002: Emerging Technologies - 6.0 CEUs

CEU: 6.0   **Duration:** 15hours 45minutes   **Tuition:** $10,000

Course Banner

Teachers:

- Kelly O. Price, II ()

Course Topics:

- Technology/Technologies

Program Locations & Dates:

- Houston, Texas USA: Mar 25-29, Jul 1-5, Nov 18-22
- Dubai, UAE: May 13-17

Program Tags:

- Technology

About Course

As new technologies like artificial intelligence, big data, and smart devices become part of everyday life, it's important to understand how they work and affect society. This course introduces these technologies in simple terms and explains how governments and regulators are adjusting their roles to keep things fair and safe for everyone. It's a great starting point for anyone curious about tech and policy.

Course Overview

The digitization of societies and economies is continuously generating record amounts of data. Digitization is driven by increased and faster connectivity of people and things. Fibre to the home (FTTx) and fast mobile networks provide the opportunity to engage in digital activities, and social media and user-generated content provide the motivation for it. At the same time, more objects become "smart", i.e. connected to the Internet to receive and send data. As a result of the explosion of data, new technologies have evolved that help to sift through data and derive value from combining and analyzing large data sets. These technologies are often described in umbrella terms such as artificial intelligence (AI) and big data.

The new technologies require ICT regulators to reconsider the tools they deploy to facilitate fair competition in the ICT sector and protect consumers. New technologies also pose legal, ethical, and macroeconomic challenges. Central banks, consumer protection agencies, competition commissions, and ICT regulators scramble to assess the implications for their fields of responsibility. The implication is that roles of sector-specific regulators such as for the ICT sector, water, electricity, and banking, and subject-specific regulators such as a consumer protection agency or the competition commission may need to be redrawn and, in some cases, more specialized regulators may need to be established.

Course Objective

The objectives of this course are as follows:

- The objective of this course is to discuss the general trend in redefining the roles of the various regulatory authorities in response to cloud computing, AI, blockchain, big data, and the Internet of Things (IoT).
- While the desired outcomes – fair competition, consumer protection and economic development – remain the same, the approaches to achieve them are changing across time and differ between countries.
- This course aims to provide a framework to identify a suitable regulatory approach in response to arising technologies. The next section explains selected technologies in the context of the Internet value chain and evolving ICT sector business models. The last section discusses the evolving regulatory environment and options for allocating regulatory responsibilities to sectoral and/or functional regulators.

Course Outline

- Evolving technologies
- The evolving Internet value chain
- The evolving business models in ICT sector
- Emerging technologies (AI) challenges and principles of regulation

What Will You Learn?

- Understand the structure and role of global and national data protection regimes.
- Analyze how emerging technologies and digital services impact data regulation.
- Explore the intersection between data privacy, security, and regulatory compliance.
- Assess the implications of cross-border data flows on trade and sovereignty.
- Examine the responsibilities of regulatory authorities in protecting personal data.
- Gain insights into international guidelines such as the ITU's Child Online Protection framework.

Why This Course Matters

Dr. Kristian David
ICT Lead
"Emerging technologies are reshaping the digital landscape faster than many regulators can respond. This course empowers professionals with the insights and tools to understand, assess, and adapt to these shifts responsibly and confidently."

Amanda O.
ICT Policy Analyst
"The course demystified complex concepts like AI, big data, and IoT, and made them accessible for regulatory application. It was eye-opening to explore how different nations tackle digital regulation."

Course Content

Module 1: Introduction to Emerging Technologies
Gain a foundational understanding of key emerging technologies and why they matter for strategic decision-makers.

- **Defining emerging technologies in a digital economy**

- **Why leadership must stay ahead of technological change**

- **The strategic role of innovation in public and private sectors**

Module 2: Key Technologies Shaping the Future
Explore the practical use and business implications of AI, Blockchain, IoT, and more.

- **Artificial Intelligence and Machine Learning in the workplace**

- **Blockchain for transparency and secure transactions**

- **IoT and real-time operational intelligence**

Module 3: Technology Integration in Management Systems
Learn how to evaluate, adopt, and align technology solutions with organizational goals.

- **Assessing readiness and digital maturity**

- **Aligning digital tools with organizational strategy**

- **Avoiding common pitfalls in tech adoption**

Module 4: Risk, Ethics, and Cybersecurity in Emerging Tech
Understand the leadership role in managing digital risks and ensuring ethical use of technology.

- **Cybersecurity threats and preventive frameworks**

- **Data privacy and compliance in a digital world**

- **Ethical leadership in tech implementation**

Module 5: Leading Digital Transformation
Drive change through informed planning, staff engagement, and continuous innovation.

- **Building a digital transformation roadmap**

- **Change management and stakeholder alignment**

- **Monitoring, evaluation, and upskilling initiatives**

Target Audience

This course is for Relevant Staff, Officers, Principal Managers, Senior Managers, Managers, and Deputy Managers

Certificate of Completion

Participants who successfully complete the course will be awarded a verified Certificate of Completion. This credential validates your grasp of modern emerging technologies, their regulatory challenges, and your readiness to contribute meaningfully to digital policy and innovation frameworks.