THE ABC OF 5G

TECHNICAL, BUSINESS, AND REGULATION PERSPECTIVES

University of Antwerp

GHENT UNIVERSITY

VUB

This comprehensive course is specifically designed **to empower business managers with a deep understanding of 5G technology and its significant economic and legal ramifications.** Participants will delve into **the technical intricacies of 5G,** explore its **techno-economic implications,** and grasp **the legal and regulatory frameworks** that govern its deployment and utilization.

By combining **engaging lectures, practical case studies and interactive discussions,** attendees will **unlock the true potential of 5G,** enabling them to **make well-informed decisions** and **successfully navigate the challenges** inherent in **implementing 5G solutions,** ultimately leading to **enhanced connectivity for their organizations.**

📣 LEARNING OUTCOMES

OVERVIEW OF 5G TECHNOLOGY

- Evolution from 4G to 5G
- Key features and benefits of 5G technology
- Overview of 5G use cases and industry applications
- Overview of Radio Access Network (RAN) and Core Network
- Introduction to network slicing and virtualisation

5G RADIO ACCESS NETWORK (RAN)

- Understand the role and importance of the Radio Access Network (RAN) in 5G deployments
- Comprehend the key components and architectural elements of the 5G RAN
- Identify the benefits, features, and capabilities of the 5G RAN
- Recognise the challenges and considerations in deploying and optimising the 5G RAN

5G CORE NETWORK (5GC)

- Understand the role and components of the 5G Core Network (5GC)
- Comprehend the key architectural elements and functionalities of the 5GC
- Identify the benefits and capabilities of the 5GC in comparison to previous generations
- Recognise the challenges and considerations in deploying and managing the 5GC

REGULATION AND LAW

- Understand the regulatory frameworks and legal considerations related to 5G technology
- Comprehend the key policy and regulatory challenges in 5G deployment
- Identify the legal implications and requirements for 5G network operators and stakeholders
- Recognise the importance of privacy, security, and data protection in the context of 5G

SECURITY

- Understand the importance of security in 5G networks and its implications
- Comprehend the key security challenges and vulnerabilities in 5G technology
- Identify the security mechanisms and solutions employed in 5G networks
- Recognise the best practices and considerations for ensuring 5G network security

TECHNO-ECONOMICS

- Understand the technoeconomic aspects of 5G technology
- Comprehend the key factors and considerations influencing the economics of 5G networks
- Identify the cost and revenue drivers in 5G deployments
- Recognise the opportunities and challenges for businesses in the 5G ecosystem

📣 PRACTICAL INFORMATION

⇨ 11, 18 & 25 September 2025 from 10h till ca. 16h00
⇨ The course will be held at Ghent University, UGain classroom, building 60, Technologiepark Zwijnaarde
⇨ The fee for this course is 1200 euro.

📣 ORGANISATION

This course is co-organized by professors and research experts in the domain of mobile telecommunication networks, 5G in particular, from three universities: the University of Antwerp, Ghent University and the Vrije Universiteit Brussel.

MORE INFO & REGISTRATION
WWW.UGAIN.UGENT.BE/5G

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