**Intelligent Multimedia Technology**

**code** 400441

**credits** 6

**period** autumn or spring?

**lecturer(s)** dr. A. Eliëns, dr. Z. Obrenovic (CWI)

**aim** The course aims to provide practical and theoretical knowledge about the application of intelligent multimedia technology in the development of component-based multimedia applications

**content** The course will cover several topics, including:

- research and development of multimedia and game applications
- intelligent multimedia technologies – DLP/AMICO
- XML-based multimedia – X3D/VRML, SVG, SMIL
- novel interaction modalities, such as speech input and output, or camera and gesture based interaction
- web services for game and multimedia application development
- mashups – component-based approach to web-based multimedia

The course will teach the students how to organize intelligent dialogs between the user and complex systems such as virtual environments and 3D games. The idea is to proceed from direct control and conventional interaction based on mouse and keyboard, and to introduce additional interaction modalities such as speech input and output, and camera based sensing.

The main focus of the course will be on the practical work of the students, organized in a series of assignments. On completion of the assignments the students are required to give a presentation.

**form of tuition** lectures and practicum

**literature** syllabus

**mode of assessment** essay and practicum assignment(s)

**entry requirements** Multimedia Authoring, or proficiency with VRML, and preferably basic knowledge of XML

**target audience** mCS-MM, and interested students

**remarks** For information see: or www.cs.vu.nl/∼eliens/imt