



Master's in Governance and Anticorruption

Information Technology for Combating Corruption

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Inquiries: Send or set an appointment via eMail WhatsApp Telegram SMS

Course Objectives

- Developing students' knowledge of the concept of an information system and its implications, including concepts such as information system components and the relationships between them; data, information, and knowledge; information quality; business system requirements; challenges facing business professionals in the age of information and globalization; and a framework and method for systems analysis from a business perspective.
- Developing students' understanding of the role of information technology, including computers, software, communications, and networks.
- Introducing students to the types of information systems and the needs of different administrative levels; information security and its relationship to combating corruption.
- The digital society and its role in combating corruption.

Background Needed to attend Course

Familiarity with the principles of:

- Public administration (state structure - role and functions of government - ...)
- Governance rules
- Applied research
- Computer skills
- Statistics

Course Content

- Do we really need a government?
- Types of corruption and the factors that help and counteract it.
- Public employees and clients (citizens, investors, etc.)
- Governance
- Towards an integrated system for state management
- General background and definitions (budget, trade balance, etc.)

- Performance indicators
- Historical stages of digital transformation (25 years, 1987–2022)
- Government technological infrastructure
- Institutional technological infrastructure
- Prevailing culture
- The difference between automation and digital transformation
- The impact of technologies on business models and reducing corruption
- The following topics will be addressed not from a technical perspective, but rather from the perspective of their impact on how business is conducted and the implications for reducing corruption:
 - Networks
 - Artificial intelligence in service applications
 - The new service delivery model (push instead of pull)
 - Dealing with traditional (non-smart) telephones
 - Seamless integrated government
 - Digital identity (the difference between digital identity and electronic identity card)
 - Electronic Signature
 - Cloud Computing
 - Mobile Apps
 - FinTech
 - Geographic Information Systems
 - Big Data and Analytics
- Applications
 - Social Safety Nets
 - Telework
 - Budget and Project Transparency
 - Regulatory Impact Assessment
 - Elections
 - Security and Privacy
 - Right to Information
 - Government Procurement Portal
 - Government Jobs Portal
 - Open Government Initiative
- Rapidly Growing Technologies
 - Artificial Intelligence
 - Computer Vision
 - Internet of Things
 - Blockchains
 - Non-Fungible Tokens
 - Circular Economy
- Upcoming Technologies
 - Quantum Computing
 - Web 3.0
 - Will other developments impact the government model (nano robots, micro-drones, next-generation batteries, mathematical modeling of human body organs)?
- Can old structures be adapted to disruptive technologies?

Grading

Will be based on *Individual* research paper or *Group* project

Academic Guidelines

- **Attendance:**

You are expected to attend all class meetings. You are responsible for all material covered in each lecture, for every announcement made any time during any class period and for any handouts. If you must miss a class, find out what you missed.

- **Honor System:**

Honor code adherence is expected in all phases of this class. All graded work is expected to be the original work of the individual, or of the team if allowed, unless otherwise directed by the instructor. In working on assignments, discussion and cooperative learning are allowed and, in fact, encouraged. Copying or otherwise using another team's programs, specific algorithms, or other detailed solutions to projects is an honor code violation. Please discuss any questions that you may have about what is permitted or not permitted with the instructor.

- **Special Needs or Circumstances**

Any students with special needs or circumstances should feel free to meet with the instructor.