



UNIVERSITÀ  
DEGLI STUDI  
DI PADOVA

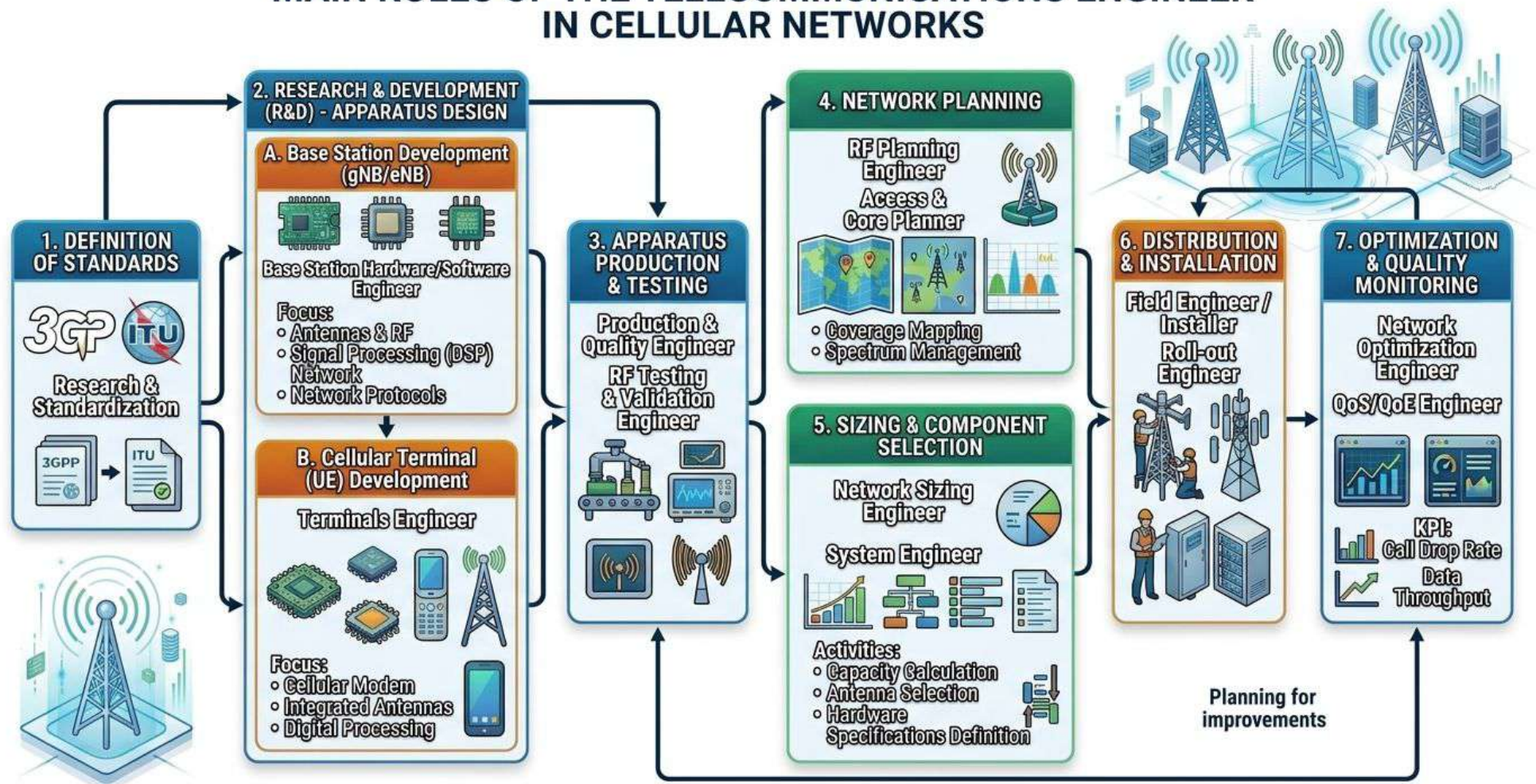
**MIME**

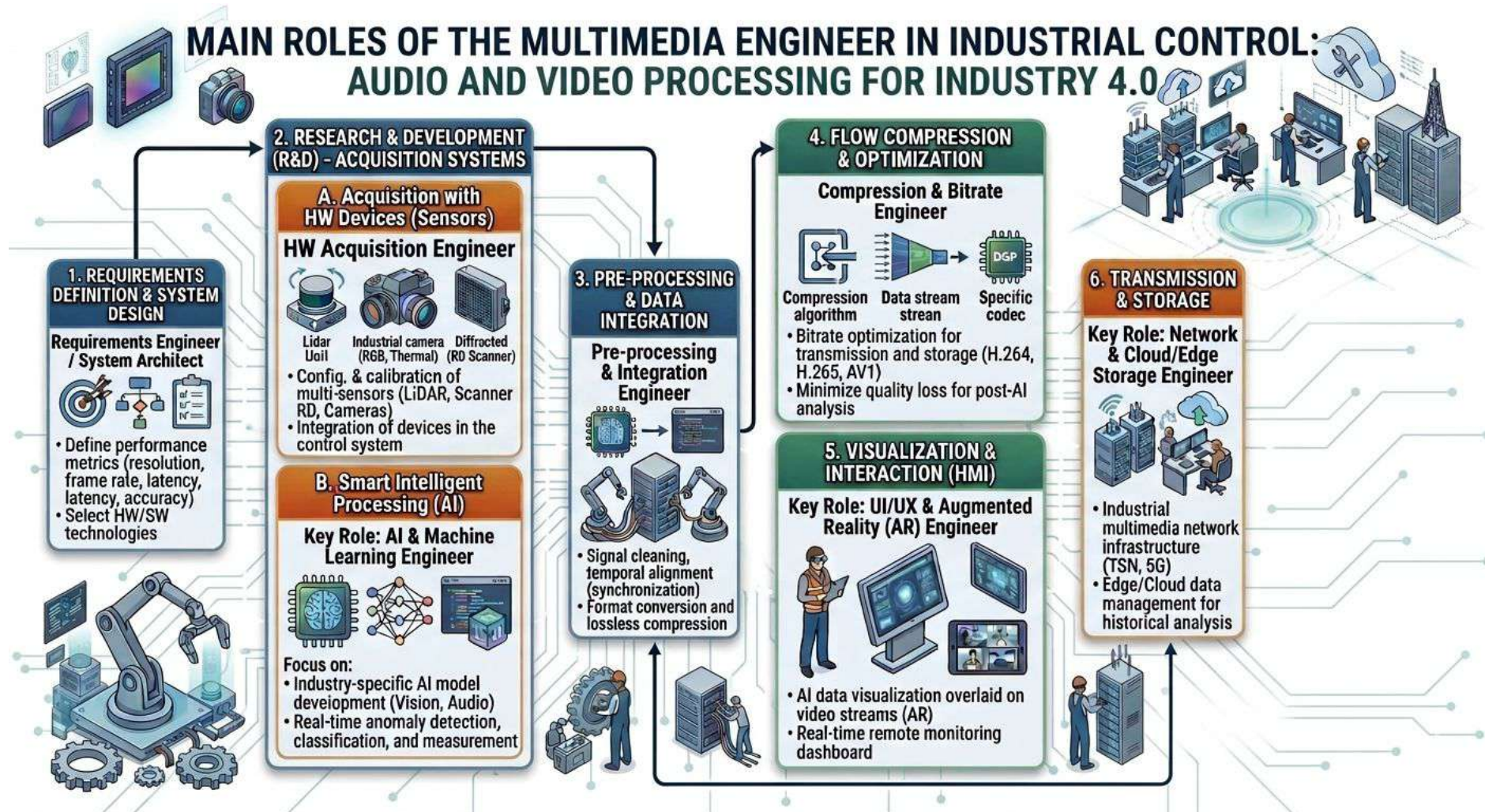
