



# TOP REASONS O DO EXCHANGE STUDIES AT EURECOM

### **KEY FACTS ABOUT EURECOM**

**300** Master students

75 Phd students

**25** Professors

Main fields of research and teaching

**Data Science** 

**Digital Security** 

Communication Systems

A consortium of 8 universities and 7 companies



300

Days of sun on the French Rivieria





#### GRADUATE SCHOOL & RESEARCH CENTER IN DIGITAL SCIENCE





#### Academia

















#### Industry and institution







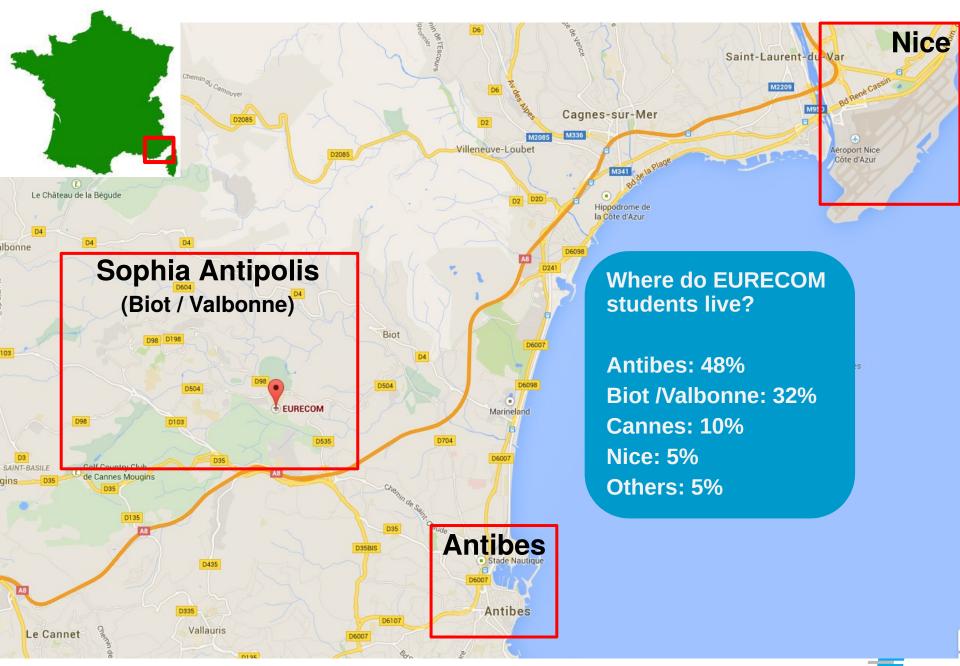












### **EUROPEAN SILICON VALLEY**

#### **EURECOM** is located in the heart of **SOPHIA ANTIPOLIS**



2,330 companies
36,300 jobs
4,500 researchers
5,000 students
70 nationalities

#### One of the largest techno-parks in Europe

Some of the top companies offering internship opportunities to our Master & Post Master students:





































DLR, NXP, Magnetti Marelli, PSA, KMPG, Delivery Hero Germany, Technicolor, HP, Nokia, CEA, Accenture





### ITS AREAS OF EXPERTISE



#### DATA SCIENCE & ENGINEERING

- Machine learning, deep learning and statistical modeling
- Big Data
- Data Science & Data Mining
- Business intelligence
- Artificial Intelligence



#### DIGITAL SECURITY

- System and Software Security
- Applied Cryptography and Security Protocols
- Biometrics and Digital Media



