



Master's Degree in Biomedical Engineering (Research Track)

Degree in

M.Sc. Biomedical Engineering

Academic years:

2023-2024

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1. Overview

1.1. General Overview

תשפ"ד 2023-2024 Academic year

Biomedical Engineering is a discipline that advances knowledge in engineering, biology, and medicine to improve human health through multidisciplinary study and research that combines engineering sciences, medical sciences, and clinical medical care.

Biomedical Engineering includes:

- Understanding of living systems through the application of experimental and analytical techniques based in engineering methods.
- Developing new equipment, algorithms, processes, and systems that advance biology and medicine and improve medical care.
- Biomedical engineering, at universities in Israel and around the world, has grown out of traditional engineering fields, developed, and become an independent field in its own right. At Tel Aviv University, biomedical engineering has been defined as a preferred field. The industry in this field is developing very rapidly, and the number of companies established to develop innovative ideas in the medical field is growing at a rapid pace.
- Tel Aviv University serves as an optimal center for research and teaching in the field of biomedical engineering. The campus houses the faculties of engineering, exact sciences, medicine, and life sciences, which conduct high-level scientific activity. In the area, there are many medical centers that maintain research connections with the university, as well as many industrial companies in the field located in the central region.
- The graduate program in the Department of Biomedical Engineering at Tel Aviv University includes master's and doctoral programs in four main areas of study: biomaterials, biomechanics, bioelectronics, and bio-optics.

- The degree program includes the study of research and development methods, measurement methods, equipment, algorithms, and engineering models in various fields of medicine and biology.
- The department maintains contact with the industry by incorporating applied topics into the curriculum and final projects.
- The department is also open to graduates of non-engineering faculties such as exact sciences, medicine, and life sciences, who are required to complete courses in biomedical engineering and life sciences according to the student's background and study track.
- New students must successfully complete prerequisite courses according to their undergraduate background and with the approval of the master's program director.

Graduates will receive the degree:

Master of Science (M.Sc.) in Biomedical Engineering

1.2. Curriculum Structure

6 Credit hours

Mandatory - faculty classes

18 Credit hours

Department classes

12 Credit hours

Thesis

-

Thesis defense

-

Departmental seminar

Degree hour cap: 24

1.3. Regulations

Master's Degree Study Regulations

2. Curriculum

The requirements for obtaining the degree in this track:

- Completion of courses totaling at least 24 credits, with an average grade of at least 75.
- Writing a thesis, totaling 12 hours, in accordance with the regulations for advanced degrees – Master's degree.
- Participation in 14 departmental seminars.

Study Phases: In general, the M.Sc. studies in the Faculty of Engineering include two stages:

1. "Accumulation Studies" stage.
2. "Regular Studies" stage.

Accepted candidates will be admitted directly to the "Regular Studies" phase.

M.Sc. candidates that are required to complete preparatory studies – will be admitted to preparatory studies.

Accumulation Phase:

- The accumulation phase must be completed within a maximum of three academic years.
- Each year during the accumulation phase, at least 3 courses must be taken.
- A student in the accumulation phase must successfully complete the school's mandatory courses (including re-enrollment after failure, if

required) no later than the end of the fourth semester of their studies. It is therefore recommended to enroll in all mandatory courses during the first year of studies, so that any failure can be corrected by the end of the second year of studies.

- The accumulated courses must have an average grade of at least 70, and all mandatory school courses must be successfully completed. In any study track, the student must take at least 25% of the courses in the “Regular Studies” status.
- A student in the accumulation phase who transitions to full-time studies will move to the “Regular Studies” status.

2.1. Faculty Mandatory Classes

It is mandatory to take two courses from the mathematics courses in the study program. The instructor may suggest substituting one of the two courses with another mathematics course at the same level.

