

EDUCATION, RESEARCH, EXPERTISE

# THE UNIVERSITY OF APPLIED SCIENCES FOR HEALTH PROFESSIONALS



**HESAV**

UNIVERSITY OF  
HEALTH SCIENCES



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**Leader in the field of healthcare education in French-speaking Switzerland, HESAV fosters a professional, multidisciplinary approach.**

**HESAV has carefully linked sound practices and demonstrated competencies that respond to society's needs by addressing health issues holistically, in a manner that is humane, precise, effective and sustainable.**

This brochure is brought to you by the University of Health Sciences and offers you specific information about its campus and activities.

More detailed information is available on [www.hesav.ch](http://www.hesav.ch)

University of Applied  
Sciences of Western  
Switzerland  
HES-SO

HESAV is one of a larger network of professional schools of higher education in Switzerland: the University of Applied Sciences of Western Switzerland (HES-SO).

Founded in 1998, HES-SO now numbers some 15,500 students. It is located in the cantons of Geneva, Fribourg, Jura, Neuchâtel, Valais, Vaud and French-speaking Bern.

Its 27 schools of higher education offer training and the provision of services in six major areas: Design and Fine Arts, Management and Services, Engineering and Architecture, Music and Theatre Arts, Health, and Social Work.

The Healthcare division of HES-SO has the following branches (those offered by HESAV are in bold)

- Ergotherapy
- **Midwifery**
- **Nursing**
- Nutrition and Dietetics
- Psychomotor therapy
- **Physiotherapy**
- **Radiological technology**

The website [www.hes-so.ch](http://www.hes-so.ch) provides information on HES-SO, its organisation and its different branches of education.

As a School of Higher Education within HES-SO, HESAV fulfils the following objectives:

**Basic education**

To provide teaching focused on practical experience, preparing for professional activities that require the application of knowledge and scientific methods.

**Continuing education**

To offer the means for professional enhancement, facilitating the deepening of knowledge or the acquisition of new information, complementing the Bachelor degree.

**Expertise and applied Research and Development**

To be active in the field of applied research and development (ARD) and to provide services to third parties (businesses, cultural, social or health institutions).

**National and international relations**

To collaborate with other institutions of education and research in Switzerland and abroad and to offer students the possibility of carrying out part of their training abroad.

## HESAV – University of Health Sciences

Educating competent and reliable professionals in the field of healthcare, able to operate within the dual frameworks of the political and health systems.

With more than 1,000 students in undergraduate and postgraduate programmes, HESAV is today the most important site of the University of Applied Sciences of Western Switzerland (HES-SO) for healthcare education.

HESAV is one of seven Schools of Higher Education in the Canton of Vaud that form part of HES-SO. Founded on 1 October 2002, it is the result of a restructuring of four cantonal schools: the Chantepierre Nursing and Midwifery Schools, and the Schools of Physiotherapy and Radiological Technology. As a publicly funded School of Higher Education, attached to the Department of Education, Youth and Culture, it has contributed to the development and prominence of the Canton of Vaud.

### **A strategic position**

HESAV is situated at the very heart of the Lausanne hospital complex. This immediate proximity to the Vaud University Hospital Centre (CHUV) and to the Faculty of Biology and Medicine (FBM) allows HESAV to provide its students with numerous possible work placements and the benefit of the contributions of eminent professors, doctors and professionals. In addition, immersion in the university hospital setting encourages continuous contact with professionals and other students.

### **4 areas of proficiency:**

Education – Research – Expertise – Internationalism

With its organisation into fields of competence HESAV fulfils the mission of the HES. Exchanges of knowledge and experience and interdisciplinary collaboration on both national and international levels make it a leading partner in the field of health.

### **An experienced faculty**

Quality teaching is guaranteed by more than 120 professors and assistants, for the most part with a double professional/academic and educational expertise recognised at the national and international levels. HESAV's experience in the area of healthcare has been recognised for several decades, as is confirmed by the numerous mandates and contracts entrusted to its professors.

### **State of the art equipment**

Endowed with skill laboratories and simulation rooms, HESAV offers a professional environment that allows students to exercise and develop their practical skills. HESAV also benefits from its access to the CHUV infrastructures.