#### COMMUNICATION SYSTEMS

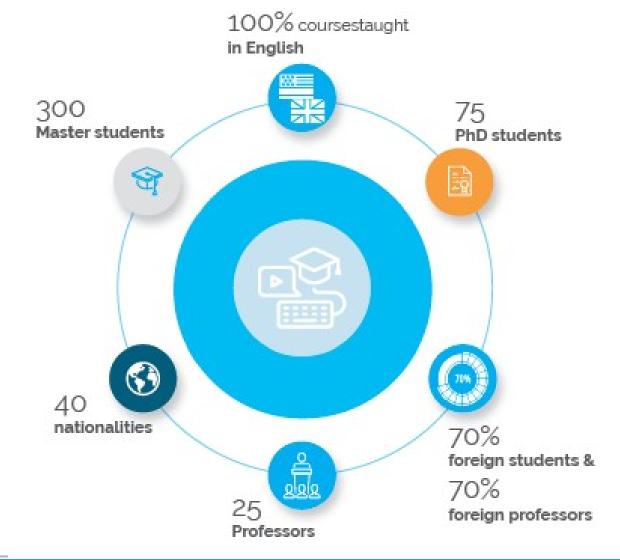
- Internet of Things
- 60
- Wireless Communications
- Mobile Communications
- Mobile Networking
- Mobile Applications and Services
- Telecommunications





# Diversity is not the exception: it's the norm!

A VERY
INTERNATIONAL
SCHOOL







## INTERNATIONAL FACULTY









**25 14** 





















































# SMALL IN SIZE BUT BIG IN VISIBILITY!

EURECOM's Faculty has achieved world-wide recognition in their field thanks to major research achievements

- 332 Scientific Publications
- 207 Top International Conferences



- 29 Average H-Index
   EURECOM is a partner in Europeans Double Degree Masters programs
  - ✓ Big Data Security
  - ✓ Sensing, Communicating and Processing Big Data f
  - ✓ Mobile Systems and Security