<u>0510-5001</u>	Class method	Total Hours	Weighted Score
Differential and Integral Equations	Lecture 3 credit hours	3	3
• Will not open in 2023-2024			
<u>0510-5002</u>	Class method	Total Hours	Weighted Score
Functional Analysis	Lecture 3 credit hours	3	3
<u>0510-6202</u>	Class method	Total Hours	Weighted Score
Fundamental Theorem	Lecture 3 credit hours	3	3
Prerequisites			
Random signals and noise (0512-3632)			
<u>0540-5001</u>	Class method	Total Hours	Weighted Score

Mathematical Methods in Engineering	Lecture 3 credit hours	3	3
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[Prerequisites](#)

Composite Functions (0509-2844)

Updates

1. in the academic year 2023-2024 it's possible to enroll into "mathematical methodology" and a substitute for course 0510.5001 that will not open 15/08/2023.

2.2. Departmental Mandatory Classes

18 credits must be accumulated through departmental elective courses.

'parallel level' courses: Selected courses from the undergraduate program defined as "equivalent level courses" will be approved as graduate courses provided they or similar ones were not taken during the bachelor's degree. In the research track, no more than 6 credits will be recognized.

It is possible to take up to two extra-departmental courses with the approval of the thesis instructor or the academic supervisor for the M.Sc. studies.

18 total credits hours | 18 total weighted credit hours

<u>0148-1007</u>	Class method	Total Hours	Weighted Score
Exercise Physiology	Class & practice Lecture 3 credit hours	3	3

- The course is offered within the School of Public Health. Biomedical engineering students are required to complete an assignment on the topic of "Sports Technologies," equivalent to one academic hour, in addition to the other course tasks.

<u>0510-7003</u>	Class method	Total Hours	Weighted Score
Scientific Writing in English	Lecture 3 credit hours	3	3

0 personal
guidance hours

- 2 lecture hours + 2 personal guidance hours. Does not grant credits.
- Recommended for students continuing to a doctoral track

<u>0540-5325</u>	Class method	Total Hours	Weighted Score
Micro- and Nano-Flow Technologies for Biomedical and Environmental Applications	Lecture 3 credit hours	3	3
Prerequisites Fluid Mechanics (1) (0542-2500)			
<u>0540-5327</u>	Class method	Total Hours	Weighted Score
Flow in the Cardiovascular System	Lecture 3 credit hours	3	3
<u>0553-5155</u>	Class method	Total Hours	Weighted Score
Artificial Biological Systems	Lecture 3 credit hours	3	3
<u>0553-5160</u>	Class method	Total Hours	Weighted Score
From Lab to Plate: the Science and Future of Cultured	Lecture 3 credit hours	3	3
<u>0553-5332</u>	Class method	Total Hours	Weighted Score
Biomedical Drug-Releasing Devices	Lecture 3 credit hours	3	3
Prerequisites Bio-Matter (0555-3150) or Introduction to Materials Science and Engineering (0542-1830)			

<u>0553-5335</u>	Class method	Total Hours	Weighted Score
Natural Polymers for Biomedical Applications	Lecture 3 credit hours	3	3

- Will not open in 2023-2024

Prerequisites

Bio-Matter (0555-3150)

<u>0553-5340</u>	Class method	Total Hours	Weighted Score
Stochastic Thermodynamics in Biology	Lecture 3 credit hours	3	3

Prerequisites

Thermodynamics and Statistical Mechanics (0555-2401)

<u>0553-5344</u>	Class method	Total Hours	Weighted Score
Selected Subjects in Biological Tissue Biomechanics	Lecture 3 credit hours	3	3

- Will not open in 2023-2024

Prerequisites

Cell Biology (0555-1101) **and**
Physiological Systems in Humans (0555-2106) **and**
Cell and Tissue Engineering (0555-3160)

<u>0553-5346</u>	Class method	Total Hours	Weighted Score
Pathomechanics of Injury and Disease in Tissue, and Mechanobiology of Healing	Lecture 3 credit hours	3	3

Prerequisites

Biomechanics (0555-3140) **and**
Biomaterials (0555-3150) **and**
Cell and Tissue Engineering (0555-3160) **and**
Cell and Tissue Engineering Research Methodology (2) (0555-4760)

<u>0553-5349</u>	Class method	Total Hours	Weighted Score
Regulation and Control Mechanisms in the Cardiovascular System	Lecture 3 credit hours	3	3

