SALONE DELL'ORIENTAMENTO 2025

#TOMORROW STARTS TODAY

CORSO DI LAUREA MAGISTRALE

ICT ENGINEERING FOR SMART SOCIETIES

Politecnico di Torino

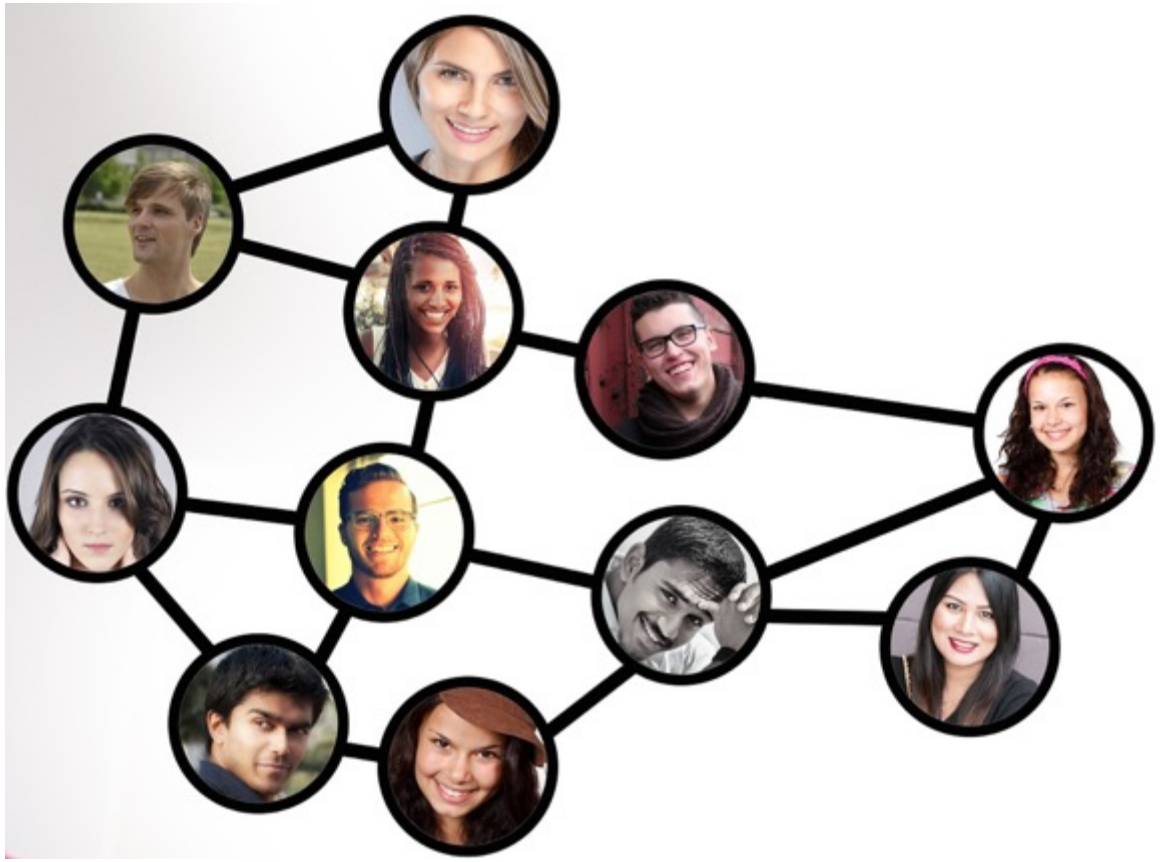
SCOPRI TUTTI I CORSI DI STUDIO A.A. 2025/26 www.polito.it

ICT

Information and Communication Technology

provides the **infrastructure** for our connected **society**

ICT *Engineering* for Smart Societies



Why ICT Engineering for Smart Societies?

- **EU smart cities marketplace**: 134 investment proposals, 740 M€ invested
- **Energy and smart cities**: smart cities allow for a better and more efficient use of energy resources – key to achieving the EU's energy and climate objectives
- **Smart mobility**: the EU must move quickly towards a sustainable, smart and inclusive mobility

