SCIENCES, TECHNOLOGIES, SANTÉ, INGÉNIERIE

Parcours Electrical Engineering and Control Systems 1ére année

Master Electronique, énergie électrique, automatique

Niveau d'étude visé
Bac +5

ECTS
60 crédits

Durée
1 an

Composante
UFR Physique, Ingénierie, Terre, Environnement, Mécanique (PhITEM)

Langue(s) d'enseignement
Anglais

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)

Formation internationale : Formation tournée vers l'international

Dimension internationale

Study abroad as an exchange student

As part of this track, you have the opportunity to study for a semester or a year at a UGA partner University abroad.

The International Relations Officers of your faculty will be able to provide you with more information.

More information on : https://international.univ-grenoble-alpes.fr/partir-a-l-international/partir-etudier-a-l-etranger-dans-le-cadre-d-un-programme-d-echanges/

Admission

Conditions d'admission

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

Informations non contractuelles.
Dernière mise à jour le 11 septembre 2026

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

Les + de la formation

- Very favorable research environment (research platforms, quality teachers, internships in reserch labs, laboratory project, ...) and opportunities to pursue a PhD thesis.
- Excellent professional integration of students after the Master's degree in a stable and qualified job market in the field of electronics, electrical engineering and automation (EEEA).
- Original and complementary thematic positioning with respect to other EEEA Masters at the national level.
- Very strong international attractiveness for English-speaking students (MISCIT).

Infos pratiques

Contacts

Responsable pédagogique

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Gestionnaire de scolarité

Gestionnaire

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Gestionnaire de scolarité

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Responsable formation continue

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Lieu(x) ville

Grenoble

Campus

Grenoble - Domaine universitaire

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Programme

Master 1re année

Semestre 7

	Nature	CM	TD	TP	Crédits
UE Signals and systems	UE	7,5h	7,5h	12h	3 crédits
UE High frequency electronics	UE		7,5h	9h	3 crédits
UE Linear dynamical systems	UE				3 crédits
UE State space representation	UE		9h	4h	3 crédits
UE Scientific programming in Python	UE			16h	3 crédits
UE Numerical methods	UE			12h	3 crédits
UE Analog and digital transmissions	UE		7h	12h	3 crédits
UE English	UE			24h	3 crédits
UE French as a foreign language	UE			24h	3 crédits
UE Linear optimal control	UE			12h	3 crédits
UE Numerical analysis of circuit equations	UE				3 crédits
UE Analog electronics	UE	8h		8h	3 crédits

Semestre 8

	Nature	CM	TD	TP	Crédits
UE Introduction à l'IA : SISO Feedback control	UE	15h	9h	15h	3 crédits
UE Initiation to research methodologies	UE			35h	6 crédits
UE Embedded systems and internet of things (IOT)	UE			18h	3 crédits
UE Electromagnetism	UE		10h		3 crédits
UE Introduction to numerical field computation	UE			12h	3 crédits
UE Communication systems	UE			8h	3 crédits
UE Introduction to RF electronic design	UE		2h	20h	3 crédits
UE Internship	UE				6 crédits

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