# ICT for Internet and Multimedia

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Prof. Stefano Tomasin

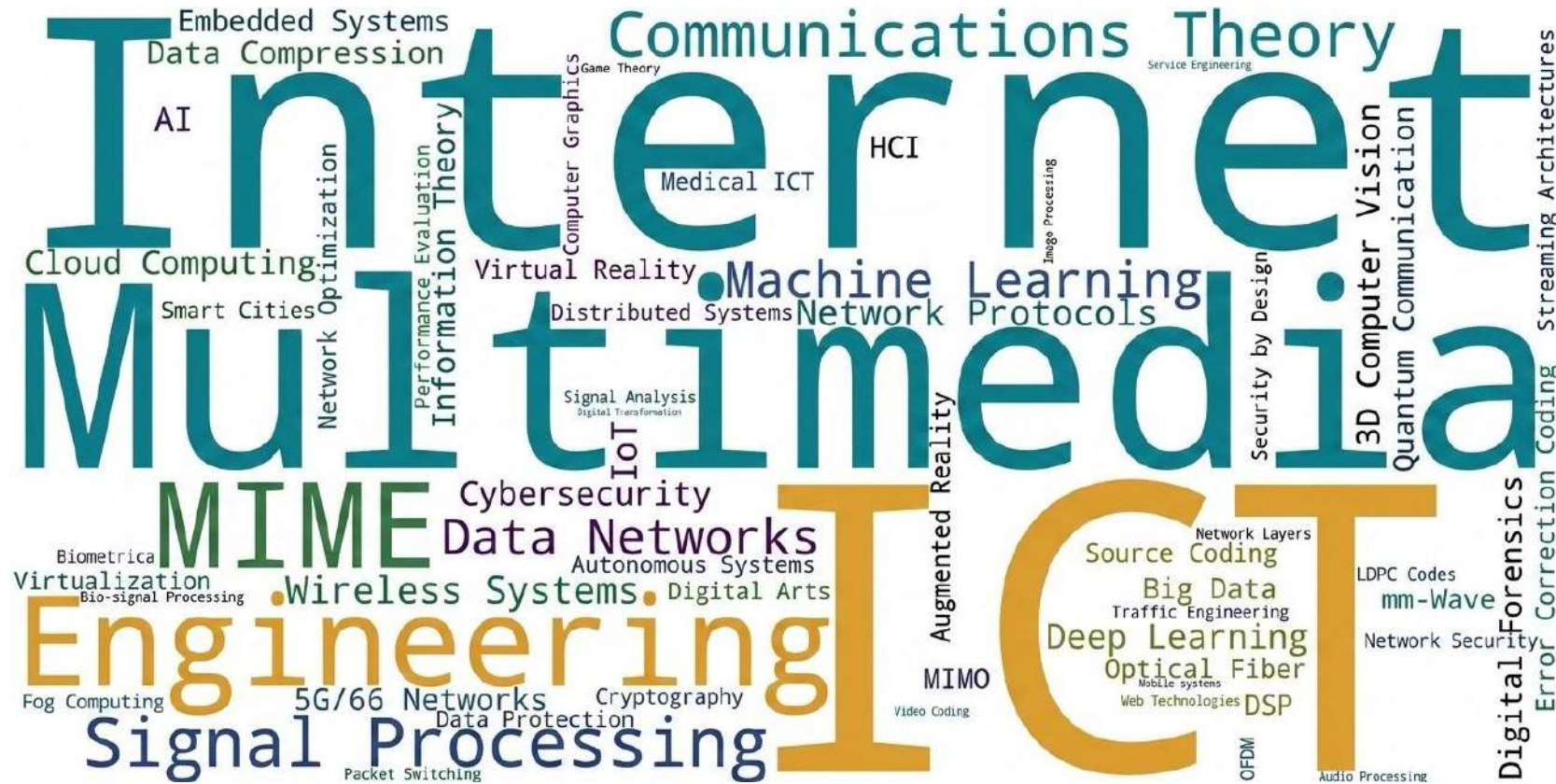