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#### CEPS – Centre for the Teaching of Health Practices

The CEPS is utilised for the instruction of clinical skills: the practice and technology involved in the care and readaptation of patients, communication with the client, clinical evaluation, critical judgement and the total provision of care. The Centre comprises classrooms and specialised equipment, multimedia and laboratories. The use of standardised patients and sophisticated mannequins permits a highly authentic simulation of situations close to clinical reality.

These facilities allow the students to:

- develop technical and personal skills within an environment approximate to reality without time or operational constraints;
- repeat technical acts under supervision and thereby develop the behaviours and qualities consistent with prescribed norms.

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#### Computer and Medical Imagery Rooms

The PACS (Picture Archiving and Communication System) room is equipped with computers with professional software allowing the processing of digital radiological images. With access to an impressive database of images, this application allows students to work in the same conditions as in the field and to develop state of the art skills in the processing of digital images.

The scanner room is equipped with a CT scanner. This X-ray machine, used to obtain information about the entire body from different angles, allows students to become familiar with its use without constraints of time and safety, and to practice studying X-rays (quality control, dosimetry, simulation of planning and treatment in cancer radiation).

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#### Partnerships

HES-SO education in the field of healthcare is constructed on the principle of alternating theory and practice. As a result, about 30 to 40% of education for a Bachelor degree is carried out in work placements.

This method of organisation is the most effective in preparing students in the human service professions. It consists of alternating periods of theoretical training in university with periods of practical professional training in the field according to “integrative” modalities

As a result of its location within the university teaching hospital of Lausanne and its preferential contacts with health institutions in the canton of Vaud, HESAV offers its students optimal conditions for their practical training.

#### **Health law unit**

A legal advice unit is available to students, faculty and collaborators of HESAV for any question they might have regarding health law. It also answers questions coming from outwith the institution regarding teaching and/or legal advice in this field.

#### **Our campus**

A living and meeting space for students from different faculties, HESAV also provides a platform for exchanges amongst healthcare professionals.

The HESAV campus extends from the hospital complex at Avenue de l'Élysée along the central axe of the M2 metro line. The 1,000 students are in close contact with each other everyday, whether attending classes, workshops and conferences or taking advantage of the areas created for their use. In addition, HESAV students are able to rent one of the 180 furnished rooms in the Chantepierre Tower.

A wide variety of scientific, cultural and health-oriented activities are organised on campus throughout the year, testifying to HESAV's openness to the world.

## Working in healthcare

Professions that combine human qualities and technical expertise for the service of others.

### **Richness and diversity of professional practice**

Healthcare professionals encounter a variety of patients and customs. They are confronted with changing situations and carry out their interventions within a variety of contexts: from new-borns and their parents to elderly people, from preventive to palliative care, from hospital to home, from emergencies to chronic situations, etc.

### **An interprofessional practice**

Cooperation and coordination amongst healthcare professionals constitute an important element in providing a holistic, quality service centred on the health and lives of people. HESAV emphasises interdisciplinary practices and encourages the sharing of ideas and opinions for a better understanding of the nature and specifics of the different healthcare professions and of their respective and communal contributions to the quality and effectiveness of care.

### **Evolving professions**

In a shifting field where the needs of populations change as a result of medical, social and technological advances (prolongation of lifespans, demands concerning the quality of care, the rise of biomedical engineering, etc.), healthcare professionals are confronted with continuous challenges. The development of responses to practical questions linked to this contextual evolution thus enlarges their skill base.

### **Academic perspectives**

The formation of specific, grounded knowledge, and the necessity of continuous evaluation, evolution and innovation of professional practices result in numerous career perspectives, notably in the areas of education and research. Complementing the Bachelor degree, the Masters and PhD serve to deepen professional skills and methodologies.

## Education

HESAV offers studies in four branches of education in preparation for the professions of:

- nursing
- radiography
- physiotherapy
- midwifery

HESAV offers three levels of instruction, from a preparatory year through courses in continuing education and postgraduate studies.

