

Development, Innovation, and Emerging Technologies: Technology in the Public Sector

Master in International Development MID SEP-2024 S-1

Area International Relations

Number of sessions: 15

Term: Term 3

Category: elective

Language: English

Professor: **EDUARDO RODÉS PONS**

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Eduardo is the VP of Customer Services at Bdeo, where he helps Insurance companies to launch and scale new digital and AI-based processes and products.

Eduardo started his career in software shortly after graduating from college and has been part of several international fast-growing startups such as CARTO or Ridecell. He studied economics at the University of Barcelona and SciencePo Paris and holds a Master's degree in Economics.

Eduardo is also part of Data for Hope and House of Beautiful Business, where he researches how to make data more actionable, technology more human and businesses more beautiful. Designing and building new products and experiences for good.

Teaching & Research Experience

- Adjunct Professor, Innovation and emerging technologies, IE University, GPA School, Spain, 2022-present
- Adjunct Professor, Data Governance, IE University, GPA School, Spain, 2021-present
- Adjunct Professor, Data Journalism, Universidad Villanueva, 2016-2018

Education

- Master's Degree in Economics, University of Barcelona, Spain, 2013.
- BA in Economics, University of Barcelona, 2013. Postgraduate Education: IESE Business School, Spain, 2015.

Office Hours

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Professor: **INMACULADA PUIG SIMON**

E-mail: ipuig@faculty.ie.edu

Faculty Member of the Global and Public Affairs School, Law School, Business School and IE Negotiation & Mediation Center

Imma is a political scientist with extensive knowledge of both public and private arenas, and an expert in national and international public affairs and advocacy.

In her professional career, she served, for almost a decade, as a Policy Advisor for the Spanish Prime Minister Office and as an Advisor and Head of the Analysis and Strategy team for the Minister of Industry, Tourism and Trade; she was also a member of the Board of Directors for several publicly owned companies. During those years, she had the opportunity to experience and conduct very complex negotiations in very diverse environments, mostly related to the policy fields of energy, telecommunications, tourism, industry, trade and defense. During that time, she actively participated to policymaking, especially in the formulation and adoption phases, while participated in monitoring policy implementation and evaluation. She also contributed to the creation of strategic relationships with key business and social actors, both nationally and internationally, to foster economic progress.

She is currently working as an independent advisor, devoted to improving private sector growth in a sustainable and responsible manner as well as to reinforcing public sector goals, through innovation, better public policy design and integrative dialogue. And teaches at IE University,

She currently works as an independent advisor, specialised in public affairs and strategy and devoted to improving private sector growth in a sustainable and responsible manner as well as to reinforcing public sector goals, through innovation, better public policy design and integrative dialogue. She works also as a Professor at IE Business School and IE University, where she teaches recognized undergraduate, postgraduate, executive and in-company courses, being awarded each year with the recognition of Teaching Excellence, granted by the students. Additionally, she serves as a board member of the Spanish National Defense Studies Alumni Association.

Imma specializes in public policymaking and advocacy, consensus building, advanced multiparty negotiations, responsible negotiations, and diversity.

Teaching & Research Experience

- Adjunct Professor, Public Policy & Public Management, IE University, GPA School, Spain, 2014-present
- Adjunct Professor, Negotiation, IE Business School, IE Law School, IE Global and Public Affairs School, IE-FT Headspring Alliance, Spain, 2012-Present
- Adjunct Professor, Public Policy and Management, Complutense University, Spain, 2010-2011.
- Visiting Research Scholar, London School of Economics & Political Science, United Kingdom, 2003-2004.
- Adjunct Professor, Public Administration, Financial Studies Centre, Spain, 2003-2005.
- Visiting Research Scholar, Max Plank Society, Germany, 2002.
- Adjunct Professor, Politics and Public Policy, Pompeu Fabra University, Spain, 2000-2004.

Education

- M.Phil. (PhD Program) in Political and Social Sciences, Pompeu Fabra University, Spain, 2004.
- Mid-career Master in Public Administration, SIPA – Columbia University, United States, 2006.
- Postgraduate in Political Communication and Strategy, UAB-ICPS, Spain, 2001.
- BA in Political and Management Sciences, Pompeu Fabra University, Spain, 2000.
- Executive education from: IESE Business School, Spain, 2009; Higher Center for National Defense Studies, Spain, 2009; and Harvard Kennedy School of Government, Spain, 2008.

