GRADUATE SCHOOL SOLAR ACADEMY

UNIVERSITÉ SAVOIE MONT BLANC

MASTER SOLAR ENERGY: ENGINEERING AND ECONOMICS

ESBC - Energy for Solar Building and Cities

Schools

- School of Engineering, Polytech Annecy-Chambery
- School of Business and Administration, IAE SMB
- School of Law, Faculté de Droit

FACULTÉ DE DROIT UNIVERSITÉ SAVOIE MONT BLANC

IAE UNIVERSITÉ SAVOIE MONT BLANC

POLYTECH ANNECY-CHAMBÉRY

Advantages of training

Innovative introduction to engineering sciences, focusing on solar energy (highly growing sector of renewable energy) and on energy efficiency in building sector (responsible for over 40% of world primary energy consumption) will give a unique multidisciplinary education.
Excellence scholarships will be awarded to selected candidates, and funded by the Solar Academy Graduate School, in order to attract students with an excellent academic level and a real motivation.

Activity sectors

IReal estate activities | Construction | Modelling and construction | Generation and distribution of electricity, gas, steam and air-conditioning | Specialized, scientific and technical activities |

Partner laboratories

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Presentation

The Master program ESBC: Energy for Solar Buildings and Citites, is a highly innovative, new degree program preparing to tackle present and future challenges of the energy transition. It is a part of Solar Academy Graduate School recently awarded to University of Savoie Mont Blanc (USMB).
ESBC is a two-year full-time Master's degree, composed of 4 semesters representing a total of 120 ECTS (officially integrated in the European Bologna system of higher education).
This master program is jointly developed by the School of Engineering (Polytech Annecy-Chambery), School of Business and Administration (Institut d'Administration des Entreprises IAE Savoie Mont Blanc) and School of Law (Faculté de Droit) at USMB.
Located on the Bourget-du-Lac Campus of INES (National Institute for Solar Energy), you will participate in high quality education and multidisciplinary projects, stimulating your creativity and entrepreneurial skills.

Objective

The training combines practice and theory centered on the fields of solar energy engineering, building physics and materials science, with an opening to computer science, architecture and urban planning, law, economics and sociology.

The training provides the knowledge on how to deploy the energy transition in the building sector, with a particular focus on solar energy.

It provides technical tools for system sizing and management, and develops an in-depth understanding of the energy transition, including its relationship with public policies, economic and industrial transformations, business models, legal concepts and tools specific to the renewable energy sector, in particular solar energy.

Content

The core training, based on Energy, Heat Transfer and Engineering will:develop knowledge and skills useful for engineers and researchers working in the field of solar transition of the built environment and teach you to solve complex problems related to the energy management, design and optimization of multiple-input technological systems.
The courses are taught entirely in English. Foreign language courses, adapted to the needs of the students (English or FLE), will also be offered.
Teaching methods include courses and tutorials, but also participation in conferences and cross-cutting seminars, Summer Scholl, project-based learning, workshops and a research dissertation..




International

Disciplinary and international mobility, as well as immersion in an international research environment, are an integral part of the curriculum, bringing added value to students in terms of training and research. Grants for international mobility, awards for best projects as well as scholarships awarded for excellent academic results are available.

Scolarship

Excellence scholarships are awarded to selected candidates, and financed by the Solar Academy, in order to attract students with an excellent academic level and real motivation (more information on the website).

www.univ-smb.fr/solaracademy/

Internship

20 weeks minimum. International experience integrated into the training: teaching by international experts, possibility of internship or training semester abroad.

Continuing study

Ph.D. in Economics, Management, for solar energy deployment and energy efficiency,PhD in Energy Law within the Solar Academy Grduate Program or at a French or foreign university.

Requirement

The ESBC programrecruits students with a bachelor degree in Engineering, Physics, Sciences and Technologies or equivalent. A minimum of 180 ECTS credits is required.General knowledge of engineering sciences and physics of transfers is desirable. As well as a sufficient knowledge of English language.

TESTIMONY

"Violet Law, a student with a background in energy engineering and public policy, with a bachelor in energy engineering from the School of Energy and Environment, City University, Hong Kong. “Solar energy has a lot of potential for us to study. The Solar academy is a perfect place to explore the topic ofsolar using an interdisciplinary approach.[...] we also need to make sense of economics and policy to ensure that the solar energy efficient and accurate solution for clean energy transition in the future.”

CAREERS

The objective of the ESBC Master is to train future researcher and, senior executives, including engineers in technical design offices. Companies in the energy and building sectors, consulting firms, government regulatory services and NGOs are interested in candidates with a dual set of skills, such as those they will be able to develop in the ESBC Master's program.

Pratical information

- Master’s degree M1 et M2
- 4 Semesters - 120 ECTS
- Hours taught: M1: 600
  M2: 300 + Internship
- Entry level BAC +3
- Courses in english
- Scolarships (4000€/an)
- Duration: September to june
- Place: Bourget-du-Lac
- Exceptional study environment
- Cost: 243€ + 92€ of CVEC

Master recruitment

Campus France : March, 22, individual oral interviews. March 31, admissions committee.
e-candidat : May, 22, individual oral interviews. June 03, admissions committee.
Scolarships : application on the Solar Academy website March/April)

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