### ≥ Health Sciences Foundation year

This year involves instruction of the basic skills necessary for entrance into the Bachelor programme:

- basic theoretical, methodological and technical skills in the health field;
- experience of the working world in general and the socio-health field in particular.

At the end of this introductory year to all branches of the Bachelor programme, students will have mastered the basic foundations. They will confirm their choice to work in healthcare and orient themselves towards one of the branches at HES-SO. In addition, Swiss students coming from a School of General Studies will receive their high school certificate with Healthcare specialisation.

### ≥ Bachelor

The education offered by HESAV assures the acquisition of skills and professional qualifications at a high level.

HESAV thus opens the door of the professional world to its students who have successfully completed the required programme of study.

### ≥ Postgraduate

The continuing education and postgraduate unit (UPG) is an area of activity involving an interface between education and professional practice.

This education is aimed at people who already hold a Bachelor degree in the healthcare field and, for certain programmes, in the area of social work. Whether certificates, diplomas or masters of advanced studies (CAS, DAS, MAS) this education offered by HES-SO facilitates the development of new skills, the acquisition of up-to-date knowledge, and the mastery of evaluative tools and interventions adapted to practical needs.



## Nursing

Combining compassion and a scientific approach, nurses are specialists in the manifestations of health and illness as experienced in all ages of life by a person, family or group.

### The profession

The nurse helps a person, family or group to determine their care needs and to respond to them within the context of an interpersonal relationship grounded in holistic care-giving. In conjunction with other members of the team of health care professionals, she works with a view to the promotion of health and adaptation to illness.

In order to confront the complexity of situations linked to the evolution of expectations in our society, nursing practice requires a high level of skills, including integration of scientific knowledge, clinical judgement and autonomy.

### Education

The Bachelor degree fosters the development of the professional skills to:

- analyse a complex situation;
- identify and plan interventions and evaluate their results;
- provide care using methods that respect persons and ethical principles;
- participate in the improvement of the quality and effectiveness of care;
- work in collaboration with a multidisciplinary team;
- base one's practice on evidence based practice;
- contribute to the development of the profession through research activities concerning professional practice;

- evaluate one's professional practice in order to adjust, develop and conceptualise one's interventions;
- contribute to research on nursing and participate in interdisciplinary projects;
- participate in procedures linked to the quality of the socio-health system;
- become involved, through words and actions, in the development and elucidation of the nurse's role.

### Professional perspectives

A Bachelor degree provides easy access to the job market in Switzerland and abroad. Whether in the home, at work, in acute hospital care, within a psychiatric milieu, with respect to children, mothers-to-be or the elderly, the professional opportunities are as numerous as the locations and persons requiring care.

Masters and Doctoral programmes in Nursing Sciences are offered by IUFERS (University Institute of Training and Research in Patient Care) of the University of Lausanne, situated nearby, and sharing the HESAV classrooms. Other specialisations in various areas, such as emergency care and resuscitation, anaesthetics, oncology, palliative care, tropical medicine, disaster medicine etc., can be pursued while employed. In the longer term, taking courses at the Master's level in administration, education or clinical work permits access to positions of responsibility (for example head nurse, lecturer, clinician, director of nursing care in a hospital).

Degree awarded	ECTS Credits	Length of training
Bachelor of Science HES-SO in Nursing Care	180	6 semesters

## Radiography

Radiographers produce and process medical images for diagnostic and therapeutic purposes. They also effectuate treatments using ionising radiation or radioisotopes.

### The profession

Within the context of the rapidly evolving fields of health and technology, the radiological technologist combines the use of complex scientific knowledge with innovative technological operations and important human and interpersonal qualities. These high-level qualifications are necessary for a professional activity that consists of carrying out both diagnostic investigations and examinations and therapeutic or palliative treatment with the help of sophisticated technological equipment. The measurements and analyses of computer data, the use of radioisotopes in nuclear medicine, the interpretation of imagery, both analogue and digital, requires rigorous thought and precision of action.