Office Hours

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SUBJECT DESCRIPTION

In the contemporary landscape of international development, the integration of innovation and emerging technologies has become increasingly paramount in driving progress within the public sector. This dynamic course delves into the intricate relationship between development initiatives, technological advancements, and their profound impact on governance, public policy, and service delivery. Through a comprehensive exploration of key concepts, case studies, and practical applications, students will gain a nuanced understanding of how innovative technologies are reshaping traditional approaches to development, fostering inclusivity, efficiency, and sustainability.

LEARNING OBJECTIVES

In the current context of the so-called fourth industrial revolution, governments, as forward-thinking institutions, understand the technological forces that surround their contexts and try to harness them for the benefit of citizens. And it is, precisely, at the intersection of public sector and innovation where a rapidly evolving spaces (and huge markets) have emerged. In this spaces, technology-driven companies, as well as start-ups and SMEs work, together with governments, in order to help them become more efficient, effective and accessible, while constituting a very dynamic ecosystem of innovation, ready to prepare for a technology advance citizen-centric era.

From digital governance and e-government solutions to the utilization of artificial intelligence, blockchain, and data analytics, this course offers a forward-thinking perspective on harnessing technology to address complex societal challenges. Through critical analysis and hands-on exercises, students will examine the opportunities and challenges associated with technology adoption in the public sector, while also exploring ethical considerations, policy implications, and strategies for maximising the potential of emerging technologies to advance global development goals. Whether aspiring policymakers, development practitioners, or technologists, this course provides a unique interdisciplinary platform for students to engage with cutting-edge ideas and methodologies at the nexus of development, innovation, and technology. And by the end of the course, they will be able to develop their own compelling tech-powered public/private initiative in order to help governments give response to society's challenges.

TEACHING METHODOLOGY

This program increases participants' knowledge and project design capacities by engaging in relevant practical cases and by discussing these cases with both instructors, during the general sessions and in the bootcamp ones.

To improve participants' knowledge regarding the interation between innovation and technology with Governments and the public sector as a whole, we will combine a mix of readings and videos with the analysis of real-life case studies in order to improve the understandig of this reality from a benchmarking perspective and be better equiped for the definition of the group project proposal. Its development will be fully guided in the bootcamp sessions.

The course will finalise with a public pitch presentation for each project, also subject to peer-review feedback.

IE University teaching method is defined by its collaborative, active, and applied nature. Students actively participate in the whole process to build their knowledge and sharpen their skills. Professor's main role is to lead and guide students to achieve the learning objectives of the course. This is done by engaging in a diverse range of teaching techniques and different types of learning activities such as the following:

Learning Activity	Weighting
Lectures	35.0 %
Discussions	10.0 %
Exercises in class, Asynchronous sessions, Field Work	20.0 %
Group work	25.0 %
Individual studying	10.0 %
TOTAL	100.0 %

PROGRAM

SESSION 1 (LIVE IN-PERSON)

Technology in the Public Sector: What Are We Talking About?

- Introduction to the course, with an overview of the contents and logistics.
- What is the bootcamp about?

Article: Innovation in the Public Sector. Knowledge Solutions (ADB), June 2012). Serrat. (CED)

Book Chapters: Technology Innovations in Public Service Delivery for Sustainable Development, in "Government 3.0: next generation government technology, infrastructure and services", Springer, New York. CED.

Video: What is the Fourth Industrial Revolution? (Youtube)

SESSIONS 2 - 3 (LIVE IN-PERSON)

Public Sector Immersion: Opportunities & Challenges

- Understanding policy making
- Innovation Ecosystems
- Digital Future for All?

Article: Governing GovTech. Bennett Institute for Public Policy, 2018. Tanya Filer. (CED)

Book Chapters: Chapter 1. The Prosperity Paradox, in THE PROSPERITY PARADOX. HARPER COLLING PUBLISHERS: NEW YORK. CED

Working Paper: Innovation-driven entrepreneurship in iEcosystems. Murray & Budden (2017). (Mit Innovation Initiative)

SESSIONS 4 - 5 (LIVE IN-PERSON)

Perspective: Governments

- Digital Transformation of Governments.
- Case Studies: GovTech Public Programs.

Article: Government as a Platform. Innovations / volume 6, number 1 (Innovations)

Video: What a Digital Government Looks Like (Youtube)

Video: How a start-up in the White House is changing business as usual (Youtube)

SESSIONS 6 - 7 (LIVE IN-PERSON)

Perspective: Entrepreneurs.

- Main challenges and opportunities for entrepreneurs working with governments.
- Startups mindset.

