Trans-Disciplinary Program

Course Overview
By Elishai Ezra, Program Director
We have only **1** aim:

to **INSPIRE** You
to **innovate**!
Jerusalem, capital of the **start up nation**

More than 400 startup companies, 100+ of them founded in 2014
8 VCs and incubators, 10 Accelerators, Hubs, and Co-Working space
40,000 students in world-leading academic institutes.
One of the most diverse cities in the world

**Multinational R&D Centers**

![Mobileye](#)  ![Medinol](#)  ![CISCO](#)  ![Intel](#)  ![ORCAM](#)  ![IBM](#)  ![SIEMENS](#)  ![TEVA](#)
5 weeks
World-Class Curriculum
In:
Computer vision
Big-data/Cyber
Bioengineering
Entrepreneurship

1 week
Special Themes on Space and Design

2 weeks
Projects

Final event
Creating Opportunities

 opp
Core Team

Prof. Yigal Erel
The responsible adult

Dr. Elishai Ezra
Program Director
Theme Leader

Amit Zilberstein
Head, HUstart

Dudu Mimran
Theme Leader
## Steering Committee

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<tr>
<th>Name</th>
<th>Position and Affiliation</th>
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<tr>
<td><strong>Prof. Yigal Erel</strong></td>
<td>The Fredy and Nadine Herrmann Institute of Earth Sciences</td>
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<td>Dean, Faculty of Science</td>
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<td>The Hebrew University of Jerusalem</td>
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<td><strong>Prof. Daniel Mandler</strong></td>
<td>Institute of Chemistry</td>
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<td><strong>Prof. Yaakov Nahmias</strong></td>
<td>Director, Grass Center for Bioengineering</td>
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<td><strong>Prof. Amnon Shashua</strong></td>
<td>School for Computer Science and Engineering, Hebrew University</td>
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<td></td>
<td>Co-Founder, Chairman, CTO, Mobileye</td>
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<td>Co-Founder, Chairman, CTO, OrCam</td>
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<td><strong>Prof. Ariel Darvasi</strong></td>
<td>Department of Genetics</td>
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<td><strong>Prof. Yair Weiss</strong></td>
<td>Head, School for Computer Science and Engineering, Hebrew University</td>
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<td><strong>Prof. Niron Hashai</strong></td>
<td>Head, MBA in Integrative Management, School of Business Administration, Hebrew University</td>
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<td><strong>Prof. Lilach Sagiv</strong></td>
<td>Vice-dean, School of Business Administration, Hebrew University</td>
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<td><strong>Uri Adoni</strong></td>
<td>Patner, JVP</td>
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<td><strong>Ami Shpiro</strong></td>
<td>Founder, Innovation Warehouse, UK</td>
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<td><strong>Dr. Elishai Ezra</strong></td>
<td>Faculty of Science</td>
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The Educational Program
Participants can be accredited with 6-10 academic points via the Hebrew University International School
Inspiration

Special Seminars

Space Science

Industrial Design
Featuring:

Dr. Jessica Meir, NASA astronaut
Team projects

Working in
Heterogenous groups

Mentorship by
Industry and academia leaders

Prototyping with:
Israel Museum of Science
Center for Nano-science
Applied Physics Workshop

Organized by:

HUstart
Creating opportunities: Matchmaking

**Pitching** and **presentation** workshops

Presentation to a panel of investors and accelerators at the programs’ final event
TIP 2015
Bioengineering Track
Featuring

Study case at evogene

Bridging academia and industry
Prof. Shay Arkin, Dr. Hagai Karchi and Boaz Lifschitz

Innovation in Brain Sciences
Prof. Idan Segev

Innovation in Biomedical Devices
Dr. Koby Richter, Boaz Lifschitz

Computational Biology
Prof. Nir Friedman

Innovation in Genomics
Prof. Nissim Benvinisty
Featuring

Innovation in Surgeries
Prof. Yoav Mintz

Medical Imaging and Robotics
Prof. Leo Joskovich

Biomechanics
Dr. Amnon Buxboim

Innovation for Food Technology
Prof. Eyal Shimony

Biomedical Nano-science
Erez Livneh

Leading R&D Teams
Dr. Noa Lapidot

Introduction to Bioengineering
Elishai Ezra

MATLAB Workshops
Computer Vision Track

TIP15
Featuring

Introduction to Computer Vision
Prof. Yair Weiss

Image Restoration
Prof. Raanan Fattal

Photography Without Photographers
Prof. Shmuel Peleg

Vision, Mobile and Cloud Processing
Adi Shavit

Lessons to be learned from biological vision
Prof. Udi Zohary

Artistic Fabrications & Manipulations
Adi Nes

Study case at

TIP15
Featuring

Machine Learning and Deep Learning
Prof. Shai Shalev-Shwartz

GoPro, Google-Glass and Us
Yair Poleg

Human centric summarization of video
Yedid Hoshen

Graphical Applications of Computer Vision
Prof. Dani Lischinski

New frontiers in visual sensory substitution
Shachar Maidenbaum

Technology Review
By

Elishai Ezra

TIP15
Big-data/Cyber Track
Featuring

A Cyber startup from zero to exit
Danny Lev

Privacy and information virality
Karine Nahon

Cryptography Fundamentals
Fault tolerance in distributed networks
Prof. Danny Dolev

State of cyber security industry
Shai Gelbaum

The Cyber Security Fragile Balance
Hagai Bar-El
Featuring

How to build (and sell) a Big Data company
Prof. Ronen Feldman

Deep Learning
Prof. Tali Tishby

Tracing an email across the internet
Prof. Michael Shapira

Growing a cyber security ecosystem
Yoav Tzruia

Intro to Cyber & Big Dat
Convergence of big data and security and future outlook
Dudu Mimran
Entrepreneurship
Featuring

Introduction: New Ideas Origination
Dr. Miki Eisenman

Innovation In The Academy
Yaacov Michlin

Challenges Presentation

By:

Ongoing workshop by

Business Plan
Dr. Shai Harel

By:

TIP15
Featuring

Marketing Strategy
Dr. Yaniv Dover

Funding your venture
Crowdfunding workshop
Dr. Dan Marom

Leading R&D teams
Dr. Noa Lapidot

Team & Culture
Prof. Lilach Sagiv

From idea to a company
Uri Adoni

Sustainability of Competitive Advantage
Prof. Niron Hashai