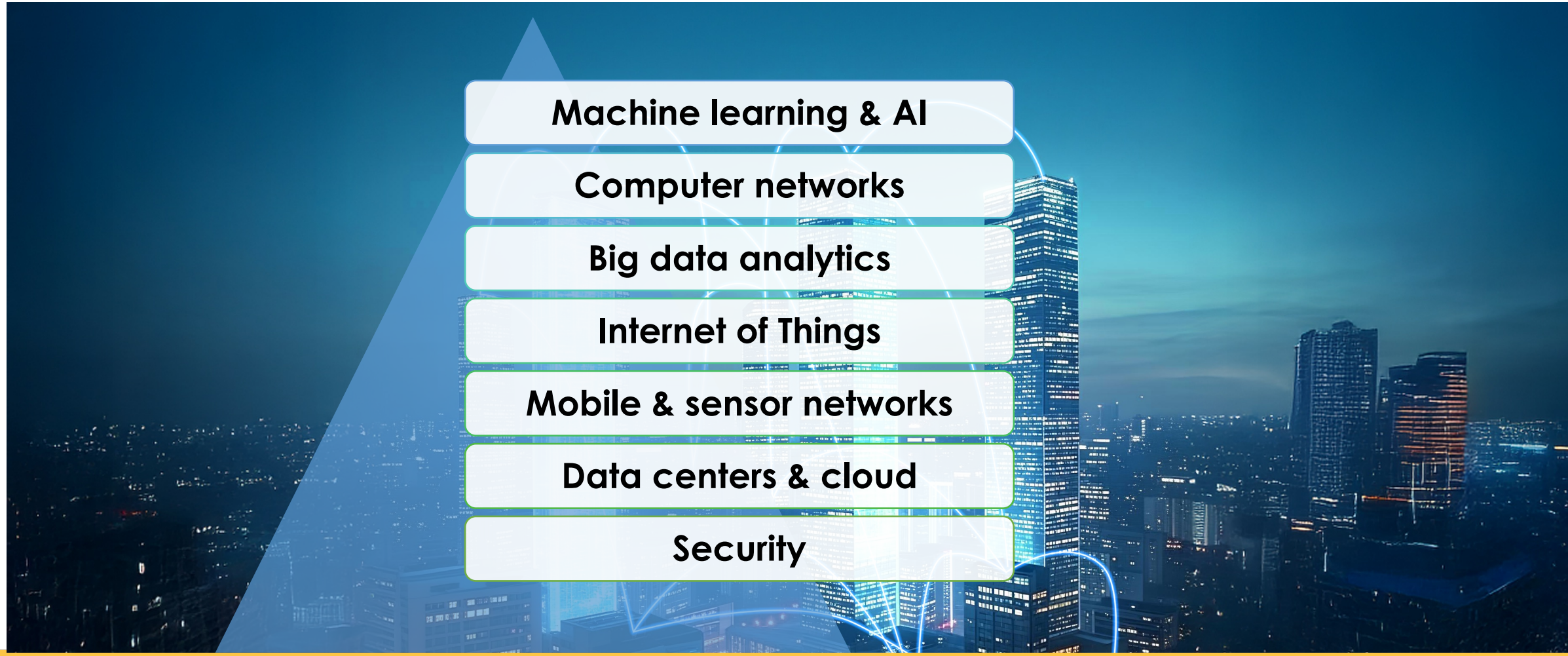
Why ICT Engineering for Smart Societies?

- 143 **smart cities projects**: London, Amsterdam, Torino, Singapore, San Francisco, …
- OECD document *"ICT skill and Employment: new competences and Jobs for a Greener and Smarter Economy"* : need of ICT skills in areas such as **environment**, **health**, **mobility**, intelligent **buildings** and cities, **energy**
- A **multidisciplinary** approach is needed

Domains

- Energy
- Smart mobility
- Building optimisation
- Environment
- Health

ICT fundamentals



First year – *new 2025/26*

ECTS	First semester	ECTS	Second semester
6	Programming for IoT applications	6	*Satellite systems for positioning and maps*
6	*Machine learning and neural networks*	6	Mobile and sensor networks
6	*Machine learning for health*	8	Operational research: theory and applications
6	Big data for Internet applications OR Applied information security and cryptography	6	*Advanced machine learning for imaging and vision* OR Innovative wireless platforms for IoT
12	Management & content delivery for smart networks: algorithms & modelling		