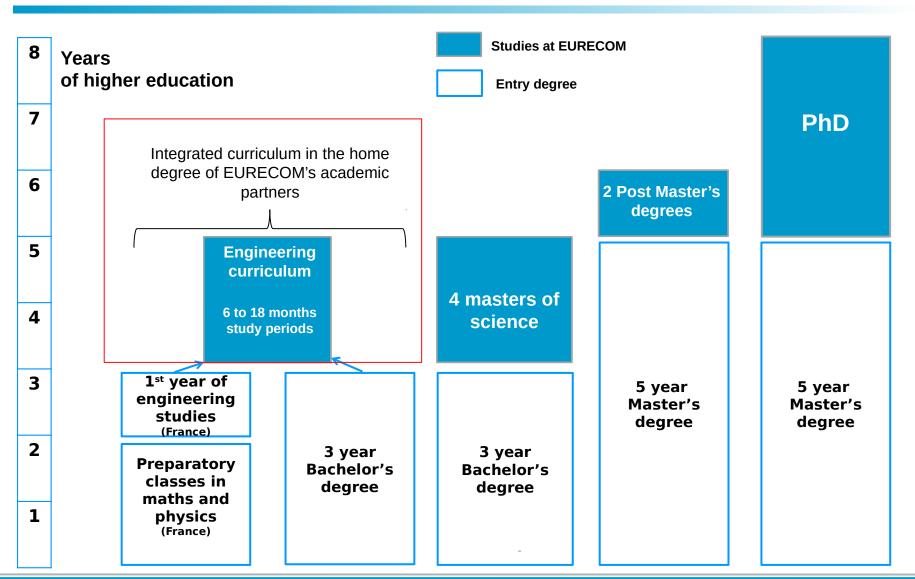


Established by the European Commission

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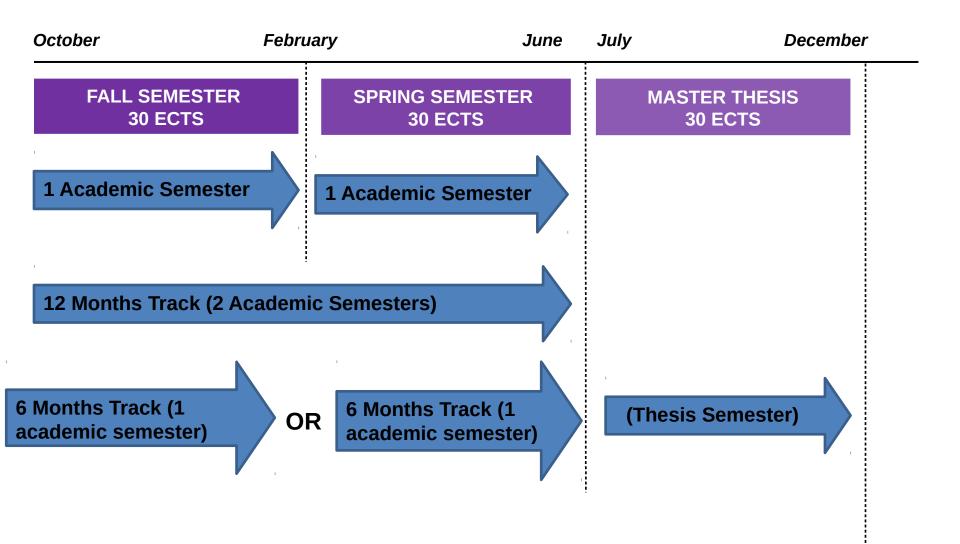
# **EURECOM's CURRICULA**







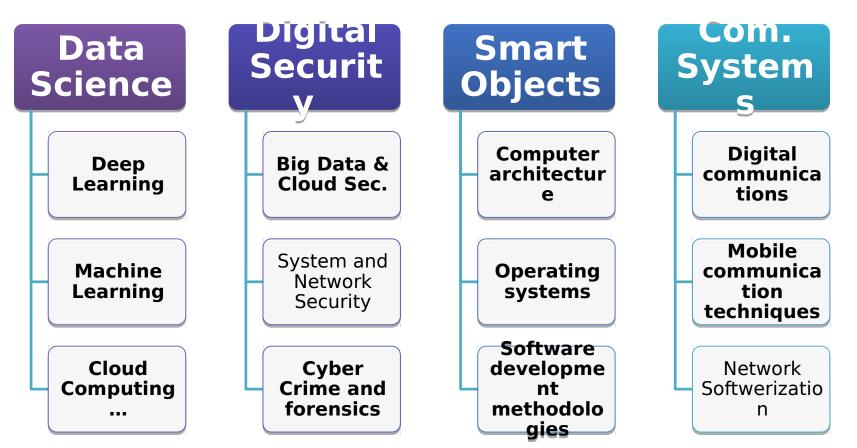
### STUDENT MOBILITY



### STUDY TRACKS

Courses are organized into 4 Study Tracks with several compulsory courses and the rest being elective. More information:

http://www.eurecom.fr/en/teaching/engineering-studies/18-mont hs-curriculum You pick the courses you wish among 4 study tracks



### FLEXIBLE CURRICULUM

EURECOM's organisation is very flexible and allow students to design their own curriculum (if approved by their home university).

The whole catalogue of courses is open to exchange students.

#### **TECHNICAL COURSES**

#### FALL SEMESTER (OCTOBER-JANUARY)

Technical courses				
T	ATMM	Advanced topics in multimedia		
Т	ATWireless	Advanced topics in wireless communications		
T	Clouds	Distributed Systems and Cloud Computing		
T	CompArch	Computer architecture		
T	DigiCom	Digital communications		
T	EmSim	Emulation and simulation methodologies		
T	G_Theory	Game Theory		
T	ImCompress	Image and video Compression and Processing		
T	InfoTheo	Information theory		
T	MALIS	Machine Learning and Intelligent System		
T	MathEng	Essential Mathematical Methods for Engineers		
T	MMIR	Multimedia indexing and retrieval		
T	MobCom	Mobile communication techniques		
T	MobMod	Mobility Modeling		

#### **NON TECHNICAL COURSES**

#### FALL SEMESTER (OCTOBER-JANUARY)

General courses				
G	Entrep	Entrepreneurship and Capital-Venture		
G	GreenIT	Sustainable ICT's		
G	Innov	Innovation & new product development		
G	Managintro	Introduction to management		
G	Property	Intellectual property law		
G	TeamLead	Personal Development and Team Leadership		





# **CONTENT OF THE CURRICULUM**

#### Technical Courses

- Innovative courses, designed in partnernship with EURECOM's academic and industrial members.
- Regularly assessed and updated.