Prerequisites

Physiological Systems in Humans (0555-2106)

<u>0553-5370</u>	Class method	Total Hours	Weighted Score
Principles and Applications of Stem Cells for Medical Uses	Lecture 3 credit hours	3	3

Prerequisites

Physiological Systems in Humans (0555-2106)

<u>0553-5510</u>	Class method	Total Hours	Weighted Score
Advanced Optical Microscopy and Its Applications in Biomedicine	Lecture 3 credit hours	3	3

Prerequisites

Optics and Lasers in Medicine (0555-4530)

<u>0553-5532</u>	Class method	Total Hours	Weighted Score
Biomedical Systems Design	Lecture 3 credit hours	3	3

<u>0553-5512</u>	Class method	Total Hours	Weighted Score
Advanced Interferometric Imaging Methods	Lecture 3 credit hours	3	3

Prerequisites

Optics and Lasers in Medicine (0555-4530)

<u>0553-5542</u>	Class method	Total Hours	Weighted Score
Image and Medical Data Processing with Deep Learning Tools	Lecture 3 credit hours	3	3

Prerequisites

Computer Vision (0510-6251) **or**
 Medical Image Processing (1) (0555-3120) **or**
 Medical Image Processing (2) (0555-4520)

<u>0553-5548</u>	Class method	Total Hours	Weighted Score
Optical Diagnostic Methods in Medicine	Lecture 3 credit hours	3	3

Prerequisites

Optics and Lasers in Mmedicine (0555-4530) **or**
 Introduction to Lasers (0512-4601) **or**
 Electromagnetic Fields and Waves for Biomedical **or**
 Electromagnetic Fields (0512-2525)

<u>0553-5550</u>	Class method	Total Hours	Weighted Score
Nanomedicine	Lecture 3 credit hours	3	3

<u>0553-7000</u>	Class method	Total Hours	Weighted Score
Practical Ethics for Engineering and Science Students	Lecture 3 credit hours	3	3

<u>0553-7950</u>	Class method	Total Hours	Weighted Score
Biomedical Issues - Advanced Research Seminar	Seminar Lecture 3 credit hours	3	3

<u>0555-4432</u>	Class method	Total Hours	Weighted Score

Biomedical System Planning	Lecture 3 credit hours Exercise 0 credit hours	3	3
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- Parallel Level

0555-4510	Class method	Total Hours	Weighted Score
Methods and Systems for Processing Physiological Signals	Lecture 3 credit hours Exercise 0 credit hours	3	3

- Parallel Level

Prerequisites

Introduction to Signal Processing (0555-1203) **and**
Physiological Systems in Humans (2) (0555-2250)

0555-4520	Class method	Total Hours	Weighted Score
Medical Image Processing (2)	Lecture 3 credit hours Exercise 0 credit hours	3	3

- Parallel Level

Prerequisites

Medical Image Processing (1) (0555-3120)

0555-4530	Class method	Total Hours	Weighted Score
Optics and Lasers in Medicine	Lecture 3 credit hours Exercise 0 credit hours	3	3

- Parallel Level

Prerequisites

Physics (2) (0509-1829) **and**
Basic Electronics (0512-1202)

<u>0555-4540</u>	Class method	Total Hours	Weighted Score
Introduction to Computational and Systematic Genomics	Lecture 3 credit hours Exercise 0 credit hours	3	3

- Parallel Level

Prerequisites

Probability for Biomedical Engineering Students (0555-1140) **and** Cell Biology (0555-1101)

<u>0555-4560</u>	Class method	Total Hours	Weighted Score
Electrical Signals and Conductivity in Cells	Lecture 3 credit hours Exercise 0 credit hours	3	3

- Parallel Level

Prerequisites

Physiological Systems in Humans (2) (0555-2250) **and** Partial Differential Equations (0509-2846)

<u>0555-4561</u>	Class method	Total Hours	Weighted Score
Continuous Sensing of Physiological Parameters	Lecture 3 credit hours Exercise 0 credit hours	3	3

