

International Program for Mater in Science (M.Sc.) in Plant Sciences with emphasis on food security

**with the support of Dr. Alex
Rath in honor of his deceased
wife Kathleen Freedman Rath**

ALL YOU NEED TO KNOW

**International Program for Mater in Science (M.Sc.)
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This two-year MSc program will allow you to gain knowledge of the methodology used in plant molecular genetics and cell biological issues; and to study how plants interact with other organisms and adapt to the new environmental changes. Moreover, in view of the challenges of sustainably feeding world growing population, the program introduces relevant courses on food security emphasizing sustainability.

OVERVIEW

This innovative interdisciplinary program, introduced in 2022, and is now open to outstanding students worldwide, interested in obtaining a MSc

in Plant Sciences with an emphasis in Food Security and Safety, with optional thesis.

Today this is the only program of its kind offered in Israel. The program provides you with academic knowledge and a leading faculty, opportunities to gain practical skills, and the chance to be a part of creating a sustainable future.

You will receive excellent research training in plant molecular genetics, biochemistry, cell biology, ecology and bioinformatics, that will allow you to pursue a PhD degree following the fulfillment of an MSc thesis and enter an academic career. Alternatively, as a graduate, you will be ready to approach a great variety of sectors with confidence – using your unique knowledge of Plant Sciences, to impact the future of sustainability and agriculture, as policy maker or future entrepreneur.

PROGRAM HIGHLIGHTS

You'll get to train and engage with world-leading academics, field experts, and policymakers from across the globe.

Get exposed to the cut-edge course on Cultivated and Plant-Based meat.

Learn the physiological and pathological aspects related to the way for extending shelf life of the fresh produce.

Study in Israel, a country renowned for its leadership and innovative approaches to food safety and security.

Take advantage of an optional thesis track.

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Curriculum

TOTAL 36 CREDITS

Mandatory Courses

16 credits

1. Safety Course - mandatory during the first year (no credit)
2. Group research Seminar (2 credits)
3. Student Seminar - School of Plant Sciences (2 credits)

And one out of the following courses:

| <u>Option 1</u> | <u>Option 2</u> |
|---|---|
| Biostatistics (4 credits) | Alternatively -Principals of experimental statistics (5 credits) |
| Advance topics in Plant Biology A (2 credits) | Advance topics in Plant Biology B (2 credits) |
| Research Project, including a written report (6 credit) | Research Project, including a written report (6 credit) |

*"Advance in Plant Biology" courses are provided in alternating years

Elective Courses

In order to add "Food Security" emphasis to the transcript, the student must take at least 1/4 of the elective courses in Food Security.

| Title of Course | Lecturer | Credits |
|--|--|---------|
| Cultivated and Plant-Based Meat | Prof. Nir Ohad \Dr. Nachman Iftach | 2 |
| Approaches for Formulation of plant protection | Dr. Nir Sade/Dr. Roy Weinstain | 2 |
| Scientific Writing | Ms. Harriet Brand-Rubin | 4 |
| Introduction to food security (Every Other Year) | Prof. Nir Ohad | 3 |
| Desert Agriculture (Volcani Center) | Dr. Arnon Dag/Dr. Uri Yermiyahu | 3 |
| Post-Harvest | Prof. Dov Bernard Prusky | 2 |
| Food, environment and sustainability | Dr. Ulanovsky Hagit | 2 |
| Environmentalism: Ethical and Cultural Perspectives | Dr. Jeremy Benstein | 2 |
| From Plant domestication to molecular breeding: a journey through science, culture and society | Prof. Arie Altman | 2 |
| Topics in present day Microbiology | Prof. Gil Segal | 1 |
| Macroecology | Prof. Shai Meiri | 3 |
| Topics in present day genetics | Prof. Martin Kupiec | 2 |
| Advanced cell biology: Cellular responses to stress in health diseases | Prof. Ehrlich Marcello | 2 |
| Tools in bioinformatics | Ms. Halabi Keren | 2 |
| Methods in Molecular and Cell biology | Prof Uri Ashery Prof Gerardo Lederkremer Dr. Adi Barzel | 2 |
| Formulation Approaches in crops protection | Dr. Nir Sade/Dr. Roy Weinstain | 2 |
| From the DNA to the Population | Prof. Elder Avigdor Dr. Wayne Rival Prof. Copaic Martin Dr. Stern Adi | 3 |
| Ecology of climate change | Prof Marcelo Sternberg | 3 |
| Plant ecology | Dr. Michal Gruntman | 2 |
| Introduction to Biology B | Prof. Tal Pupko Prof. Dorothee Huchon Prof. Nir Ohad | 4 |
| Climate Change Ecology | Prof. Marcelo Sternberg | 3 |
| Pollination Biology | | |
| From the DNA to the Population | | |
| Advanced Topics in Plant Biology | Prof. Marcelo Sternberg | 2 |

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Admissions Requirements

Bachelor's degree with a GPA of at least 3.0 on a 4.0 scale or 80 on a scale of 100.