#### Non Technical Courses

 1/3 of the curriculum. « Soft skills » MBA type classes taught by experts from companies or professors from renowned business schools in Law, Management, Business simulation...

# Semeste r Project

 Blend of theoretical and practical work under the supervision of a professor, often involves the building of a prototype. In teams of 2/3 students. (Around 90-100h per semester)

#### Foreign Languag es

 Any foreign language can be taught provided there are 5 students min. with a similar level.

# Master's Thesis

- Thesis on an industrial or research subject carried out in a company or a lab during 6 months. EURECOM maintains an updated database.
- Students are paid and integrated as part of the company' staff.



#### **INNOVATIVE LEARNING**

- Main developer of a dedicated DS (GPU)-cloud platform to perform analytics on demand, https://zoe-analytics.eu/
- Use of cutting-edge software for Data Science :Jupyter, Collab, ...
- Students encouraged to participe in Capture The Flag competitions (Hacking Challenges)
  - 2<sup>nd</sup> place at CSAW 2017 (Europe)
  - Co-Organizer of DEFCON



2nd PLACE PRIZE







# HANDS-ON APPROACH approach

between theoretical input and practical application (Labs, Challenges...)

- Guest Speakers from the Industry
- Semester long projects on relevant industrial topics
- Visits in nearby companies and introduction to new





# **SEMESTER's PROJECTS**

Students choose a topic and work on project which is highly related to research and/or industrial partnership. It can be about developing a prototype, finding a solution to an identified problem...

The aim is to put into practice the concepts learnt in class and gain a valuable practical and/or research experience.

Students work in team under the supervision of a professor.

#### Some recent examples of students projects

- Web Interface, Semantic Web, Sensor Networks & Security
- Online Game to teach Reverse Engineering
- Statistical tests of machine-learning algorithms with applications in security
- Collect and analysis of dynamic data on Twitter
- Where is my money going? Following the bitcoin money trail
- Automated Identification of Android Malware Using Classification Techniques
- Surveillance networks: How to build surveillance networks from a communications point of view, what are the networks limits and will the big brother win
- Prototype of Cloudup: Secure Deduplication with encrypted data for cloud storage
- Monitoring Android baseband system status for GSM fuzzing
- A game-theoretic analysis of the economic issues in ISP regulation
- People tracking with autonomous UAVs based on AR.Drone 2.0



# MASTER THESIS OPPORTUNITIES (

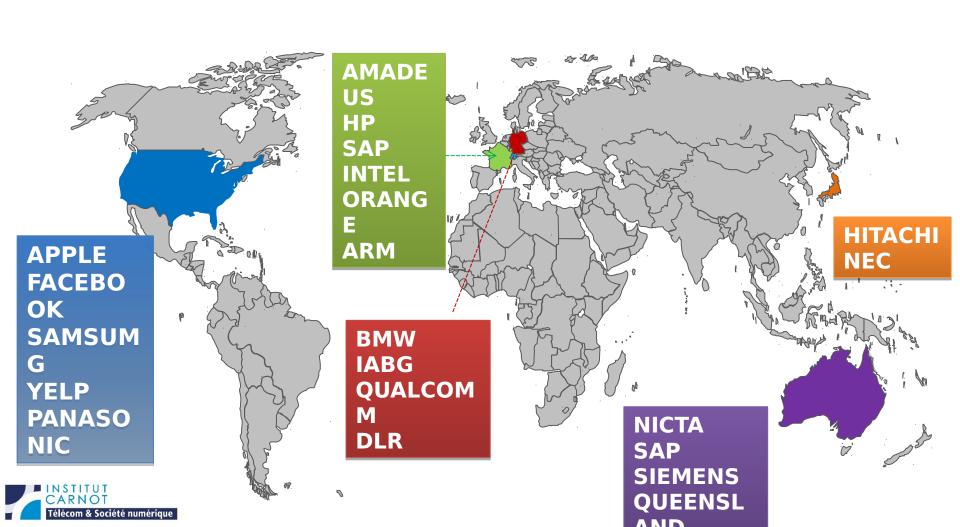
- Master's programs include a <u>paid</u> 6-month internship (master's thesis) in a hitech company or lab a unique industrial exposure and competitive asset on the job market!
- EURECOM gives students access to its database of internship opportunities in prominent companies both in France and Abroad.