## MAIN ROLES OF THE TELECOMMUNICATIONS ENGINEER IN CELLULAR NETWORKS

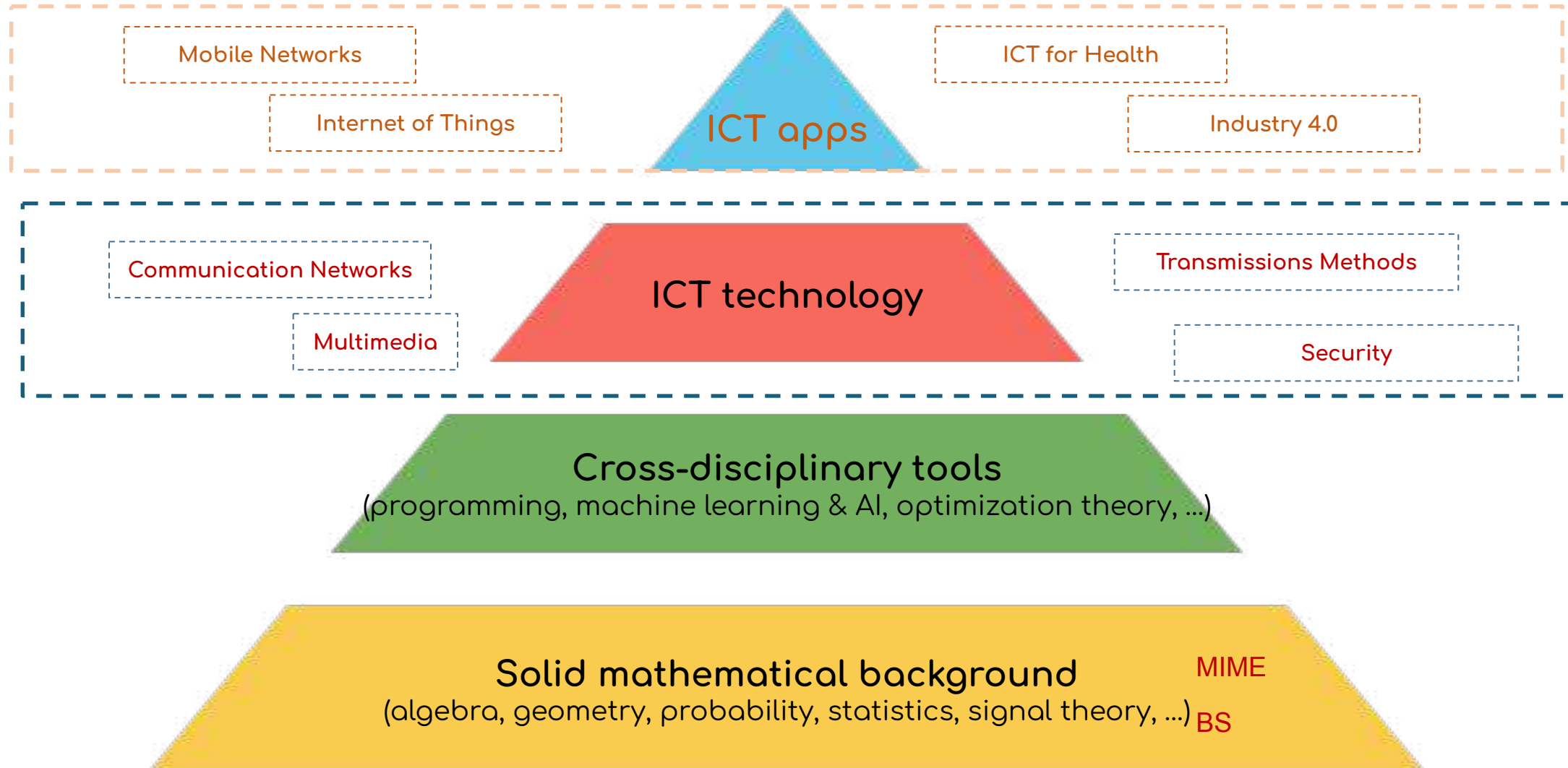






## ICT: Information and Communication Technologies







Course taught in English

## 6 corsi obbligatori

Main educational path [36 ECTS]

