

Electrical Engineering and Control Systems / WICS 2nd year

Master in Electronics, electrical energy, automation



Component
UFR PhITEM
(physique,
ingénierie, terre,
environnement,
mécanique)

Presentation

The WICS (Wireless integrated circuits and systems) master is a master degree focusing in integrated circuit and system design for Analog/Mixed/RF & millimeterwave applications. It gives students the opportunity to learn advanced skill sets with projects led by high-level research units; the techniques and methodologies they will need to promote their research on an international level will be studied.

With a **curriculum focusing on theoretical knowledge supported by practical applications**, the WICS master prepares students for a career in both the **international research community and the professional applications**. As they finish their training, graduate students are fully ready to pursue a career in thriving fields such as the Internet of Things, future wireless communication systems, sensor networks, or medical applications.

International dimension

The WICS master is taught in English by French and foreign teachers and/or researchers from universities and companies. It will allow preparing students for a career in both

the international research community and the professional applications.

A double degree with Politecnico di Torino has been created. It concerns:

- Master WICS in France (at the UGA and Grenoble INP)
- Laurea magistrale in Ingegneria elettronica in Italy (at Politecnico di Torino)

The first year of this program is taught at PoliTo, the second year at UGA/Grenoble INP

Admission

Access conditions

- **2nd year of master WICS degree** : The prospective student should have completed at least **four full years of University** studies (a first year of master's degree, bachelor or equivalent degree with 240 ECTS), have followed basic classes in Electronics and Radio Frequency and prove an English proficiency with CEFR (B2), TOEFL (IBT 87-109), IELTS (5.5-6.5), TOEIC (785-945) or equivalent. Students coming from English-speaking countries or/and who had a University curriculum in English are considered proficient enough. If you don't have the

opportunity to take the test in your home University, an English test is organized during the first week of the classes, to check the level of everyone

Candidature / Application

You want to apply and register?

Simply follow this [link](#) to get started

Useful info

Contacts

Program director

Lauga-Larroze Estelle

✉ estelle.lauga-larroze@univ-grenoble-alpes.fr

Program administration

Gestionnaire

✉ phitem-master-eea@univ-grenoble-alpes.fr

Continuing education manager

Laura DI RUZZA

✉ fc-phitem@univ-grenoble-alpes.fr

Partner schools

This program can be followed as part of a double degree in partnership with Politecnico di Torino (Italy). Professor in charge of the Double Degree: Mr. Jean-Marc DUCHAMP

Partner laboratories

TIMA

<http://tima.univ-grenoble-alpes.fr/tima/fr/index.html>

IMEP-LAHC

<http://www.imep-lahc.grenoble-inp.fr>


LCIS

<http://www.lcis.grenoble-inp.fr/>

Course location(s) - City

 Grenoble

Campus

 Grenoble - Scientific Polygon

Program

Master 2nd year

Semester 9

	Nature	CM	TD	TP	Crédits
UE Radiofrequency Communication Systems	Teaching Unit (UE)	14h			6 credits
UE Radiofrequency Integrated Circuits	Teaching Unit (UE)	14h	14h	24h	6 credits
UE Microwave Circuits	Teaching Unit (UE)			24h	6 credits
UE Antennas and Electromagnetic Compatibility	Teaching Unit (UE)	16h	10h		3 credits
UE Integrated technologies & process of fabrication	Teaching Unit (UE)			8h	3 credits
UE Research lab work (part I)	Teaching Unit (UE)				3 credits
UE Specialty courses	Teaching Unit (UE)				3 credits

Semester 10

	Nature	CM	TD	TP	Crédits
UE Research internship	Teaching Unit (UE)				24 credits
UE Research lab work (part II)	Teaching Unit (UE)				3 credits
UE French as a foreign language	Teaching Unit (UE)				3 credits
UE English	Teaching Unit (UE)				3 credits