#### **Example of internships (Places and Topics)**

AFD Technology	International GSM Roaming
ALCMEON	crawl, and large-scale processing of UGC (User Generated Content)
<b>AMADEUS</b>	iPhone application for online flights shopping
ATOS	Network security
BMW	Security analysis and specifications of the fedust protocol
CISCO Systems Inc.	Router's Penetration Testing
Commsquare	Protocol Analysis in IP Mobile Networks
EUREVA	Developing a Cloud-Computing visualization solution
NOKIA	TCP Response to Lower-Layer Connectivity-Change Indications
ORANGE	Practical Network security applications in a network provider
	environment
PHILIPS ELECTRONICS	Study of the influence of NAT in triple play networks
SAP	Security mechanisms for the Internet of Services
SecludIT	Security Audit in cloud infrastructures
ST MICROELECTRONICS	Evaluate the feasibility of particular kinds of multi-fault attacks
	against RSA
<b>SWISSCOM Innovations</b>	Network access control
TECHNICOLOR	Design and evaluation of a hybrid cloud for dynamic workloads
THALFC ALFAUA CDACE	notwork access control with part based convity

# **MASTER THESIS**

EURECOM provides students with a database of Master's thesis opportunities in labs and companies in France and abroad.



# **OPPORTUNITIES IN SOPHIA ANTIPOLIS (3)**

**EURECOM** students can browse a database of several hundreds of offers, fueled by the efficiency of its network of partners and relationships with local, national and international companies.

Some of the top companies offering internship opportunities to our Master & Post Master students:























DLR, NXP, Magnetti Marelli, PSA, KMPG, Delivery Hero Germany, Technicolor, HP, Nokia, CEA, Accenture

















# WHY EURECOM? ENHANCED EMPLOYABILITY

#### **DURING**

- Very strong ties with major actors in industry, not only in Sophia but in the whole world
- 6-month Paid Master Thesis in a company or lab (EURECOM provides students with an updated Database of internship opportunities)

**Average monthly allowance: 1200€/month** 

#### **AFTER**

- 99% of our Graduates find a job between 0 -12 months after graduation (93% from 0 to 3 months)
- 75% have an annual salary between 40K€ and +75K€
- 97% satisfied by EURECOM's education
- 90% declare professional career = career aspirations



### INDIVIDUAL ASSISTANCE

- Human-size school:
   Accessible professors
   and staff
- Favorable professor/students ratio
- A whole team dedicated to student's administrative life
  - Administrative assistance: Health insurance, housing, bank account...
  - Help to find a flat and an internship



EURECOM Student Affairs Team



# LANGUAGE AND CULTURAL TRAINING

- A 3-week Intensive program of French language and cultural visits organized in September
- Included in the program (Free of charge for Exchange Students)
- Weekly French courses throughout the academic year





### STUDENT ACTIVITIES

EURECOM has a very active Student's association organises many events all year long to fully enjoy your stay in France.