## 3 characterizing courses

Scelta tra 10-12 corsi specialistici [18 ECTS]

## 3 corsi affini

Integrazione competenze (scelta tra 9-12) [18 ECTS]

## 2 corsi liberi

Personalizzazione libera del piano [12 ECTS]

## Internship / Research Training

Esperienza pratica o ricerca [9 ECTS]

## Tesi Finale

Progetto di laurea magistrale [21 ECTS]



Per maggiori informazioni e dettagli sui corsi visitate:

[mime.dei.unipd.it](http://mime.dei.unipd.it)





# Requirements and Credits

 Course taught in English

## 6 compulsory courses

Main educational path [36 ECTS]

## 3 characterizing courses

Choice from 10-12 specialized courses [18 ECTS]

## 3 related courses

Skills integration (choice from 9-12) [18 ECTS]

## 2 free choice courses

Free study plan personalization [12 ECTS]

## Internship / Research Training

Practical experience or research [9 ECTS]

## Final Thesis

Master's degree project [21 ECTS]



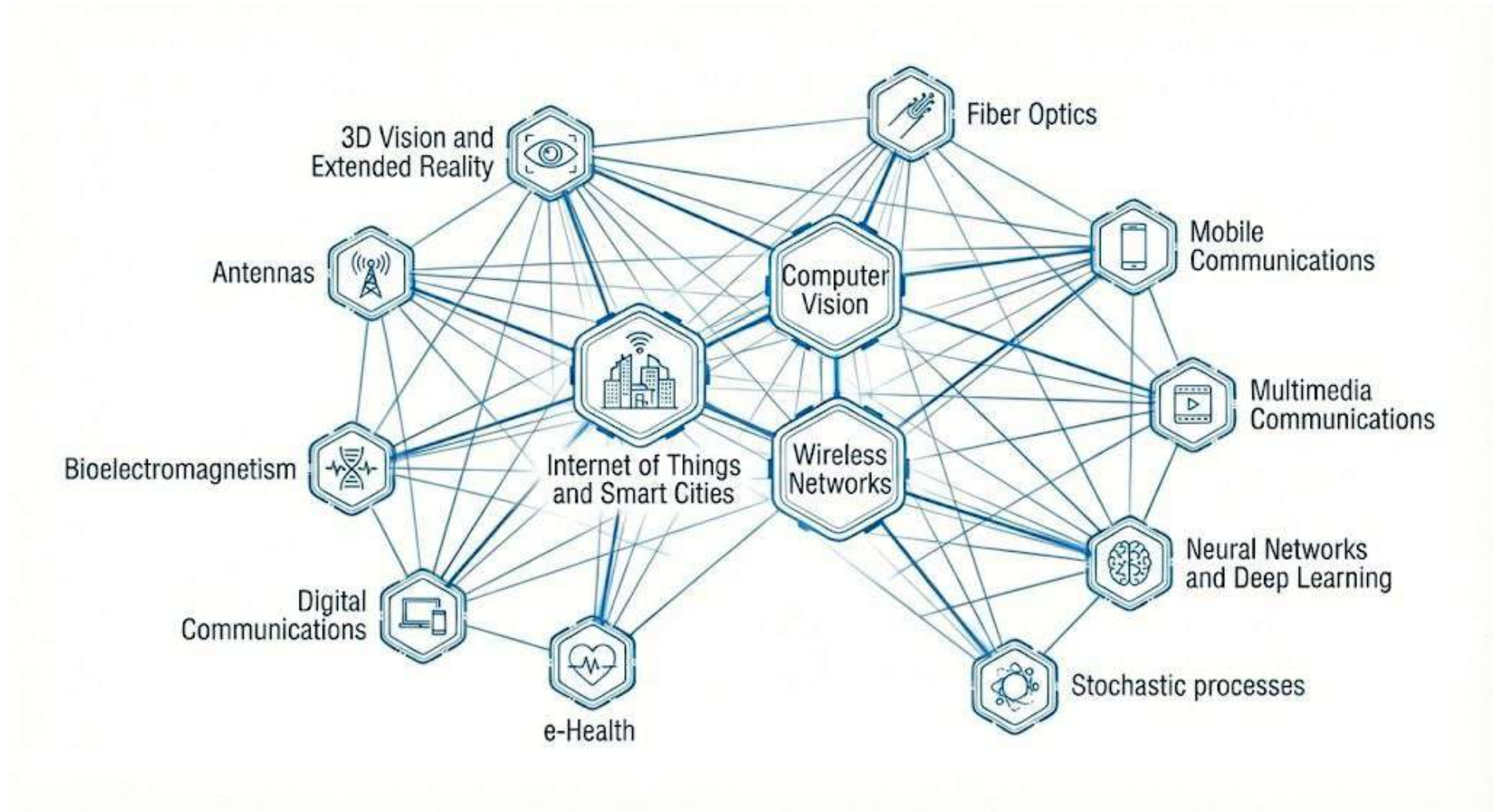
For more information and details on courses, visit:

