in geology/geophysics. No credits towards MSc awarded for these courses

Required courses for acceptance to the Engineering track for students with קורסי חובה הנדרשים לקבלה למגמה הנדסית לתלמידים שסיימו a first degree in Engineering. No credits granted towards MSc

206-11031	Introduction to Mineralogy and Rocks	2	1	2	2	4	A
206-11041	Introduction to Dynamic Geology	2	-	2	2	3.5	B
206-12071	Introduction To Geomechanics	2	1	-	-	2.5	A
206-12251	Mapping	2	-	-	6	3.5	B
206-13041	Introduction to Geophysics	2	1	-	-	2.5	A
206-13091	Plate tectonics	2	1	-	-	2.5	B
206-23921	Rock Mechanics	2	1	-	-	2.5	A

required courses within the department for the Engineering Geology track (6.25(ז"ר) 6.25) קורסי חובה במחלקה למגמה לגיאולוגיה הנדסית (credits)

Course No.	Course Title	Weekly teaching hours	Weekly tutorial hours	Weekly lab hours	Field Exc.	No. of Credits	Semester
206-23861	Rock Tunneling	2	-	-	1	2.25	B
206-23871	Rock Slope Stability	2	1	-	2	3	A
206-24261	Seminar A	2	-	-	-	0	A
206-24271	Seminar B	2	-	-	-	0	B
206-24321	Research Seminar	1	-	-	-	1	B
206-25341	Seminar C	2	-	-	-	0	A,B
206-28880	Research	-	-	-	-	15	A,B

required courses outside the department, for the Engineering Geology track (2.5 credits)

374-13041	Foundation Engineering	2	1	-	-	2.5	B
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)Elective courses for the Engineering Geology track (3.25 credits)

201-19461	Ordinary Differential Equations for ME	3	1	-	-	3.5	A
202-19031	Computer Programming in CB	3	2	-	-	4	A/B
202-13011	Introduction to Numerical Analysis	4	1	-	-	4.5	A/B
206-23931	Earthquake Science	4	-	-	-	4	A
206-24021	Earthquake Science	2	-	-	-	2	A
206-24501	Petroleum Geology	3	-	-	-	3	A
206-24851	Advanced Field Geology	2	-	-	6	3	B
206-25241	Seismic Hazards	2	-	-	-	2	B
206-25401	Geomorphology: Mechanics and Evolution of Landscapes	3	2	-	2	4.5	A
206-25061	Oil and Gas Reservoir Engineering	2	-	-	-	2	B
206-26201	Petrophysics and Well Logging	2	-	1	-	2.5	A
206-26091	Introduction to exploration geophysics	3	-	-	-	3	B

Course No.	Course Title	Weekly teaching hours	Weekly tutorial hours	Weekly lab hours	Field Exc.	No. of Credits	Semester
206-26181	Basin and Petroleum Systems Modeling: Applications for Conventional and Unconventional Pet	1				1	A
362-12221	Dynamics	3	2	-	-	4	A
362-16051	Structural Dynamics	3	-	-	-	3	A
374-12080	Or- Structural Dynamics	3	2	2	-	5	A
362-12311	Mechanics of Fluids 1	3	1	-	-	3.5	B
362-13111	Introduction to the Theory of Elasticity	3	-	-	-	3	A
374-13061	Theory of Elasticity	3	-	-	-	2.5	
374-11081	Structural Analysis I	2	2	-	-	3	B
374-12010	Strength of Materials 2 for Structural Engineers	3	2	-	-	4	A
374-12020	Structural Analysis II	2	2	-	-	3	A
374-14011	Numerical Methods in Structural Engineering	2	2	-	-	3	
374-14112	Tunneled Protective Structures	2	-	-	-	1.5	B

* equivalent

Note: Additional electives with approval of supervisor. 15 additional credits in the department (or engineering, mathematics or