



Faculty of Arts and Social Sciences
Information Systems

Syllabus

Research perspectives on AR and VR (augmented and virtual reality)

Course Code:	ISAD19
Course Title:	Research perspectives on AR and VR (augmented and virtual reality) <i>Forskningsperspektiv på AR och VR (augmented and virtual reality)</i>
Credits:	7.5
Degree Level:	Master's level
Progressive Specialisation:	Second cycle, has only first-cycle course/s as entry requirements (A1N)

Major Field of Study:
IKA (Information Systems)

Course Approval

The syllabus was approved by the Faculty of Arts and Social Sciences 2018-09-07, and is valid from the Autumn semester 2018 at Karlstad University.

Prerequisites

Bachelor's degree or Bachelor Thesis 15 ECTS credits in one of the subjects Information Systems, Copmputer Science, Business Administration, Working Life Science, Media and Communication Studies, or equivalent

Learning Outcomes

Upon completion of the course, students should be able to:

- give an account of current problems and challenges in the research field of augmented reality (AR) and virtual reality (VR),
- critically review the relation between research questions, research methods and research results in AR and VR,
- give an account of and critically review research on the use of AR as user interface to Internet of Things (IoT), and
- summarise and discuss the scope, width and demarcations of AR and VR as disciplinary fields.

Content

The course primarily centres on definitions, evaluations and discussions in science literature on:

- user experience in virtual reality
- user experience in augmented reality
- client experience in physical and virtual service landscapes
- augmented reality as a user interface to Internet of Things
- multimodal input
- learning perspective on different types of sensory representation and interactivity.

Instruction is in the form of seminars where published research articles are studied prior to each seminar. The students write short reports for each of the designated articles for each seminar, identifying the strengths and weaknesses in the research design, as well as the conceptual frameworks and empirical basis that the article relies on, and how the analysis of data was conducted.

Reading List

See separate document.

Examination

Assessment is based on individual hand-in assignments presented and discussed in seminars.

Grades

One of the grades Distinction (VG), Pass (G), or Fail (U) is awarded in the examination of the course.

Quality Assurance

Follow-up relating to learning conditions and goal-fulfilment takes place both during and upon completion of the course in order to ensure continuous improvement. Course evaluation is partly based on student views and experiences obtained in accordance with current regulations and partly on other data and documentation. Students will be informed of the result of the evaluation and of any measures to be taken.

Course Certificate

A course certificate will be provided upon request.

Additional information

The local regulations for studies at the Bachelor and Master levels at Karlstad University stipulate the obligations and rights of students and staff.