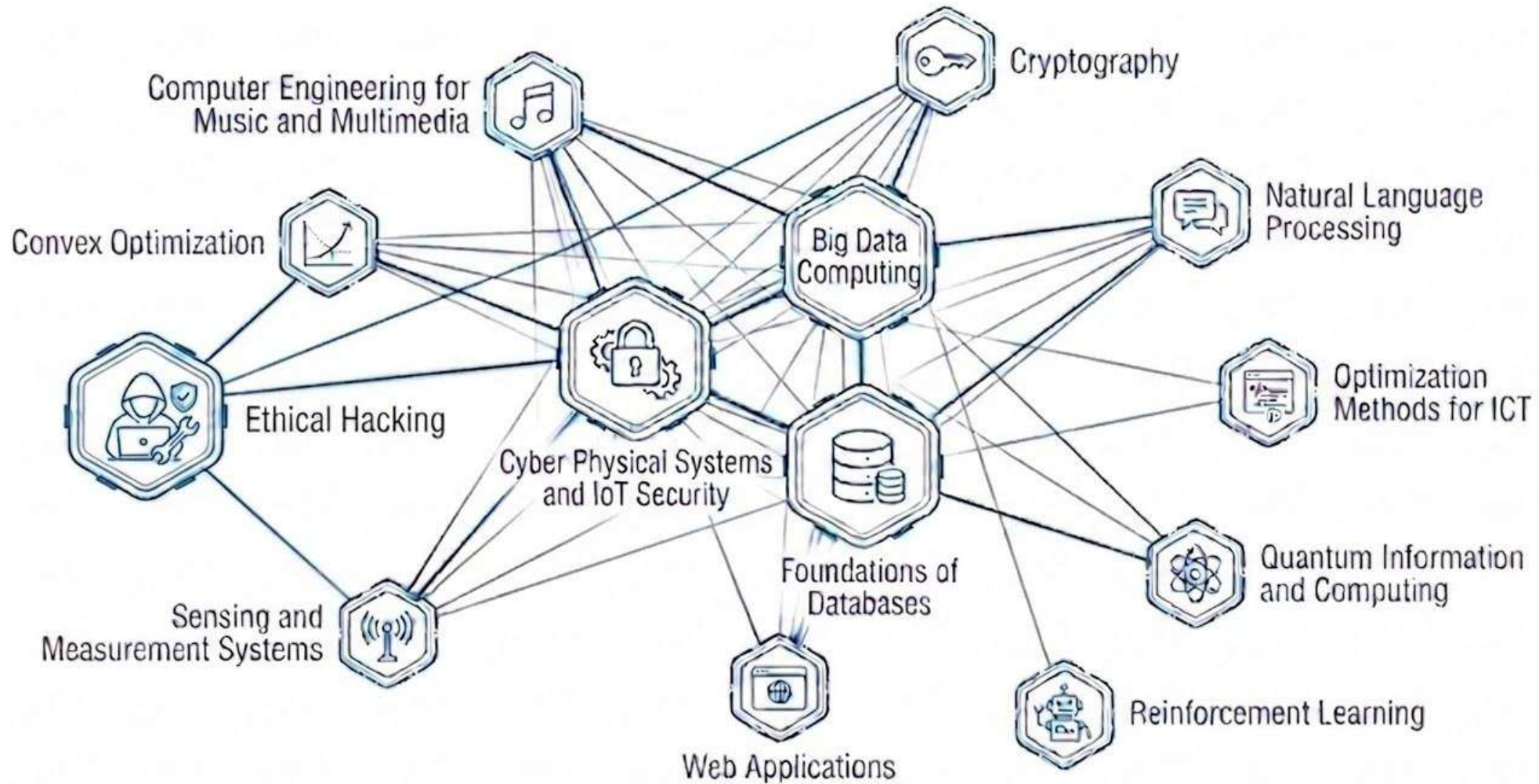
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# CHARACTERIZING ("CARATTERIZZANTI") COURSES