ICT fundamentals
domain specific course
free choice course
new course 2025/26

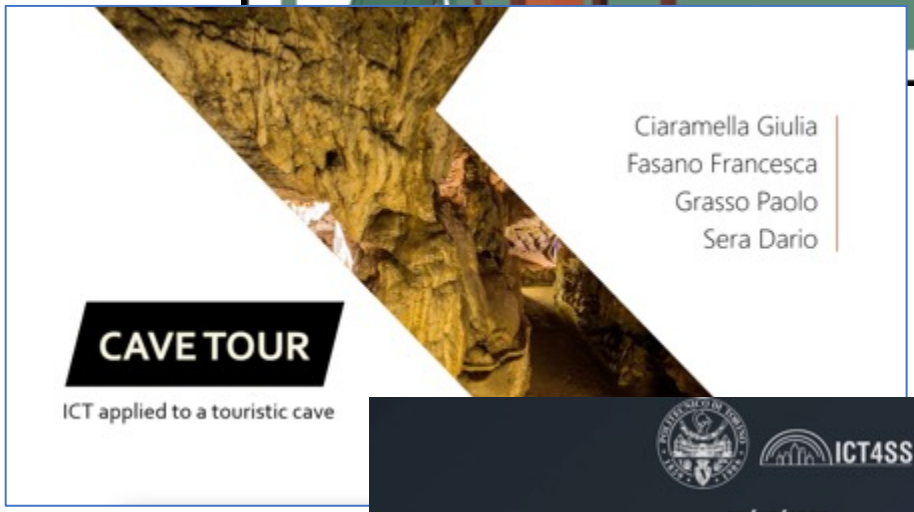
Second year - *new 2025/26*

ECTS	First semester	ECTS	Second semester
6	*Intelligent building optimisation*		
6	ICT for smart mobility		
6	Smart grids		
10	Interdisciplinary projects		
30	Master thesis		

domain specific course
project activities
new course 2025/26

Interdisciplinary project

- Project-based course during the second year
  - 10 credits
  - Students work in **teams**
  - Learn **project management**
  - Apply ICT to **challenging problems** of **practical interest**



Mobility & Internships

- **Double degree** programs with international universities:
  - **EURECOM Sophia-Antipolis** (France)
  - **TELECOM Paris Tech** (France)
  - **Grenoble Institute of Technology** (France)
  - **Universidad Politécnica de Madrid** (Spain)
  - **KTH – Royal Institute of Technology** (Sweden)
  - **University of Illinois at Chicago** (USA)

- **ERASMUS** exchange programs (TUGraz, KUL, TUD, UPC, Aalto, NTNU, Chalmers, Sidney, Montreal …)

After graduation

- You will become an **ICT engineer** expert in **smart societies**
- Work in **top competitive companies** and **research centers** in ICT sector
- Design of **smart technology products** and **services**, R&D, ICT consultant
- **Interdisciplinary** expertise:
  - cloud computing, big-data analysis, telemedicine, energy distribution, smart mobility, home automation, environmental protection, …
- **PhD** in Italy or abroad

After graduation

- A few examples, from LinkedIn:
  - **Application Product Manager** @ Celonis, Madrid, Spain
  - **Research Scientist** @ Telefonica Research, Madrid, Spain
  - **Data Scientist** @ TIM, Torino
  - **Innovation Leader** @ Teoresi, Torino
  - **Assistant Professor** @ PoliTO
  - **Technical Project Manager** @ TIM, Torino
  - **Manager** @ Blue Reply IT, Torino
  - **Cloud Engineer** @ Storm Reply, Torino
  - **Program and Project Manager** @ Intesa Sanpaolo, Moncalieri
  - **ELLIS PhD student** in Artificial Intelligence, Alicante, Spain
  - **Research Engineer** @ CNRS, Paris, France