### Education

The Bachelor degree fosters the development of the professional skills to:

- carry out radiological investigations, examinations and clinical procedures for a diagnostic purpose;
- devise and elaborate treatment plans, and establish and conduct therapeutic activities in the field of radiological technology;
- take into consideration and appreciate the whole range of technological data and human physiques in order to assure a precise and reliable interpretation of radiological images;
- assume the role of expert in radioprotection;
- establish a relationship, communicate and collaborate in a constructive manner with patients, the medical team and the entire

range of partners;  
-establish oneself as a participant within the health care system and as a responsible professional.

### Professional perspectives

The demand for radiological technologists is constantly increasing, whether in a university teaching hospital, a hospital, clinic, private practice or a medical imaging business as an applications engineer..

Access to HES or university postgraduate training in Switzerland or Europe enables the construction of a professional career within practice, teaching or applied research and development (ARD).

Degree awarded	ECTS Credits	Length of training
Bachelor of Science HES-SO in Radiological Technology	180	6 semesters

## Physiotherapy

The physiotherapist develops an approach centred on the person, in particular with regard to his relationship with the movement and actions of his body.

### The Profession

As a specialist in movement and mobility, the physiotherapist is concerned with questions of health, illness and accidents. The physiotherapist participates in the socio-professional rehabilitation of persons who experience limitations in their physical and social abilities by helping them to recover mobility and autonomy. Healthy people and athletes benefit equally from their advice.

The exercise of the profession imposes a high level of theoretical knowledge. It demands manual skills, and methodological and interpersonal techniques within a practice requiring proximity and intimacy, resulting in treatment proposals and preventive measures, health education, re-education and re-adaptation appropriate to each situation.

### Education

The Bachelor degree fosters the development of the professional skills to:

- exercise one's profession in an autonomous and responsible manner;
- identify the needs and expectations of users with regard to their health and functional capacity
- define objectives, strategies and means of prevention, maintenance and restoration or improvement of functional capacities;
- set up practices for preventing, maintaining, restoring or improving functional capacities;
- evaluate the impact of the treatment plan on the health and functional capacities of the users.

- Record the treatment plan and organise its activities
- Contribute to the development and promotion of health
- Contribute to research programmes within the socio-health system.

### Professional perspectives

A Bachelor degree permits entry into independent practice as a physiotherapist (after 2 years of full-time guided practice) or as a salaried practitioner within a variety of professional environments (hospitals, rehabilitation centres, private practices, international organisations, corporations, schools, sporting associations, etc.). It also provides access to HES or university postgraduate training, in Switzerland or in Europe, enabling the construction of a professional career within practice, education or research.

Degree awarded	ECTS Credits	Length of training	Special Features
Bachelor of Science HES-SO in Physiotherapy	180	6 semesters	Specific regulations

## Midwifery

By turns clinician, educator, collaborator and expert, the midwife accompanies pregnant women, their partners, new-borns and families during pregnancy, childbirth and the post-natal and breast-feeding periods.

### The profession

The midwife has an extensive range of activities as a specialist in maternity at the different ages in the life of women, from puberty to menopause.

In an autonomous and holistic fashion, the midwife oversees and accompanies women and healthy new-borns from before conception to the end of breast-feeding, all the while involving the entire family. She has responsibility for conducting pregnancy consultations and delivering babies, and she ensures the care of the family in the postnatal period and in physiological situations. She has a limited right to prescribe medicine. She collaborates with other health care professionals when there are complications.

The person who exercises this profession is confronted with care situations requiring calm and composure. She needs to observe, anticipate and make decisions, showing herself capable of assuming responsibility and autonomy.

### Education

The Bachelor degree fosters the development of the professional skills to:

- decide upon actions favouring the support, maintenance and/or restoration of the physiological process of maternity during the pregnancy, delivery and after-birth periods;
- attune her services within an ethical perspective;
- accompany the woman, her partner and

family in their experience of the event, whatever its context;

- monitor the passage of time in both long and short term, from the waiting periods of pregnancy to any emergency;
- accept the continuous uncertainty and inevitability inherent in this professional sphere;
- become engaged with health promotion and disease prevention for women and their families;
- organise and manage the human, logistical, financial and administrative resources at her disposal;
- assume a role of responsibility within the community, whatever its socio-health, economic and political contexts;

### Professional Perspectives

A Bachelor degree allows one to practice the art of obstetrics within a hospital milieu or independently, in a private practice, at home or in the homes of the mothers to be. It is also possible to practice in the area of birth preparation. Various possibilities for deepening one's knowledge are offered in continuing education, notably that organised by HESAV (Continuing Education in new-borns at risk) or in complementary medicine (massage of new-borns, acupuncture, haptonomy, sophrology). In the longer term, Master's degrees are available in management, education and research, providing access to positions of responsibility.