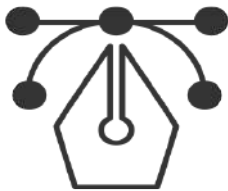
**Communication Technologies**  
(Wi-Fi, 5G, fiber optics, antennas)



**Cybersystems**  
(Internet, protocols, industrial comunic.)



**Research & Innovation**  
(advanced topics for research)

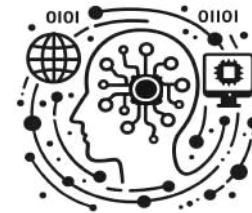


**Multimedia**  
(image/video processing, digital forensics machine learning)

**MIME**



**ICT for Life and Health**  
(telemedicine, human data analysis)



**AI**  
(network automation, deep learning, generative AI, ML-based forensics)



## Communication Technologies

- Fiber optics, wireless, MIMO, smart surfaces, quantum communications
- Mobile networks (5G/6G), Wi-Fi, submarine and satellite networks



## Cybersystems

- Internet Networks and Protocols, Cybersecurity
- Wi-Fi, Internet of Things, Industrial Communication



## Multimedia

- ML and AI for point cloud and video analysis
- Video/image analysis and processing, network transmission



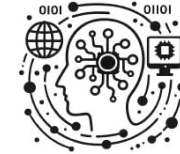
## ICT for Life & Health

- Processing and transmission of human and biological signals
- Analysis of human data (often using ML/AI techniques)



## Research & Innovation

- Core Courses in Communication and Multimedia
- Advanced Network Analysis, Optical Networks, 3D Vision, Wireless Systems



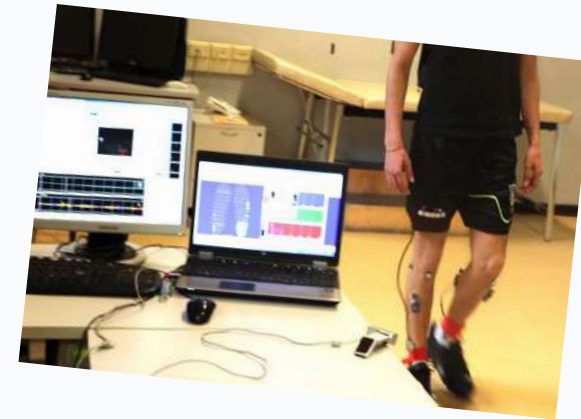
## Artificial Intelligence

- Common Skills in AI and Machine Learning
- Computer vision, computer forensics, and biometrics; ML/AI for human data



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**Research Labs**



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**Teaching Labs**





**Riccardo**

Principal Cloud  
Architect  
**Vodafone**



**Matilde**

Mission Op. System  
Engineer  
**Qascom**



**Mattia**

App. Engineering Cell.  
Products  
**Trasna**



**Silvia**

GNSS Signals  
Engineer  
**Airbus D&S**



**Daniele**

Head of Research  
and Innovation  
**HP Enterprise**



**Francesco**

Antenna Engineer  
**All.Space**