

## **Immersive computing, 15 HE credits**

*Immersive computing, 15 hp*

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Established: 2022-05-19

Established by: School of Business, Economics and IT

Applies from: H22

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### **Learning outcomes**

#### **Knowledge and understanding of:**

- explain key concepts, techniques and applications for immersive computing, software development and digitalization.

#### **Skills and abilities to:**

- suggest and independently argue for design solutions applying immersive computing based in the literature.
- develop functional prototypes of suggested solutions in interactive immersive environments.
- demonstrate methods of mixing real and virtual objects and environments.
- apply theoretical and technical understanding about immersive computing in independent interactions with project partners.

#### **Judgment and approach to:**

- individually reflect on and critically analyze current and emerging research in immersive computing.
- discuss the ethics and societal impact of immersive computing and emerging applications.
- analyze and provide well-founded criticism on specific solutions for immersive computing.
- discuss current issues related to immersive computing, software development and digitalization.

### **Entry requirements**

Degree of Bachelor of Science with a major in Informatics, Information systems or equivalent. Verified knowledge of English corresponding to the course English B or 6 in the Swedish Upper Secondary School (high school) or equivalent.

### **The forms of assessment of student performance**

Project work, seminars, and workshops/labs.

### **Course contents**

The course Immersive Computing focuses on applications of immersive technology and related theory and research, while also introducing software development and digitalization. The first part of the course will introduce all these areas, with some additional seminars and exercises/workshops related to the focus on immersive technology. These initial seminars will focus on theory, research, and potential projects while the exercises/workshops will focus on applications and development tools such as Unreal Engine. The second part of the course will delve deeper with lectures on more advanced topics and applications as well as exercises/workshops providing practical experience with this material and related tools. Seminars in the second part of the course will focus on preparing for the project. The third part of the course consists of a group project executed independently with interactions with an external partner. Finally, the project work is presented in group and further discussed in an individual portfolio report together with a summary of individual course work and learnings.

### **Other regulations**

Course grading: F/Fx/E/D/C/B/A - Insufficient, Insufficient- more work required before the credit can be awarded, Sufficient, Satisfactory, Good, Very Good, Excellent

Course language: The teaching is conducted in English.

A student who does not fully meet the learning outcomes of a non-supervised examination (hemtentamen), but is close to the grade “pass” can, after a decision by the examiner, be allowed to complement (kan skriva supplement eller revise också) an examination assignment in order to reach the criteria for pass. For supervised examination (salstentamen) complementing is not allowed. Complementing of an examination must be individually adapted based on the learning outcomes or objectives that were not achieved by a student. It must take place within two weeks after informing the student of the examination result and before the next examination opportunity.

General rules pertaining to examination at University West are available at [www.hv.se](http://www.hv.se).

If the student has a decision/recommendation on special support due to disability, the examiner has the right to examine the student in a customized examination form.

### **Course Overlap**

IMR200

Read about course overlap in the Swedish version of this course syllabus.

### **Cycle**

Second cycle

### **Progressive specialization**

A1N - second cycle, has only first-cycle course/s as entry requirements



## COURSE SYLLABUS

Course code: **IMC600**

**Main field of study**  
Informatics