Contacts

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ICTE4SS coordinator

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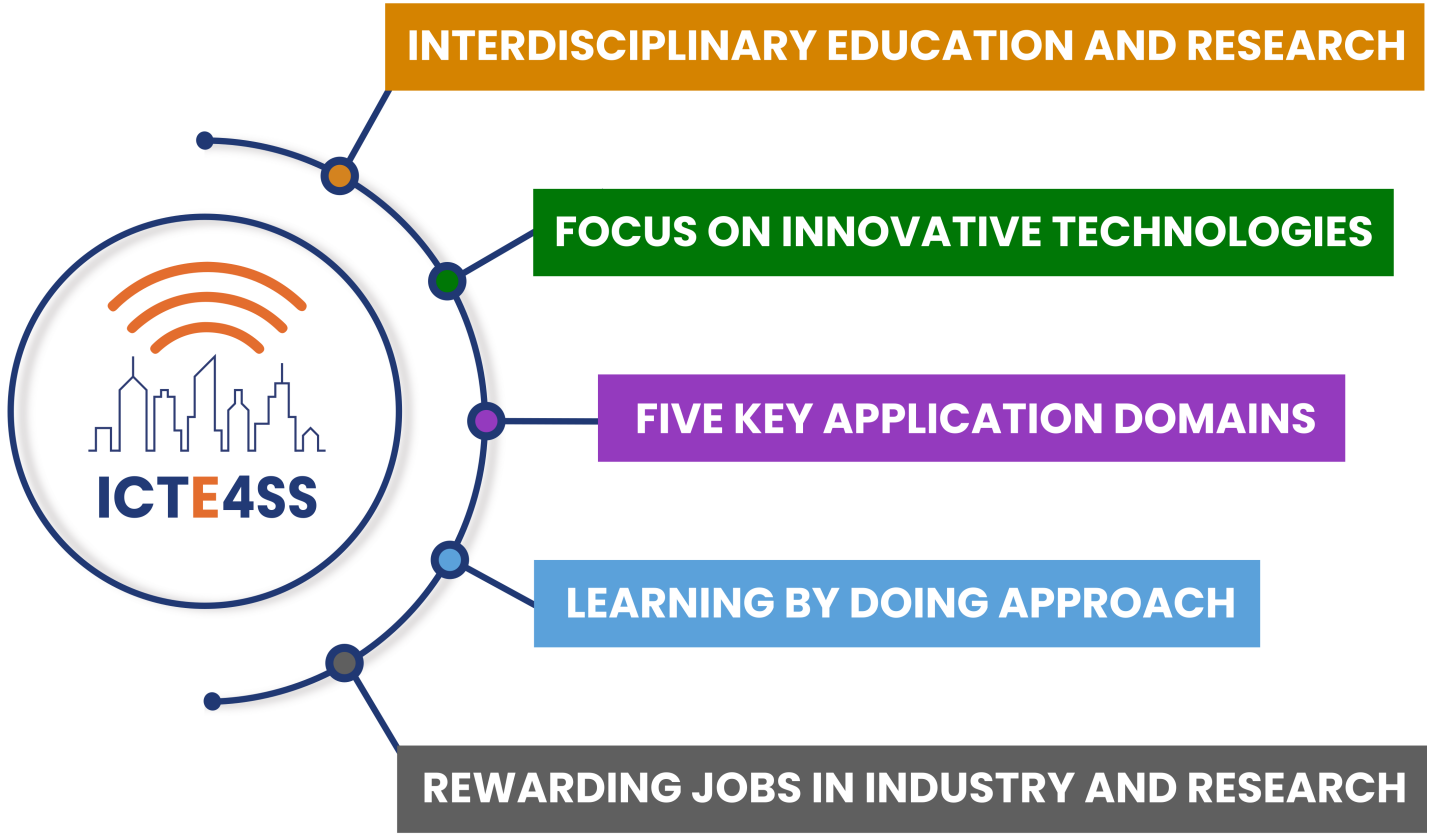
ICT4SS_ETF_POLITO

Website

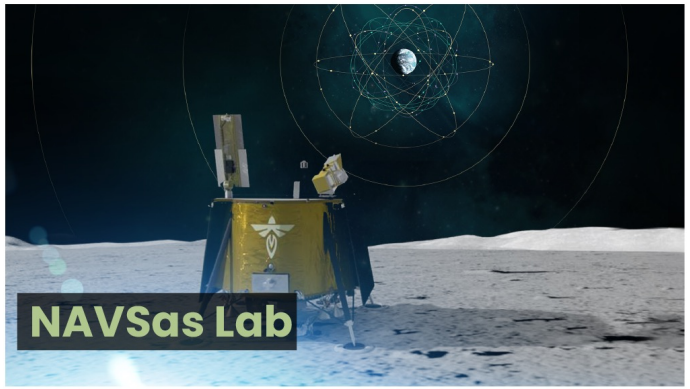
https://www.polito.it/en/education/master-s-degree-programmes/ict-engineering-for-smart-societies



ICT Engineering for Smart Societies

Research Labs Tours

Book your tour at the booth!



Navigation Signal Analysis and Simulation Lab

Global Navigation Satellite Systems (GPS,GALILEO, ...),
Remote Science Processing Center of the LuGRE NASA-ASI mission to study satellite navigation on the Moon.

Tour of the processing center, instrumentation and description of activites.

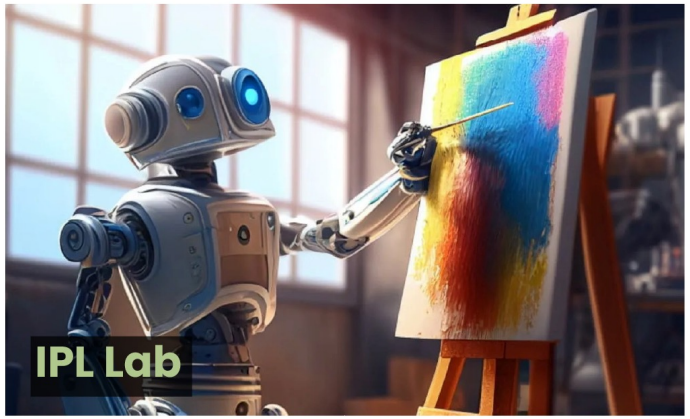


Image Processing and Learning Lab

Deep learning for vision and imaging.

Demo of personalized image generation:
AI generative model can be prompted to generate images with a specific object provided with a photo.

SCHEDULE

Monday 31st

17:00 – 17:30 (max 8 people)

17:45 – 18:15 (max 8 people)

Tuesday 1st

14:00 – 14:30 (max 8 people)