

Master of Science

ENGINEERS FOR

SMARTCITIES

by IMREDD

in partnership with
**MÉTROPOLE
NICE CÔTE D'AZUR**

FOSTERING TALENTS IN SMART CITIES CROSS - SECTOR CHALLENGES

The Diploma offers a multidisciplinary study experience focused on smart cities as well as the innovations and business solutions triggered by the transition towards more sustainable urban environments. The aim is to foster professionals capable to develop, implement and manage innovative projects around the smart city: a sustainable, connected, integrated, inclusive and liveable city.



"To boost my professional career I felt the need to update my engineering skillset and knowledge with current trends and developments in the field of smart cities. This was possible thanks to the sponsorship of my employer."

Isabelle Raeser, Manager of urban planning projects at Metropolis Nice Côte d'Azur

STUDY PROGRAM



Smart & Sustainable City / 20 hours (1 ECTS)
Systemic approach to smart city analysis; interactions of innovative urban infrastructures, networks, users and behaviors.



Urban Design / 40 hours (3.5 ECTS)
Sustainability policies to urban planning (AEU & HQE approach, eco-neighborhoods). Digital revolution in urban design (BIM to CIM) and urban form.



Urban Resilience / 40 hours (3.5 ECTS)
Assess vulnerability and resilience of a territory to technological and natural hazards as well as its capacity to adapt to changes and future risks.



Business challenges / 40 hours (3.5 ECTS)
Design and analyze business models of smart innovation; examine the relationship of innovation, territory and entrepreneurial spawning in smart cities.



Digital City / 40 hours (3.5 ECTS)
Explore trends in ICT creating wealth and social cohesion in urban contexts (mobile uptake, ultra broadband deployment, IoT, Big Data...).



Smart Energy / 40 hours (3.5 ECTS)
Explore new energy technologies for efficiency in energy consumption, distribution and self-production (eco-districts and micro-grids).



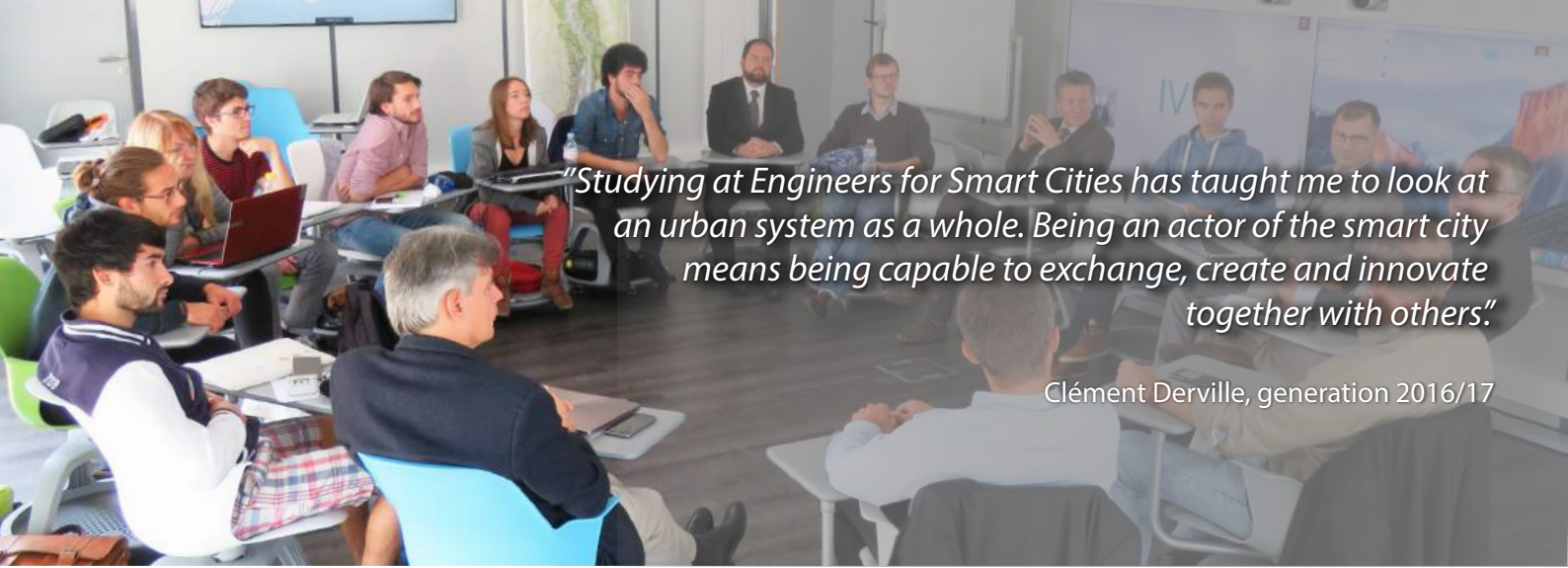
Mobility and Transport / 40 hours (3.5 ECTS)
Identify major challenges in mobility and transport systems, conceive smart mobility models, and assess innovation of urban mobility.



Integrated Project / 144 hours (8 ECTS)
Multi-disciplinary module providing participants with a cross-sector and hands-on management experience of smart city projects.



Professional Experience / (30 ECTS)
4 to 6 months internship at a company, research centre or public institution in France and worldwide.



"Studying at Engineers for Smart Cities has taught me to look at an urban system as a whole. Being an actor of the smart city means being capable to exchange, create and innovate together with others."

Clément Derville, generation 2016/17

INNOVATIVE LEARNING EXPERIENCE

The "Smart City Innovation Center" (SCIC), an integrated collaborative platform unique in France, created within the premises of the IMREDD, is the strategic hub bringing together stakeholders from the research, education and leading smart city-focused companies. The SCIC is equipped with a Learning Lab where all the teaching sessions for the diploma "Engineers for Smart Cities" will be held. Participants and course conveyors will have the chance to use state-of-the-art education technology allowing for an innovative blended learning experience (SPOC, flipped-classrooms, webinars, etc.).

Practical case-studies and on-site field trips will be organized throughout the study semester to animate the learning environment as well as stimulate critical analysis and exchange.

CONTINUING PROFESSIONAL DEVELOPMENT

Sponsoring continuing professional development enables employers to reward and motivate employees, while equipping them with the latest skills and specialist knowledge to maximise business opportunities.

Employers can opt for:

- The enrolment in the full program to obtain greater depth of knowledge and training;
- A selection of individual and in-house modules to fill a specialist skills gap;
- Bespoke and in-house courses tailored to suit an organization's needs.

CAREERS

Participants will acquire the requisite skills for a career in private enterprises, consultancies, engineering firms as well as the public sector, development projects and bodies concerned with smart cities and sustainable urbanization. Participants will also gain the necessary skills for roles in higher education and research institutions.

ADMISSION

Postgraduate students as well as professionals can apply for this Diploma. Applications are reviewed holistically focusing on applicants' academic excellence and personal commitment. Basic entry requirements include:

- Qualification equivalent to a 4 year degree or professional experience
- English language proficiency equivalent to CEFR B2 level
- French language skills equivalent to CEFR B1 level (preferred)

TUITION FEES

10 000 € / Year

Scholarships are available to support participants, partially or fully covering tuition fees and based on academic excellence as well as on personal circumstances.

CONTACT

 4smartcities.imredd@univ-cotedazur.fr

CALENDAR

SEMESTER 1 : SEPTEMBER - FEBRUARY
SEMESTER 2 : MARCH - AUGUST



4smartcities.com



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QUALITY LABELS



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