Exploring reality I: Some case studies will be presented and analysed in detail by students.

Article: Why Entrepreneurs Should Go Work for Government. RESEARCH & IDEAS, 09 MAR 2015. (CED)

Working Paper: Why Startups Don't Bid on Government Contracts. Orazem et al (2017). (BCG)

SESSIONS 8 - 9 (LIVE IN-PERSON)

Perspective: Investors

- Reasons for investing in Govtech projects.
- Main actors: investors, accelerators and incubators.

Exploring reality II: Some case studies will be presented and analysed in detail by students.

(If agenda allows it, participants will conduct an interview with a relevant player in this investment sector).

Article: 100 GovTech - Gaining Steam. January/February 2022. (CED)

Article: How we started a VC firm to fund urban innovations startups. Brenner & Lein (2016) (Living Cities)

SESSIONS 10 - 11 (LIVE IN-PERSON)

Bootcamp: Introduction & Ideation Session

The introduction will provide a brief overview of the bootcamp, including the learning outcomes, goals, and expectations.

Then participants will have the opportunity to choose from a range of real-world challenges, most of them probably identified in previous sessions. The chosen challenges will have to be relevant and engaging, allowing participants to apply their skills and knowledge in a practical context.

Through a series of design thinking exercises, participants will explore their chosen challenges in depth, gaining a deep understanding of the problem space and identifying opportunities for innovative solutions. The exercises will be facilitated by an instructor who will provide guidance and support throughout the process. Participants will work in small groups, collaborating with their peers to generate ideas and refine their solutions.

By the end of the session, participants will have developed a solid understanding of the design thinking process and how it can be applied to real-world challenges. They will also have identified potential solutions to their chosen challenges, setting the stage for the rest of the bootcamp.

SESSIONS 12 - 13 (LIVE IN-PERSON)

Bootcamp: How to design a govtech program or innovative business models for a govtech startup?

The Business Model Canvas is a powerful tool for developing and refining business models. In this session, participants will learn how to use the canvas as a framework for their own projects, gaining a deep understanding of the key components of a successful business model.

Through a combination of hands-on exercises, participants will explore different case studies, analyzing real-world examples of successful business models and identifying the key factors that contributed to their success. Participants will learn how to use the canvas to develop their own business models, refining their ideas and testing their assumptions in a structured and systematic way.

By the end of the session, participants will have a solid understanding of the Business Model Canvas and how it can be used to develop successful business models. They may also have started to develop their own canvas, getting ready to write their final project.

SESSIONS 14 - 15 (LIVE IN-PERSON)

Final Projects Presentation

The final project presentation is a key component of the course, providing participants with an opportunity to showcase the knowledge acquired throughout the whole course and demonstrate their skills. Combining the theoretical knowledge with the practical elements covered in the Bootcamp, participants will work in teams to develop their final projects, aiming at providing some solution to today's world challenges.

The main goal of the final project presentation is to provide a high-level overview of the projects to the audience in order to gain some insights from individuals who have a reasonable knowledge but are not experts in your particular project topic. Each team will have the opportunity to present their project to the class, highlighting their key insights, findings, and recommendations. Following the presentations, the class will engage in a collective analysis of the projects, discussing the strengths and weaknesses of each.

EVALUATION CRITERIA

The final grade will be based on different evaluation criteria: attendance and participation, as well as individual and group performance in the course assignments. And the final results will be distributed using a Bell curve.

Participants are expected to take part of all class discussions and exercises and strongly engage with the collective final project.

criteria	percentage	Learning Objectives	Comments
	0 %		
Class Participation	0 %		
Individual Work	0 %		
Group Work	0 %		
Final Project	0 %		
	0 %		

FAILING GRADE AND REASSESSMENT

When students receive a Fail in a course, they have the opportunity to present themselves for reassessment in order to earn the necessary credits toward graduation.

The reassessment of students should be scheduled between 5 and 10 working days after the review session takes place.

Grades for the reassessment are limited to a Low Pass and Fail.

Both, the initial Fail as well as the grade of the reassessment remain on the transcript. For the purpose of calculating the GPA however, only the grade of the reassessment is to be considered. Students receiving a failing grade in the reassessment of a course will not be able to continue in the program.

BEHAVIOR RULES

Please, check the University's Code of Conduct [here](#). The Program Director may provide further indications.

ATTENDANCE POLICY

Please, check the University's Attendance Policy [here](#). The Program Director may provide further indications.

ETHICAL POLICY

Please, check the University's Ethics Code [here](#). The Program Director may provide further indications.

