

Your future in tomorrow's technologies and processes



Engineering and Architecture courses in a single HES establishment

Architecture
Landscape Architecture
Civil Engineering

Agriculture (horticultural sciences)
Environmental Engineering

Mechanical Engineering
Microengineering

Computer Science
Telecommunication

Our future is to create

h e p i a

Geneva
technology, architecture and landscape

hepia

Technological innovation in step with the efficient management of resources

Architecture
Landscape Architecture
Agriculture (horticultural sciences)
Civil Engineering
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Do you dream of creating, building, taking society to its next level? You've always said you would play an active part in making the world more respectful of its resources? You certainly have ideas you want to take further; so do we!

hepia* trains specialists capable of finding tomorrow's solutions. Choose a profession that will be both exciting and useful, aligned with the current and emerging needs of the economy. Private firms, institutions, industries and administrations are increasingly in need of engineers skilled in innovation, and open to the challenge of protecting our environment and improving our quality of life. At hepia, links between academic circles and the economic fabric are forged on a daily basis. The research projects you'll be involved in will quickly immerse you in the practical aspects of your chosen field. These projects, often multi-faceted as a result of the variety of disciplines taught at hepia, will give your training real added value, offering you the prospect of a rich and promising professional career.

Committed to the idea that technology can ensure optimal management of means and resources, HES courses offered by hepia go further than ever in meeting these expectations.

* hepia – Geneva University of applied sciences Western Switzerland technology, architecture and landscape was created following the merger between eig - Ecole d'ingénieurs de Genève and eil - Ecole d'ingénieurs de Lullier.



Construction and Environment

You see your life in three dimensions. The urban environment and its constructions fascinate you. Or perhaps you are drawn to the integration and preservation of urban and rural landscapes and feel concerned about the environment.

Whatever your preferences or convictions, you know it is possible for human activity to co-exist harmoniously with the needs of the built environment, of nature and of the landscape.



Life Sciences

You greatly value the natural heritage in which you live and feel a sense of responsibility towards the environmental challenges facing our planet.

Earth and environmental sciences and the search for “green” solutions for the future excite you, fuelling your desire to help manage and make the most of our natural resources.

Architecture

From design to complete assembly of the building, the architect is the final overseer of what he or she has conceived in response to users' needs. The architect works within a specific cultural, legal, technical and economic framework to give life to a building in terms of its context, its use, its materiality.

Landscape Architecture

A key player in the development of our towns and countryside, the landscape architect plans, develops, manages and protects rural and urban spaces, both private and public, taking into account town and country planning, engineering problems, ecological and social aspects.

Civil Engineering

The role of the civil engineer encompasses structures, transport and mobility, hydraulics, geotechnics and foundations. He or she meets society's needs in terms of infrastructure and construction works, ensuring public safety and environmental protection.

Agriculture (horticultural sciences)

The agronomist performs supervisory responsibilities and applies technical expertise to the mechanisms of living entities in relation to food crops and ornamental vegetation, soil protection and the conservation of green spaces. He or she conducts research and trains or advises professionals in the production, fertilization, protection and optimisation of cultivated land.

Environmental Engineering

The environmental engineer makes ecological diagnoses and applies natural land-use solutions, plans follow-up and maintenance initiatives, advises and involves the direct users on the land. His or her actions are ecology-focused and take into account economic, social and cultural dimensions.

Career prospects*

Freelance activities or collaboration with private development and consultancy agencies, service companies, industries, institutions and public administrations.

