

Course title: Multimedia Systems

Course code: 63270

ECTS: 6 ECTS

Professor: Luka Čehovin Zajc

Undergraduate program

Prerequisite knowledge:

- programming (Python)
- datastructures and algorithms (sorting, tree, hashing)
- basics of information theory (entropy)
- basics of linear algebra (matrices)
- basics of signal processing (filter, FFT)

Short course description:

The course covers a wide range of technical concepts required to build various multimedia systems. We talk about the acquisition and representation of different media (images, video, audio) and different processing algorithms. This is then extended to the compression of multimedia data. We also look into information retrieval in multimedia systems and some interactive multimedia directions, such as augmented reality and interactive surfaces. This course has an extensive scope and only goes into some theoretical details. Nevertheless, it can get very technical, especially during practical laboratory exercises. Therefore, a solid programming background is required.