- Parallel Level

Prerequisites

Statistics for Biomedical Engineering (0555-2240) **and** Introduction to Signal Processing (0512-1203) **and** Introduction to Data Science for Engineers (0555-3121)

<u>0555-4562</u>	Class method	Total Hours	Weighted Score
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Introduction to Ultrasound: Imaging and Therapy	Lecture 3 credit hours Exercise 0 credit hours	3	3
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- Parallel Level

[Prerequisites](#)

Introduction to Signal Processing (0512-1203)

<u>0555-4563</u>	Class method	Total Hours	Weighted Score
Advanced Magnetic Imaging Methods and Their Applications in Research and Clinics	Lecture 3 credit hours Exercise 1 credit hour	4	3

- Parallel Level

<u>0555-4570</u>	Class method	Total Hours	Weighted Score
Engineering Introduction to Magnetic Resonance Imaging (MRI)	Lecture 3 credit hours Exercise 0 credit hours	3	3

- Parallel Level

[Prerequisites](#)

Physics (2) (0509-1829) **and**

Introduction to Signal Processing (0555-1203)

<u>0555-4575</u>	Class method	Total Hours	Weighted Score
Introduction to Cellular Coherent Optical Imaging	Lecture 3 credit hours Exercise 0 credit hours	3	3

- Parallel Level

[Prerequisites](#)

Electromagnetic Fields and Waves for Biomedical (0555-3115)

<u>0555-4630</u>	Class method	Total Hours	Weighted Score
Polymeric Biomaterials	Lecture 3 credit hours Exercise 0 credit hours	3	3

- Parallel Level

[Prerequisites](#)

Bio-Matter (0555-3150) **and**

Cell and Tissue Engineering (0555-3160)

[Parallel Requirements](#)

Cell and Tissue Engineering (0555-3160)

<u>0555-4711</u>	Class method	Total Hours	Weighted Score
Mechanics of Cells and Tissues: Application to the Neuro-Musculo-Skeletal System	Lecture 3 credit hours Exercise 0 credit hours	3	3

- Parallel Level

[Prerequisites](#)

Physiological Systems in Humans (2) (0555-2250) **and**

Solid Mechanics (0555-3160) **and**

Fluid Mechanics (0555-2403) **and**

Introduction to Signal Processing (0555-1203)

<u>0555-4712</u>	Class method	Total Hours	Weighted Score
Introduction to Neuroprosthetics	Lecture 3 credit hours Exercise 0 credit hours	3	3

- Parallel Level

[Prerequisites](#)

Physiological Systems in Humans (2) (0555-2250)

<u>0555-4713</u>	Class method	Total Hours	Weighted Score
Biomechanics of Human Body Protection	Lecture 3 credit hours Exercise 0 credit hours	3	3

- Parallel Level

<u>0555-4715</u>	Class method	Total Hours	Weighted Score
Introduction to Intracellular Engineering and iGEM	Lecture 3 credit hours Exercise 0 credit hours	3	3

- Parallel Level

Prerequisites

Probability for Biomedical Engineering Students (0555-1140) **and**
 Statistics for Biomedical Engineering (0555-2240) **and**
 Ordinary Differential Equations (0509-1845) **and**
 Cell Biology (0555-1101) **and**
 Introduction to MATLAB Workshop (0509-1000)

<u>0555-4716</u>	Class method	Total Hours	Weighted Score
Project in Synthetic Biology, Intracellular Engineering, and iGEM: part 1	Lecture 3 credit hours Exercise 0 credit hours	3	3

- Parallel Level

<u>0555-4717</u>	Class method	Total Hours	Weighted Score
Project in Synthetic Biology, Intracellular Engineering, and iGEM: part 2	Lecture 3 credit hours Exercise 0 credit hours	3	3

- Parallel Level

Prerequisites

Project in Synthetic Biology, Intracellular Engineering, and iGEM: part 1 (0555-4716)

2.3. Thesis

12 credit hours in total.

2.4. Thesis Defense

2.5. Departmental Seminar

Mandatory participation in 14 departmental seminars during the course of the degree and presentation of a seminar.

