



BACHELOR | FULL-TIME | 6 SEMESTERS | ENGLISH

**BACHELOR**

# Creative Computing

Interface Design | Experience Design and Development for Web |  
Mobile | Games and Virtual Reality

# Creative Computing

You want to shape the digital future? The human-computer interface is at the centre of the digital transformation. This bachelor degree programme provides you with the necessary skills for planning, designing, and programming these interfaces and allows you to combine technical programming knowledge with creative expertise in User Interface Design, Game Design, Web Technologies, Mobile Programming, and Augmented & Virtual Reality.

## Your Studies

The curriculum provides you with a broad qualification profile in computer science and the basics of media design as well as the social science methods necessary for user-centred design.

### Focus Areas

- **Programming:** You learn to code web, mobile, and 3D applications. We start with fundamental programming skills on the basis of JavaScript. Building on this, you learn a high-level language for native programming on smartphones. Subsequently, the programming language C# is taught and used in the development of Augmented and Virtual Reality applications on the platform Unity.
- **Human-computer interaction:** The curriculum includes essential components of the human-centred design cycle such as user research, prototyping, and evaluation. Furthermore, you learn how to develop smart devices and to equip existing objects with computing features.
- **User interface design:** You acquire the fundamental principles of graphic design for interactive screen media and deepen your knowledge of web, mobile, and Augmented & Virtual Reality in a media-specific manner.

## Your Career

Once you have completed this sound scientific training, numerous professional options in various sectors will be open to you. Graduates are well equipped for jobs such as:

- Mobile designer
- Mobile developer
- Web designer
- Web developer
- Multimedia designer
- Digital artist
- 3D artist
- User interface designer
- User experience designer
- Front-end developer
- Full-stack developer
- Game designer
- Game developer
- XR designer
- XR developer
- AI developer



### Academic Degree

Bachelor of Science in  
Engineering (BSc)



### Duration of Studies

6 semesters



### Tuition Fees<sup>1</sup>

363.36 € per semester  
+ Students' Union fee



### Application

[fhstp.ac.at/guide](https://fhstp.ac.at/guide)



### Study Places/Year

75



### Organisational Form

full-time  
English

<sup>1</sup>for students from third countries: 1,500 €, performance-based tuition fee waivers are available

# What Makes Your Studies Unique

## Creative Code Labs

The study content is taught using the method of project-based learning: Each of the first four semesters ends with an intensive two-week project phase. These project phases – called Creative Code Labs – are assigned to specific topics that differ from semester to semester. The topics of the Creative Code Labs in the first four semesters are: Games and Playful Front Ends, Connected World, Mobile Applications, and Extending Realities. In the fifth semester, students can deepen one of these topics in group projects that are carried out over a full semester in the framework of the Creative Code Lab.

## Internationalisation at Home

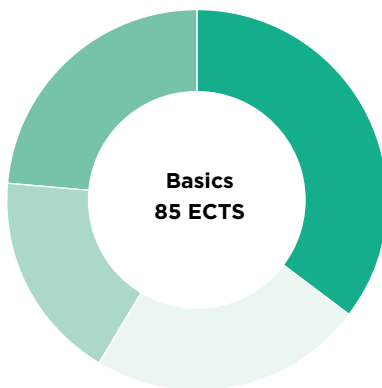
Another option for the fifth semester is to join the international and interdisciplinary project semester. The students

form interdisciplinary teams who strive to solve a specific problem during the semester. Our objective is to offer all students the opportunity to gain experience with international teams, independent of stays abroad. However, we also strongly encourage students to opt for a semester abroad.

In addition, a professional internship in the sixth semester gives our students the opportunity to put the acquired content into practice. Supervisors provide individual mentoring and assistance during the internship.

The Window of Opportunity enables our students to collaborate internationally during short-term-mobility initiatives, broaden their horizons in interdisciplinary projects and develop a global awareness to shape society responsibly.

