TECHNION Israel Institute of Technology | FACULTY OF DATA AND DECISION SCIENCES MAKING SENSE OF IT | THE WILLIAM DAVIDSON MBA

MBA – Focusing on Entrepreneurship, Innovation & Technology Management

Syllabus

Course: When Innovative Technology Meets Policy and Regulation

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Tuesday June 3 and Monday June 9, 2025

Course Description

Successful tech executives know how to identify a market opportunity, develop an innovative solution, bring it to market and take it to scale. They also have another skill – they understand how to work with policymakers and regulators to ensure their products reach the market in a timely fashion and tap their full financial potential. They know how to create private value but also public value. This course provides students with the public policy and regulatory knowledge necessary for success. It also helps the students understand and grapple with the ethical issues associated with innovation including AI, a focal area for both innovation and ethical debate. The course also provides them with the opportunity to apply and hone these skills in the context of high tech innovation.

Special Course Features

- Use case studies and in-session simulations to ensure interactive learning environment.
- Cover a blend of Israel and worldwide examples so learning is applicable in different contexts.
- Provide concepts/frameworks to address the interaction between entrepreneurs and policymakers, especially regarding the ethical considerations of innovation.
- Test out concepts/frameworks with case examples to reinforce the classroom learning.
- A reference of research-based studies focused on AI and gene-editing innovations and regulation for those interested in a deep dive on current controversial innovations.

Student Evaluation

- 2000 word paper (65% of final grade): The paper addresses an aspect of the course that is relevant for the student. It must crisply describe the issue and provide a detailed approach for resolution, leveraging course concepts/frameworks. The grade is a function of relevance and importance of the issue, effectiveness of the solution and clear and effective writing. This is NOT a recap of the course. It IS a proscriptive solution to an innovation/regulation challenge.

- Class participation (35% of final grade): The course is designed for active engagement by all students. The grade is determined by the frequency and quality of student's insights.

Course Content

Tuesday June 3, 2025

Session 1: The High Tech – Public Policy Conundrum

Session Objectives

- Establish the need for tech executives to understand and influence the public policymaking process.
- Illustrate the range of stakeholder interests and incentives associated with high tech innovation.
- Demonstrate the challenge of finding win-win solutions but show that desirable outcomes can be achieved.

Pedagogy

- Multi-party simulation/negotiation.
- Reach consensus on autonomous vehicles (AVs) data privacy.
- Negotiation followed by a class debriefing session.

Cases/Readings

- AV Data Privacy paper: https://www.hks.harvard.edu/sites/default/files/Taubman/AVPI/330782%20Taubman%20Whose%20Data.pdf
- Role specific briefing packages. (distributed at the session)

Session 2: The Wonderful World of Policy in an AI World

Session Objectives

- Explain public value, its creation and estimating its contribution.

- Provide the rationale for policy and regulation.
- Explore the different types of policies and regulations.
- Differentiate public versus private value.
- Present the policymaking framework and associated toolkit.

Pedagogy

- Estimation of public value – automated trash trucks.
- In class facilitated discussion of AI regulation in general and AI IP in particular.
- Write a regulation for the IP of AI.

Cases/Readings

- Mark Moore, Public Value, Chapter 2 PP. 1-14 of the PDF (up to Page 38 in the document)
- Regulating Business Innovation as Policy Disruption: Form the Model T to Airbnb https://scholarship.law.vanderbilt.edu/vlr/vol70/iss5/4/
- Using Intellectual Property to Regulate Artificial Intelligence https://papers.ssrn.com/sol3/papers.cfm?abstract_id=5014647
- Owning Your Own IP: The State of the Law https://www.mayerbrown.com/en/insights/publications/2024/10/owning-your-ai-the-state-of-the-law

Monday June 9

Session 3: Exercising Influence and Shaping Public Policy

Session Objectives

- Explain the tech executives' levers for influence and degree of power.
- Provide a framework for shaping policy/regulation.
- Explore persuasion models.
- Illustrate the parallels between tech leadership and policymaking.
- Practice applying the shaping framework to build an influencing strategy.

Pedagogy

- Class discussion of case study.
- Build the shaping framework from the case as a class.
- Apply frameworks and persuasion models to student issues or faculty provided issues.

Preparation

- Come to class with a 60 second pitch for a book or movie we should read/watch.

Session 4: In the Real World: Cost of Failure; Benefits of Success

Session Objectives

- Explore how tech executives and government officials work through policy and regulation for high tech innovation.
- Highlight different approaches that high tech organizations take in response to policymakers.
- Understand the pros and cons of models.
- Use real examples to see "how the sausage (kosher) gets made."

Pedagogy

- Discussion of actual case examples.
- Responses to specific student scenarios. ("What advice you would offer?")

Cases/Readings

- With Big Data Comes Big Responsibility, HBR, https://hbr.org/2014/11/with-big-data-comes-big-responsibility

Session 5: Putting It All Together: Finding the Balance with AI Medical Devices and Cryptocurrency

Session Objectives

- Put all the course learning into practice in developing policy and regulations for two very different disruptive innovations – AI medical devises and cryptocurrency.
- Test the students'' abilities to effectively take on various stakeholder positions and reach a policy/regulation agreement.
- Develop a list of course insights and best practices.

Pedagogy

- Multi-party simulation/negotiation.
- Reach consensus on a policy and associated regulatory frameworks.
- Negotiation simulations followed by class debrief session.
- Facilitated discussion of course concepts and best practices.

Cases/Readings

- https://www.imf.org/en/Publications/fandd/issues/2022/09/Regulating-crypto-Narain-Moretti
- https://www.brookings.edu/product/regulating-crypto-why-how-and-who/
- Pew Center https://www.pewresearch.org/short-reads/2024/10/24/majority-of-americans-arent-confident-in-the-safety-and-reliability-of-cryptocurrency/
- https://www.forbes.com/sites/jasonbrett/2025/01/21/where-crypto-policy-and-regulations-are-headed-under-president-trump/?

- https://www.pharmacytimes.com/view/regulatory-hurdles-and-ethical-concerns-in-fda-oversight-of-ai-ml-medical-devices?
- https://jamanetwork.com/journals/jama/fullarticle/2825146?

Research-based Refences on AI and Gene-editing Innovations and Regulations

- Sfetcu, Nicolae (2024), The Ethics of Artificial Intelligence: Balancing Innovation and Responsibility, *IT & C*, **3**:4, pag, 48-64 DOI: 10.58679/IT38020, https://www.internetmobile.ro/the-ethics-of-artificial-intelligence-balancing-innovation-and-responsibility/
- Sun et al., From Principles to Practice: A Deep Dive into AI Ethics and Regulations, https://arxiv.org/pdf/2412.04683
- Cavaliere G, Devolder K, Giubilini A. Regulating Genome Editing: For an Enlightened Democratic Governance. Camb Q Healthc Ethics. 2019 Jan;28(1):76-88. doi: 10.1017/S0963180118000403. PMID: 30570466; PMCID: PMC6316359.https://pmc.ncbi.nlm.nih.gov/articles/PMC6316359/
- Nuffield Council on Bioethics, "Genome Editing: An Ethical Review" https://www.nuffieldbioethics.org/wp-content/uploads/Genome-editing-an-ethical-review.pdf