3. Timetable – Academic Year 2023-2024

3.1. Mandatory Classes

Functional Analysis [0510-5002](#)

Group	Class Method	Frequency	Semester	Lecturer	Location	Date
01	Lecture	Weekly	2 nd	Prof. Goerge Wise		Thursday 15:00-18:00

The course is presented in English

Fundamental Theorem [0510-6202](#)

Group	Class Method	Frequency	Semester	Lecturer	Location	Date
01	Lecture	Weekly	2 nd	Dr. Anatoli Hina		Wednesday 15:00-18:00

Differential and Integral Equations [0540-5001](#)

Group	Class Method	Frequency	Semester	Lecturer	Location	Date
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<u>01</u>	Lecture	Weekly	1 st	Dr. Lior Madina	Bob Shapell School of Social Work	Tuesday 16:00-19:00
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3.2. Departmental Classes

Exercise Physiology [0148-1007](#)

Group	Class Method	Frequency	Semester	Lecturer	Location	Date
<u>01</u>	Lecture	Weekly	1 st	Prof. Mickey Scheinowitz	Skalar Medical School, 100א	Tuesday 14:15-15:45

Scientific Writing in English [0510-7003](#)

Group	Class Method	Frequency	Semester	Lecturer	Location	Date
<u>01</u>	Lecture	Weekly	1 st	Mrs. Monica Broido	Engineering classes building 103	Wednesday 14:00-16:00
<u>02</u>	Personal guidance	Weekly	1 st		Wolfson Mechanical Engineering building 406	Wednesday 14:00-16:00
Online course						
<u>03</u>	Lecture	Weekly	2 nd			Wednesday 16:00-18:00
Online course						
<u>04</u>	Personal guidance	Weekly	2 nd			Wednesday 16:00-18:00
Online course						

Micro Technologies and Nano-Flow for Bio-Medical and Environmental Applications [0540-5325](#)

Group	Class Method	Frequency	Semester	Lecturer	Location	Date
<u>01</u>	Lecture	Weekly	1 st	Dr. Gilad Yossifon	Engineering classes building 001	Wednesday 16:00-19:00

Flow in the Cardiovascular System 0540-5327

Group	Class Method	Frequency	Semester	Lecturer	Location	Date
<u>01</u>	Lecture	Weekly	1 st	Dr. Gil Marom		Thursday 15:00-18:00

From Lab to Plate: the Science and Future of Cultured Meat 0553-5160

Group	Class Method	Frequency	Semester	Lecturer	Location	Date
<u>01</u>	Lecture	Weekly	2 nd	Dr. Ben Meir Maoz		Tuesday 15:00-18:00

Biomedical Drug-Releasing Devices 0553-5332

Group	Class Method	Frequency	Semester	Lecturer	Location	Date
<u>01</u>	Lecture	Weekly	2 nd	Prof. Meital Zilberman		Monday 15:00-18:00

Principles and Applications of Stem Cells for Medical Uses 0553-5370

Group	Class Method	Frequency	Semester	Lecturer	Location	Date
<u>01</u>	Lecture	Weekly	1 st	Dr. Orna Amam Sharbani Yosef	Wolfson Mechanical Engineering building 406	Monday 16:00-19:00

Image and Medical Data Processing with Deep Learning

Tools [0553-5542](#)

Group	Class Method	Frequency	Semester	Lecturer	Location	Date
01	Lecture	Weekly	2 nd	Prof. Hayat Greenshfan		Sunday 15:00-18:00

Nanomedicine [0553-5550](#)

Group	Class Method	Frequency	Semester	Lecturer	Location	Date
01	Lecture	Weekly	2 nd	Dr. Tali Ilovitsh	Engineering classes building 207	Tuesday 09:00-12:00

Practical Ethics for Engineering and Science Students [0553-7000](#)

Group	Class Method	Frequency	Semester	Lecturer	Location	Date
01	Lecture	Weekly	2 nd	Prof. Israel Ganot		Wednesday 15:00-18:00