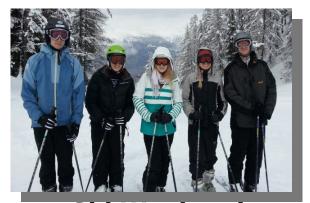






Weekend of Integrationnternational Meal

**International Study trip** 



Ski Weekend



**Many sport activities** 



**Graduation and Alumni Events** 





### AN UNPARALLELED LOCATION

EURECOM's localization allows our students to enjoy culture, sports and

discovery.





#### 60 km from Italy







Gateway to main European Cities with low cost flights

**Fine Arts** 

Like the cinema?
Enjoy the Festival de Canne





# **FANCY LIVING IN A VILLA?**













# 30 min the beach



# A few words from past exchange students at EURECOM (1):

- Leaving Trondheim in mid February and arriving under the sun of Côte d'Azur is not only a remarkable change of climate, the EURECOM staff are also very helpful with all administrative tasks making the transition fast and easy.
- Coming to campus you find yourself in a state of the art research driven environment; the professor / student ratio is one of the major differences to NTNU.
- It is really cool to work with the professors that have written some of the most referenced articles and books in communication.

I'll strongly recommend spending a year at EURECOM to anyone.

It was an educational and social experience I'll never forget!»







# A few words from past exchange students at EURECOM (2):

We (Janita, Jomar, Eirik, Christian, Fredrik, Amund, Marius, and all) went to EURECOM in order to do something a bit different for our fourth year, and it turned out to be a great choice. Here we get:

- Smaller courses of 5 or 3 credits, meaning you can get a quite broad spectrum.
- A great fit with the track we are taking back home - getting the course choices approved is not very difficult. (We are from elsys, komtek and data).
- A very international group of friends



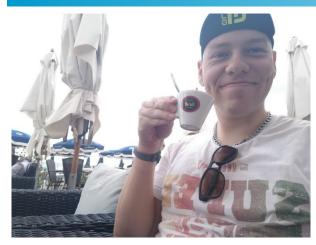
- Good financial support from erasmus, lånekassen and CAF.
- Super nice weather!

Are you considering EURECOM for a semester or two abroad? Kjør på!





# A few words from past exchange students at EURECOM (3):



Eino Virtanen
Former AALTO student at

**EURECOM** 

"I definitely recommend EURECOM!

The university building is small and all students are exchange students, so the atmosphere is very positive and social.

The professors are from many different countries and are motivated to lecture and research.

The topics of the courses and research are timely and that boosts studying motivation.

Cote d'Azur as a location is awesome, because here we have only a few months of the "Finnish spring" and the rest of the time it is summer.

One should not fear the infamous bureaucracy of France, because there are many members of the staff of the university, that gladly assist with all the practicalities.

There are multiple opportunities to learn the French language, but knowing the language is not a requisite, as everything can be done in English."



# student that took DD at EURECOM:

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"Well, a year spent at EURECOM was definitely magnifique!

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Level of education is high here, so don't be surprised that you will be required to work a lot. On the other hand, knowledge you're getting here, is up to date with what industry requires and more often even beyond it (since EURECOM is not just a university, it is also a research center).

University administration, teachers and assistants are very friendly and tending to help you in case you got stuck with something. It's almost like a small family:)

As well as getting in touch with modern trends in industry, you will have an opportunity to explore an amazing location of Cote d'Azur. There is no need to introduce French Riviera, just have a look on the map and see the distances between all famous locations. There is actually a lot to visit!.

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Also, since there is quite few students (from all over the world), you will easily get your "travel buddy" or "chillin' buddy" with who you will have (for sure a lot of) great memories and fascinating trips all over the seashore.

For me personally, it was a great experience and I'm really grateful, that I had this opportunity.

Life wouldn't be the same after spending some time here. You will get new opportunities, new friends and warm memories.

Long story short, if you're looking for some changes in life, a good adventure or a good time, this is the right place! "







#### **CONTACT DETAILS**

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