Career prospects*

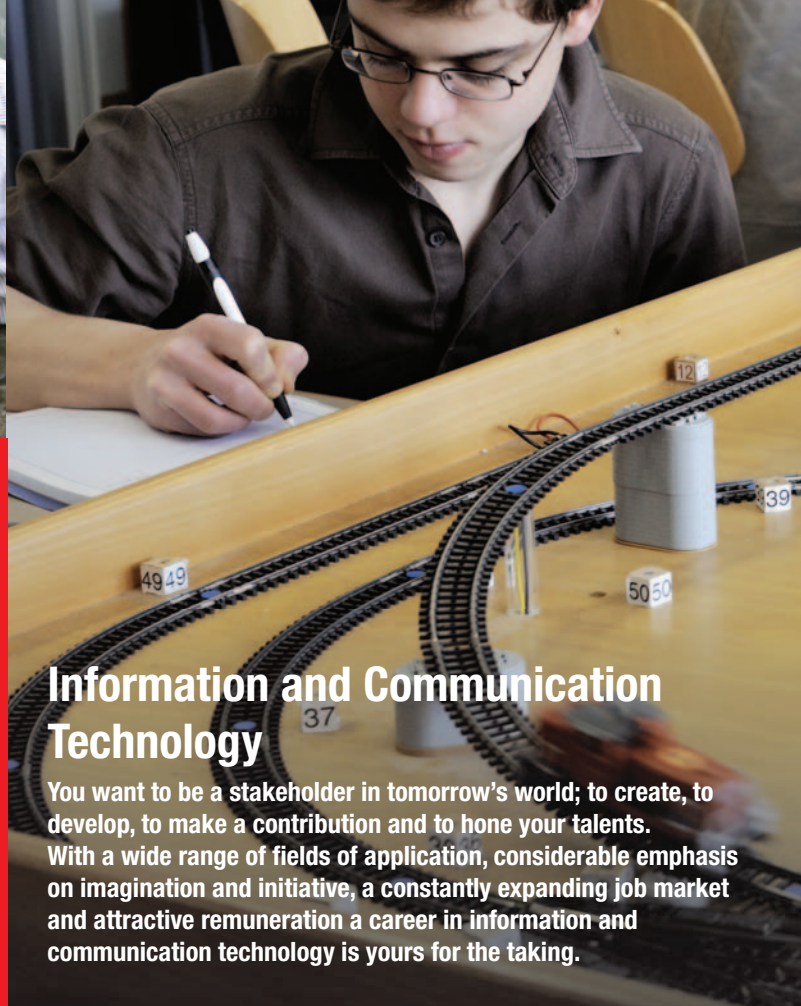
Research centres, manufacturing or commercial firms, engineering consultancies, administrations, organisations devoted to managing and protecting the natural world, structures involved in promoting environmentally-friendly tourism.

* These lists are not exhaustive. Visit our website www.hesge.ch/hepia to learn more about the exciting professional prospects that an HES Bachelor's degree can open up for you.



Industrial Technology

You want to play an active role in all activities related to industry, the production and transmission of energy, or the upgrading and recycling of materials. Or you're fascinated by miniaturization and its extraordinary applications or have a liking for precision and hope one day to design "high-tech" components and systems. To cut a long story short, you have but one aim: to immerse yourself in the fascinating world of technology, materials and their properties.



Information and Communication Technology

You want to be a stakeholder in tomorrow's world; to create, to develop, to make a contribution and to hone your talents. With a wide range of fields of application, considerable emphasis on imagination and initiative, a constantly expanding job market and attractive remuneration a career in information and communication technology is yours for the taking.

Mechanical Engineering

Robotics, medical technologies, research and applications involving new materials: the mechanical engineer specialising in eco-engineering and materials or in fluid and energy mechanics is responsible for researching, developing and conducting projects in a wide range of specialist fields. Analytical and creative, he or she associates shapes, materials, energies and information to create a useful function in a machine or industrial process.

Microengineering

Those active in this multi-disciplinary field develop industrial products and systems by capitalising on the integration of several technologies in fields as varied as watchmaking or biomedical instrumentation. The micro engineer possesses multiple skills, particularly in electronics, IT, optics, acoustics, physics, chemistry, engineering, actuator and sensor technologies and materials science. Three specialisations are available: applied physics, microsystems, surface construction and engineering.

Computer Science

Industrial IT, such as real-time or remote systems and programmable logic circuits, is the unifying theme of this course of study, which nonetheless covers aspects related to information systems, databases, Internet transmission and protocols. Attendance can be day- or evening-based. Controlling technical factors and managing organisational and human aspects will be part of the daily schedule of the IT engineer, who will smoothly integrate and develop within multi-disciplinary teams in all sectors of activity, rising to a managerial position over time.

Telecommunication

The telecommunication engineer is involved in the operation of multimedia networks over short or long distances, and advises firms in their search for communication solutions. Few technologies are developing at such a rapid rate: much of this course is therefore devoted to practical training, enabling the acquisition of fundamentals that will allow the student to confidently and successfully pursue an exciting career in many different fields. Attendance can be day- or evening-based.

Career prospects*

Industry, design and development of products, machines and systems, industrial services (energy, water, etc.), transport, environmental protection, medical instrumentation, watchmaking, bio-engineering, nano-bio-technology, etc.

Career prospects*

Industry, consultancy, design of equipment and production, sales, operation and maintenance of networks and systems, development of new services, all sectors of the economy included.

* These lists are not exhaustive. Visit our website www.hesge.ch/hepia to learn more about the exciting professional prospects that an HES Bachelor's degree can open up for you.

Development and further training



HES courses lead to a professional qualification sanctioned by a Bachelor's degree. Students wishing to continue their studies may follow a Master's course at HES establishments or, subject to certain conditions, at universities, making it possible to achieve a doctoral level. For others, continuing education will allow them to develop within their profession or may open up new horizons.

Joint Master's in Architecture (120 ECTS)

In collaboration with the Ecole d'ingénieurs et d'architectes de Fribourg (EIA-FR) and the Ecole d'architecture, de génie civil et du bois de Berthoud (HSB), the Haute école du paysage, d'ingénierie et d'architecture de Genève offers a Master's degree in Architecture with special emphasis on "Architecture and the City".