Biomedical Issues - Advanced Research Seminar [0553-7950](#)

Biomedical System Planning [0555-4432](#)

Group	Class Method	Frequency	Semester	Lecturer	Location	Date
01	Lecture	Weekly	2 nd	Prof. Israel Ganot		Monday 16:00-19:00
02	Exercise	Weekly	2 nd	Mr. Nicolas Lin		Monday 19:00-20:00

Methods and Systems for Processing Physiological Signals

0555-4510

- Parallel Level

Group	Class Method	Frequency	Semester	Lecturer	Location	Date
<u>01</u>	Lecture	Weekly	2 nd	Dr. Or Perlman		Sunday 16:00-19:00
<u>02</u>	Exercise	Weekly	2 nd	Mrs. Yuval Shlibovski		Tuesday 12:00-13:00
<u>03</u>	Exercise	Weekly	2 nd	Mrs. Yuval Shlibovski		Tuesday 13:00-14:00

Medical Image Processing (2) 0555-4520

- Parallel Level

Group	Class Method	Frequency	Semester	Lecturer	Location	Date
<u>01</u>	Lecture	Weekly	2 nd	Prof. Hayat Greenshfan		Sunday 08:00-11:00
<u>02</u>	Exercise	Weekly	2 nd	Mr. Eran Bamni		Wednesday 14:00-15:00
<u>03</u>	Exercise	Weekly	2 nd	Mr. Eran Bamni		Wednesday 11:00-12:00

Optics and Lasers in Medicine 0555-4530

- Parallel Level

Group	Class Method	Frequency	Semester	Lecturer	Location	Date
<u>01</u>	Lecture	Weekly	1 st	Prof. Gili Bisker	Wolfson Mechanical Engineering building 103	Monday 11:00-14:00
<u>02</u>	Exercise	Weekly	1 st	Mr. Eran Borstein	Wolfson Mechanical Engineering building 101	Monday 14:00-15:00

Introduction to Computational and Systematic Genomics

0555-4540

- Parallel Level

Group	Class Method	Frequency	Semester	Lecturer	Location	Date
<u>01</u>	Lecture	Weekly	2 nd	Prof. Tamir Toler		Tuesday 14:00-17:00
<u>02</u>	Exercise	Weekly	2 nd	Mrs. Shir Bahiri Elitzur		Tuesday 17:00-18:00
<u>03</u>	Exercise	Weekly	2 nd	Mrs. Shir Bahiri Elitzur		Tuesday 18:00-19:00

Electrical Signals and Conductivity in Cells 0555-4560

- Parallel Level

Group	Class Method	Frequency	Semester	Lecturer	Location	Date
<u>01</u>	Lecture	Weekly	1 st	Mrs. Shir Bahiri Elitzur	Wolfson Engineering Building 406	Sunday 09:00-12:00
<u>02</u>	Exercise	Weekly	1 st	Mr. David Peled	Engineering classes building 011	Wednesday 09:00-10:00
<u>03</u>	Exercise	Weekly	1 st	Mr. David Peled	Engineering classes building 011	Wednesday 08:00-09:00

Continuous Sensing of Physiological Parameters 0555-4561

- Parallel Level

Group	Class Method	Frequency	Semester	Lecturer	Location	Date
<u>01</u>	Lecture	Weekly	2 nd	Dr. Tzvi Shen'ar		Sunday 11:00-14:00

<u>02</u>	Exercise	Weekly	2 nd	Mr. Dvir Teitelbaum	14:00- 15:00
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Introduction to Ultrasound: Imaging and Therapy [0555-4562](#)

- Parallel Level

Group	Class Method	Frequency	Semester	Lecturer	Location	Date
<u>01</u>	Lecture	Weekly	1 st	Dr. Tali Ilovitsh	Engineering classes building 207	Tuesday 12:00-15:00
<u>02</u>	Exercise	Weekly	1 st	Mrs. Keren Tchelet Karlinski	Wolfson Computer Engineering Building 103	Thursday 08:00-09:00

Advanced Magnetic Imaging Methods and Their Applications in Research and Clinics [0555-4563](#)

