Zvi Meitar Emerging Technologies Program – Academic Overview

This new and innovative program aims to provide students with a unique and enriching opportunity to examine the legal, ethical and social challenges of new and emerging technologies. The program affords advanced students with an unparalleled opportunity to actively contribute to the public discourse on these issues with the ultimate purpose of influencing academic scholarship, shaping public policy and even drafting laws and regulations.

This is a year-long English language program, open to exceptional students from all schools.

Over the course of the year, students will have the opportunity to:

- Interact personally with industry leaders as well as government officials and NGOs.
- Educate and inform the public on issues associated with disruptive technologies through developing symposiums, round tables, workshops and conferences.
- Examine the legal, ethical and social aspects relating to new and emerging technologies. Students will research these challenging issues, publish position papers, formulate amicus briefs and draft relevant statutes.

The program will comprise two parts:
- 6 credits will be granted for academic course work.
- 4 credits will be granted for a student project. Students will be divided into small groups where they will choose from real-world projects in the fields of Hi-Tech, Bio-Tech and Green-Tech.

The program will include local tours of relevant Israeli industries, affording the students a unique opportunity to make contact with leading figures and organizations in these fields. Upon completion of the program, students will receive an official certificate.

Dov Greenbaum is the Director of the program and of Zvi Meitar Institute for Legal Implications of Emerging Technologies.

For additional information please review our website:
http://portal.idc.ac.il/en/main/research/zmi/pages/emerging_technologies_program.aspx

PART I: Academic Courses – 6 credits

❖ **Introduction ELSI of Science and Technology**
   (Dr. Dov Greenbaum, Academic Program Director) – *2 credits*

This course will look to the historical underpinnings of studying ***ethical legal and social implications (ELSI)*** of science and technology and discuss in depth how such a study can be valuable to society as a whole. With this framework established, the course will also look to both established and current technologies to see where ELSI issues arise and where and how ELSI intervention may be useful or not. The course will seek to provide the necessary foundation to develop the skill set for examining many new and emerging technologies in light of their legal, ethical and social implications.

Semester A - Exam

❖ **Introduction to Science and Technology in Society**
   (Dr. Aharon Hauptman) – *2 credits*

We are living in a world characterized by unprecedented progress in scientific research and accelerated pace of technological developments on one hand, and facing unprecedented societal challenges on the other hand. Brain and cognition research, nanotechnology, synthetic biology, autonomous systems (to name just a few) offer tremendous benefits – and at the same time pose new threats and risks. Climate change, environmental problems, ageing and ever- growing population (to name just a few issues) pose tremendous challenges that science & technology can help to cope with.

Following the introduction of basic concepts concerning the nature of the scientific method, this course will provide introductory knowledge that can help to understand the complex relationships between science, technology and society. How is society shaping science and technology and at the same time shaped by them? What is the role of public perception, imagination, Foresight and Science Fiction? How can we assess the impact (sometimes revolutionary) of new and future technologies on society, and balance between promises and perils, dreams and nightmares?

Semester B – Exam

❖ **Emerging Technologies Workshop**
   (Dr. Dov Greenbaum, Academic Program Director) - *2 credits*

The workshop will host weekly/bi-weekly guest speakers, comprising local and international experts in one or more of the fields of technology, law, science and ethics, who will share their personal success stories in intimate and informal sessions.

Students will be required to prepare short position papers to be submitted throughout the year.

PART II: Guided Student Project

❖ **Yearly Research Project**
   (Dr. Dov Greenbaum, Academic Program Director) – *4 credits*

Students will be divided into small groups (approximately 6 students per group) where they will choose from real-world projects in the fields of Hi-Tech, Bio-Tech and Green-Tech, under the guidance of Dr. Dov Greenbaum. Students will work on the project throughout the academic year (2 semesters).

Projects will take a look into the technologies themselves and come to offer solutions to the legal, ethical and social issues.

Project may be in the form of a Bill or Position Paper that could be presented to the relevant institutions/companies/lobbies etc.

* In addition to the above, students will attend educational local tours.