International Applicants

All applicants applying to TAU International English-speaking programs who are from non-English speaking countries or are non-native speakers of English must provide proof of English proficiency as part of the application requirements. To view specific instructions for completing this step, please [click here](#).

Israeli Applicants

Applicants with Israeli citizenship, whether by birth or immigration (Olim), are eligible to apply to the program under the same criteria as international applicants.

Israeli Applicants need to apply on the Israeli registration portal.

Costs and Funding

International Applicants

Tuition for International students is \$11,300 includes:

- Student services
- Membership in the Student Union
- Library services
- Social events
- Cultural activities
- Field trips

Health insurance not included.

Please note that all students must be covered by an Israeli medical insurance while studying in Israel.

Israeli Applicants

The basic tuition fee for Israeli citizens is 200% according to TAU's tuition regulations for MA. Tuition for 2021-2022 is to be determined according to the CPI rate of June 2021.

For reference listed here are the tuition and fees for the 2020-21 academic year.

Housing

There is a limited amount of on-campus housing available for international graduate students, with the majority preferring to live in rented apartments throughout Tel Aviv-Yafo. For more information on housing please [click here](#).

Scholarships and Funding

TAU International is committed to making education accessible to all students, regardless of their financial backgrounds, and several sources of funding are available, including need-based tuition assistance, delayed payment plans, and external scholarships. TAU also participates in U.S. federal student loan programs. See more information on the TAU International website.

Students who continue to the research track will be eligible for scholarship.

Application Instructions

Step 1: Online Application

Open your student profile on the TAU International website. Complete the "Personal Profile" and "Application Form" sections.

Israeli Applicants need to apply on the Israeli registration portal.

Pay the \$150 (USD) application fee. This may be done at any stage in the application process.

*Canadian citizens should submit their application fee through the CFTAU offices. Contact orna@cftau.ca for more information.

Upload a digital passport style photo (white or light background, headshot only, JPEG/JPG format). This photo will be used for your student ID card, and is not used as part of the admissions process.

Upload a scan of your valid passport.

A Medical Form is required for students who wish to join the on-campus gym.

Step 2:

Academic Documents

DIPLOMA (GRADUATION CERTIFICATE)

Upload a scanned copy of a diploma from each university level degree awarded to your student profile.

TRANSCRIPT

Mail in official transcripts from each post-secondary school (college or university) you attended. An official transcript includes the stamp and signature of the university, and is not a photocopy or scan. If possible, order a transcript from your university that will be sent directly to the below address.

Professionally certified English translations of each transcript (where applicable) must be included.

Please state the primary language of teaching and examination of the graduated school.

ADDRESS:

Manna Center Program for Food Safety and Security
Britannia Building
Tel Aviv University
Ramat Aviv, Tel Aviv 6997801
ISRAEL

Step 3:

Personal Documents

PERSONAL STATEMENT

Upload a personal statement of 400-600 words (no more than 600 words) describing why you have chosen to pursue studies at the MSc in Plant Sciences with Emphasis in Food Security, and in Israel, focusing in particular on the connection between the program and your academic and/or professional experience; your educational and professional aspirations; your anticipated contribution to the program.

LETTERS OF RECOMMENDATION

Two letters of recommendation from individuals who can knowledgeably comment on your ability to successfully complete graduate level study are required. It is highly recommended that at least one letter be submitted by a faculty member of an accredited university.

Follow the instructions for letters of recommendation in the student portal.

CV/RESUME

Please upload a current CV/resume to your student portal profile.

Step 4: English Proficiency Exam

TO SUBMIT YOUR TEST SCORES:

- 1. Upload a student copy of TOEFL or IELTS scores to your student profile.**
- 2. Request official copies of your scores to be sent to TAU International. The Tel Aviv University code is 7704.**

Step 5: Review Applicant Checklist

Please review the following checklist to confirm that you have submitted the necessary documents to apply for the program.

**Diploma
Official transcript
Personal statement
2 letters of recommendation
English language proficiency scores
Passport style photo
Scan of valid passport
\$150 USD application fee
Medical Form
CV/Resume**

Please note that applications will be processed when the application is complete and the \$150 USD application fee has been paid.

Applicants who would like more information about the status of their application may email foodsecurity@tauex.tau.ac.il

GOOD LUCK

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