Degree awarded	ECTS Credits	Length of training	Special Features
Bachelor of Health Science in Midwifery	120	4 semesters	Specific Regulations. Secondary education for people holding a degree in Nursing Care



## Health Research

The Unité de Recherche en Santé (Health Research Unit) promotes a culture of research. It aims to create a dynamic working environment, favourable to scientific exchange, the sharing of information and the development of skills linked to the activities of Applied Research and Development (ARD). It is also intended to be a valued contact for health care professionals, socio-health institutions and researchers in various fields, with the aim of consolidating strong partnerships at local, national and international levels.

On the one hand, the HRU supports research in the four disciplinary branches of education offered by HESAV in order that professionals can base their knowledge on relevant and up-to-date scientific knowledge. On the other hand, it supports interdisciplinary projects, resulting in a deepening appreciation of the complexity of the health field as well as its social, political, legal and economic contexts.

## Internationalism

### A leading centre for the exchange of interdisciplinary knowledge and skills

In order to ensure the mobility of its students and provide them with the possibility of participating in a period of study abroad during their education, HESAV has formed a number of partnerships with Schools of Higher Education in other countries. This period of study abroad could take the form of a work placement, a place to write a thesis in culmination of one's studies, a personal educational project or a semester on exchange.

In the same perspective, HESAV hosts students from every continent and encourages the participation of foreign professors in its programmes in order to make the education of its students more international.

Within the framework of the International Relations mission of the HES, the canton of Vaud has also developed a Summer University. Programmes are organised every year with universities in North-America, India and Singapore.

The existing partnerships offer students and faculty the possibility of extraordinary scientific and cultural exchanges. Whether in Switzerland or overseas, the study periods involve a total immersion, theoretical and practical, within the challenges of the healthcare systems.

## Expertise

HESAV brings its expertise to businesses and public associations within its areas of competence: institutional analysis in the field, medical imaging and screening, legal expertise, design of training programmes and assessment of educational systems, institutional coaching and team supervision, continuing education.

Its partnerships with the socio-health, economic, industrial, cultural or social environments, as well as its elaboration of effective solutions, position HESAV as a trustworthy and valuable collaborator.

In professional and private life, developing a culture of health has become indispensable in today's world.

For society, healthcare professionals and students, HESAV is a leading educational and research centre, responding in an outstanding way to the demands and challenges of health due to its incorporation of a holistic vision of well-being, supported by its vast network of partners, and making its teaching a real tool of excellence.

≥ **Community life**  
Three associations, run by the students, offer activities that contribute to life within and outside of the HESAV campus.

ASSIDE (L'Association interfilière des étudiants) represents HESAV students within and outside the school. Recognised as a spokesperson by the management of the school, ASSIDE is regularly consulted regarding issues and can also relay the preoccupations of the student body to it. ASSIDE is equally very active outside of the strict framework of studies, animating groups with particular recreational, cultural or sporting interests.

[www.asside.ch](http://www.asside.ch)

Skyphysio, an association of student physiotherapists, offers massages and fitness activities that allow them to put into practice the techniques they have studied and used in the classroom and work placements. Its members offer massage services free of charge to the participants of sporting, cultural or artistic events. The association is supported by the HESAV administration and by the professional association Fisiovaud.

[www.skyphysio.wapiti.ch](http://www.skyphysio.wapiti.ch)

Alumni. This association regroups the graduates of Chantepierre, the Cantonal Schools of Physiotherapy and Radiological Technology and HECVSanté. With more than 500 members, it constitutes one of the largest Alumni networks in the field of health in Switzerland and contributes daily to promoting the reputation of HESAV throughout the world.

<http://alumni.hesav.ch/>





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