## Weighting of Course Contents

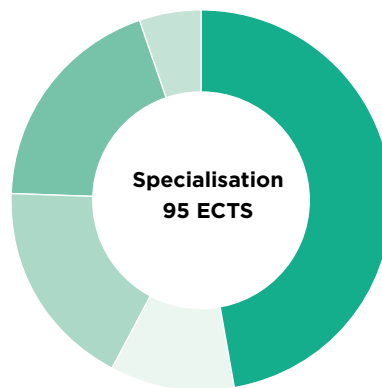


**Programming**  
30 ECTS

**Human-Computer Interaction** | 15 ECTS

**Foundations**  
20 ECTS

**User Interface Design**  
20 ECTS



**Projects**  
45 ECTS

**Scientific Work**  
17 ECTS

**Elective Modules**  
10 ECTS

**Internship**  
18 ECTS

**Window of Opportunity**  
5 ECTS

# Curriculum

## 1<sup>st</sup> year of studies

1 <sup>st</sup> semester	ECTS
<b>Front-End Development</b>	
Introduction to Web Technologies	3
Client-Side Coding	4
2D Browser Game Coding	3
<b>Visual Design and Game Graphics</b>	
Graphic Design	3
2D Game Graphics	2
<b>Foundations of Creative Computing</b>	
Data Ethics	1
Game Design and Digital Storytelling	3
Selected Legal Topics for Developers and Designers	1.5
Design Thinking	1.5
Mathematics and Physics for Computing	3
Creative Code Lab 1: Games and Playful Front-Ends	5

2 <sup>nd</sup> semester	ECTS
<b>Web Programming</b>	
Server-Side Coding	5
<b>Design-Oriented HCI</b>	
Introduction to Human-Centred Design	2
User Research	3
<b>Web Design</b>	
Inclusive Design and Accessibility	2
User Interface Design	3
<b>Foundations of Creative Computing 2</b>	
Networks, Cloud & Communication Security	3
Applied Artificial Intelligence (AI)	3
Framework-Oriented Coding	4
Creative Code Lab 2: Connected World	5

## 2<sup>nd</sup> year of studies

3 <sup>rd</sup> semester	ECTS
<b>Mobile Programming</b>	
Mobile Coding	5
<b>Empirical Methods in HCI</b>	
Usability and Experience Evaluation	5
<b>Mobile and Tangible User Interface Design</b>	
User Interface Design for Mobile Devices	3
Tangible User Interfaces	2
<b>Physical Computing and Algorithms</b>	
Physical Computing and Connectivity	2
Data Structures and Algorithms	3
<b>Elective Module</b>	
Elective Module	5
Creative Code Lab 3: Mobile Applications	5

4 <sup>th</sup> semester	ECTS
<b>Extended Reality Coding</b>	
Practical Software Design Principles	3
Engine-based Extended Reality Development	5
Audio for 3D Engines	2
<b>3D Design</b>	
3D Modelling and Animation	3
Interface and Interaction Design for Extended Realities	2
<b>Scientific Writing</b>	
Scientific Writing	5
<b>Elective Module</b>	
Elective Module	5
Creative Code Lab 4: Extending Realities	5

## 3<sup>rd</sup> year of studies

5 <sup>th</sup> semester	ECTS
<b>Creative Code Lab 5: Applications in Creative Computing</b>	
Team Development	3
Scrum Coaching	2
Software Testing	1
Project Work	19
Bachelor Thesis: Plan and Research	5
6 <sup>th</sup> semester	ECTS
Window of Opportunity	5
Internship	18
Bachelor Thesis: Implementation and Evaluation	5
Bachelor Exam	2

Details and  
information about the  
admission procedure





### Stay up to date on social media!

@ Instagram Media: [instagram.com/fhstp\\_medien](https://www.instagram.com/fhstp_medien)

@ Instagram: [instagram.com/fhstp](https://www.instagram.com/fhstp)

🎵 Tiktok: [tiktok.com/@fhstp](https://www.tiktok.com/@fhstp)

in LinkedIn: [linkedin.com/school/fhstp](https://www.linkedin.com/school/fhstp)



© Raubacker Photography

### Start Your Career in Media:

A campus that is accessible to students 24/7, Campus media, labs and studios that can be used individually, and our very own equipment rental: We offer optimal learning and teaching opportunities for over 900 students of our media study programmes. Establish contacts during your studies and build up a network with over 4,000 alumni in the sector. The St. Pölten UAS trains you as a media expert – in design, production, distribution, and management.

### Information & Contact

Campus und Study Center (CSC) | T: +43 2742 313 228-333 | E: [csc@fhstp.ac.at](mailto:csc@fhstp.ac.at) | I: [fhstp.ac.at](https://www.fhstp.ac.at)

### Diversity at the Campus St. Pölten

Inclusion, gender equality, and diversity are important to us. Our campus is accessible barrier-free. Please contact us in good time so that we can take your needs into account.