

Master Electronique, énergie électrique, automatique

Parcours Electrical Engineering and Control Systems 1^{ère} année

Présentation

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)

Admission

Conditions d'admission

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](#).

Candidature

Do you want to apply?

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

Droits de scolarité

[Consulter le montant des frais d'inscription](#)

Infos pratiques :

- > Composante : UFR PhITEM (physique, ingénierie, terre, environnement, mécanique)
- > Niveau : Bac +5
- > Durée : 1 an
- > Type de formation : Formation initiale / continue
- > Lieu : Grenoble - Domaine universitaire

Contacts

Responsable pédagogique

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Gestionnaire de scolarité

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Responsable formation continue

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Programme

Master 1re année

Semestre 7

UE Signals and systems	3 ECTS
UE High frequency electronics	3 ECTS
UE Linear dynamical systems	3 ECTS
UE State space representation	3 ECTS
UE Scientific programming in Python	3 ECTS
UE Numerical methods	3 ECTS
UE Analog and digital transmissions	3 ECTS
1 option(s) au choix parmi 1	
UE English	3 ECTS
UE French as a foreign language	3 ECTS

2 option(s) au choix parmi 2

UE Linear optimal control	3 ECTS
UE Numerical analysis of circuit equations	3 ECTS
UE Analog electronics	3 ECTS

Semestre 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