Group	Class Method	Frequency	Semester	Lecturer	Location	Date
<u>01</u>	Lecture	Weekly	2 nd	Dr. Tamar Katzir		Monday 09:00-12:00
<u>02</u>	Exercise	Exercise	2 nd	Dr. Tamar Katzir		Tuesday 09:00-10:00

Engineering Introduction to Magnetic Resonance Imaging (MRI) [0555-4570](#)

- Parallel Level

Group	Class Method	Frequency	Semester	Lecturer	Location	Date
<u>01</u>	Lecture	Weekly	1 st	Prof. Noam Ben Eliezer	Engineering classes building 008	Monday 11:00-14:00

02	Exercise	Weekly	1 st	Mrs. Shar Weinrauch	Engineering classes building 001	Wednesday 14:00- 15:00
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Introduction to Cellular Coherent Optical Imaging [0555-4575](#)

- Parallel Level

Group	Class Method	Frequency	Semester	Lecturer	Location	Date
01	Lecture	Weekly	1 st	Prof. Natan Tzvi Shaked	Wolfson Computer Engineering Building 103	Tuesday 14:00- 17:00
02	Exercise	Weekly	1 st		Engineering classes building 008	Monday 18:00- 19:00

Polymeric Biomaterials [0555-4630](#)

- Parallel Level

Group	Class Method	Frequency	Semester	Lecturer	Location	Date
01	Lecture	Weekly	2 nd	Prof. Mital Zilberman		Wednesday 11:00-4:00
02	Exercise	Weekly	2 nd	Mrs. Daniela Godar		Wednesday 14:00- 15:00

Mechanics of Cells and Tissues: Application to the Neuro- Musculo-Skeletal System [0555-4711](#)

- Parallel Level

Group	Class Method	Frequency	Semester	Lecturer	Location	Date
01	Lecture	Weekly	1 st	Prof. Amit gefen	Wolfson Computer Engineering Building 104	Thursday 11:00- 14:00

02	Exercise	Weekly	1 st	Mrs. Ma'ayan Loostig	Wolfson Computer Engineering Building 104	Thursday 14:00-15:00
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Introduction to Neuroprosthetics [0555-4712](#)

- Parallel Level

Group	Class Method	Frequency	Semester	Lecturer	Location	Date
01	Lecture	Weekly	1 st	Dr. Ronen Shoshnik	Bob Shapell School of Social Work 056	Thursday 16:00-19:00
02	Exercise	Weekly	1 st	Dr. Ronen Shoshnik	Bob Shapell School of Social Work 056	Thursday 19:00-20:00

Introduction to Intracellular Engineering and iGEM [0555-4715](#)

- Parallel Level

Group	Class Method	Frequency	Semester	Lecturer	Location	Date
01	Lecture	Weekly	1 st	Prof. Tamir Tuller	Wolfson Computer Engineering Building 106	Thursday 15:00-18:00
02	Exercise	Weekly	1 st	Mr. Nicolas Lin	Wolfson Computer Engineering Building 106	Thursday 18:00-19:00

Project in Synthetic Biology, Intracellular Engineering, and iGEM: part 1 [0555-4716](#)

Group	Class Method	Frequency	Semester	Lecturer	Location	Date
<u>01</u>	Lecture	Weekly	1 st	Prof. Tamir Tuller	Dan David classes 109	Sunday 16:00-19:00
<u>02</u>	Exercise	Weekly	1 st	Mr. Matan Arbel	Dan David classes 109	Sunday 19:00-20:00

Project in Synthetic Biology, Intracellular Engineering, and iGEM: part 2 [0555-4717](#)

Group	Class Method	Frequency	Semester	Lecturer	Location	Date
<u>01</u>	Lecture	Weekly	2 nd	Prof. Tamir Tuller		Sunday 16:00-19:00
<u>02</u>	Exercise	Weekly	2 nd	Mr. Matan Arbel		Sunday 19:00-20:00

3.3 Thesis

3.4 Thesis Defense

3.5 Departmental Seminar