Master of Science HES-SO in Engineering (90 ECTS)

A new Master of Science in Engineering (MSE) is available for the coming 2009 academic year, with three orientations: Industrial Technologies (INT); Information and Communication Technology (ICT) and Construction and Environment (CEN).

Continuing Education

Master of Advanced Studies "Energy and Sustainable Development in the Built Environment" (60 ECTS)

This MAS offers architects, engineers and construction professionals a multi-disciplinary course composed of five CAS (Certificates of Advanced Studies) relating to complementary fields.

Swiss Master of Advanced Studies in Nano and Micro Technology (60 ECTS)

This MAS is the result of a joint effort on the part of all teachers and course leaders at Swiss HES establishments specialising in Nano and Micro Technologies.

Master of Advanced Studies in Watchmaking and Design (60 ECTS)

The Haute Ecole Arc Ingénierie and the Haute école du paysage, d'ingénierie et d'architecture de Genève, with the support of the Employers' Federation of the Swiss Watch Industry, offers an MAS in watchmaking and design.

Master of Advanced Studies in Intelligent Manufacturing Systems (60 ECTS)

Comprehensive knowledge of new challenges in the field of industrial design and production is the aim of this MAS offered jointly by the Haute Ecole Arc Ingénierie, l'Ecole d'ingénieurs et d'architectes de Fribourg and the Haute école du paysage, d'ingénierie et d'architecture de Genève.

Master of Advanced Studies in Information and Communication Technology (60 ECTS)

This MAS in Information and Communication Technology is organised by HES-SO partner establishments. It consists of four CAS (Certificates of Advanced Studies) and a Master's project involving 300 hours of work.

Certificate of Advanced Studies (CAS) in Bio-Engineering (18 ECTS)

The Haute école du paysage, d'ingénierie et d'architecture de Genève, HES-SO Valais, the Haute école Arc Ingénierie, in collaboration with University Hospitals of Geneva (HUG) and the Faculty of Medicine of Geneva University, offer a CAS in Bio-Engineering.

Certificate of Advanced Studies (CAS) in "EE" (10 ECTS)

The Haute école du paysage, d'ingénierie et d'architecture de Genève, in collaboration with the SILVIVA Foundation, offers a CAS in "Environmental Education through Nature".

This course allows participants to broaden their methodological competence and teaching knowledge in this field.

Practical Information

Admission conditions / Please note that courses at hepia are given only in French

Maturité professionnelle avec un CFC correspondant à la filière choisie	Direct admission
Maturité professionnelle avec un CFC ne correspondant pas à la filière choisie	One year's professional experience in the chosen field*.
Maturité fédérale ou maturité reconnue par la Confédération	Proof of at least one year's experience in the world of work in the chosen field*.
Diplôme du secondaire II (niveau certificat ECG en 3 ans)	A pass in the admissions exam for engineering schools and proof of at least one year's experience in the world of work, in the chosen field*.
CFC correspondant à la filière choisie, sans maturité professionnelle	A pass in the admissions exam for engineering schools and proof of at least three years' professional experience or certified training after receiving the vocational training certificate.
Technicien ET/ES	Direct admission (equivalence of max. 30 ECTS credits granted)
Baccalauréat général S, L, ES, délivré par la France	One year's professional experience in the chosen field and a pass in the admissions exam for engineering schools, if general average below 12/20.
Baccalauréat en science et technologie	One year's professional experience in the chosen field* and a pass in the admissions exam of engineering schools.
Other	See admission conditions on the website.

Registration period :

Beginning of February to mid-June (for candidates not subject to the admissions exam)

Candidates for courses in Agriculture (horticultural sciences), Landscape Architecture and Environment Engineering may apply at any time.

*One-year placement in the envisaged field of study with a firm or as preparatory classes for entrance to hepia :

To find out more about preparatory classes for entrance to hepia :

- Professional Training Centre in Construction (Architecture, Civil Engineering) :

<http://icp.ge.ch/po/cfp-c/presentation-1/classes-passerelles-menant-aux-filieres-bachelor-de-la-hes-so-geneve>

- Professional Training Centre in Engineering (Mechanical Engineering, Microengineering, IT, Telecommunication) :

<http://www.geneve.ch/cfp/technique/>

Qualifications awarded

Bachelor of Arts HES-SO in Architecture

Bachelor of Science HES-SO in Landscape Architecture

Bachelor of Science HES-SO in Civil Engineering

Bachelor of Science HES-SO in Agriculture

Bachelor of Science HES-SO in Environmental Engineering

Bachelor of Science HES-SO in Mechanical Engineering

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Bachelor of Science HES-SO in Telecommunication

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