

Master in Electronics, electrical energy, automation

Electrical Engineering and Control Systems 1st year

Presentation

The Electrical Engineering and Control Systems (EECS) program is intended for English-speaking students who want to obtain a solid training in the fields of Electronics, Electrical Energy and Automation and who wish to pursue a PhD thesis in one of the laboratories in Grenoble or elsewhere in the world.

The program consists of a common core in semesters 7 and 8 which correspond to the first year of the Masters degree. In semesters 9 and 10, students will choose to pursue their studies in one of the following areas:

- Computational Sciences for Electrical Engineering (CompSEE)
- Master in Systems, Control and Information Technologies (MISCIT)
- Wireless Integrated Circuits and Systems (WICS)

Registration and scholarships

Access conditions

See the section "Candidater et s'inscrire" (opposite)

Admission to the first year of Masters: prospective students should:

- have completed at least three full years of University studies (an L3, bachelor or equivalent degree with 180 ECTS),
- have followed a basic class in Automatic Control, or Electrical Engineering, or Applied Physics and succeeded with top grades,
- have fluency in English.

Continuing education: You are eligible for continuing education:

- if you are resuming your studies after a two-year interruption,
- or if you were following a training under the continuing education system during one of the 2 previous years
- or if you are an employee, a job seeker or a self-employed person.

If you do not have the required diploma to enter the program, you can undertake a [validation of your personal and professional experience \(VAPP in French\)](#).

For more information, you can look up the web page of [Direction de la formation continue et de l'apprentissage](#).

For applicants whose country of residence is not part of the "Portail Etudes en France" (PEF) system, the application campaign schedule for the eCandidat application is available [here](#).

skin.odf-uga:SKIN_ODF_CONTENT_PROGRAM_CANDIDATURE_LABEL

Do you want to apply?

Please note that the procedure differs according to the degree you are considering, the degree you have obtained, or your place of residence for foreign students. [Simply follow this link to get started](#)

Expenses

Tuition fees 2023-2024: 243 € + 100€ CVEC

Practicals informations :

- > Component : UFR PhITEM (physique, ingénierie, terre, environnement, mécanique)
- > level : Baccalaureate +5
- > Duration : 2 years
- > Course type : Professionalisation contract, Education in apprenticeship, Initial and Continuing Education
- > Location(s) : Grenoble - Scientific Polygon

Contacts

Program director

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Program administration

Application
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Continuing education manager

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Program

Master 1st year

Semester 7

UE Signals and systems	3 ECTS
UE High frequency electronics	3 ECTS
UE Linear dynamical system	3 ECTS
UE State space representation	3 ECTS
UE Scientific programming in Python	3 ECTS
UE Numerical methods	3 ECTS
UE Analog and digital transmission	3 ECTS

1 option(s) to choose from 1

English	3 ECTS
French as a foreign language	3 ECTS
2 option(s) to choose from 2	
UE Linear optimal control	3 ECTS
UE Numerical analysis of circuits equations	3 ECTS
UE Analog electronics	3 ECTS

Semester 8

UE SISO Feedback control	3 ECTS
UE Initiation to research methodologies	6 ECTS
UE Embedded systems and internet of things (IOT)	3 ECTS
UE Electromagnetism	3 ECTS
UE Introduction to numerical field computation	3 ECTS
UE Communication systems	3 ECTS
UE Introduction to RF electronic design	3 ECTS
UE Internship	6 ECTS