

SYLLABUS

Multimedia Systems 7.5 credits M7017E

Multimediasystem

Course syllabus admitted: Autumn 2015 Sp 1 - Autumn 2015 Sp 2

DECISION DATE
2015-02-16

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Multimediasystem

Second cycle, M7017E

Education level	Grade scale	Subject	Subject group (SCB)
Second cycle	G U 3 4 5	Medieteknik	Computer Technology

Entry requirements

Courses of at least 90 credits at first cycle including the following knowledge/courses. Assumes general object oriented programming knowledge of both graphical and non graphical applications (D0010E).

Alternative:

Alternative to completed courses can be corresponding knowledge acquired through work within the IT sector.

Selection

The selection is based on 30-285 credits

Examiner

Karl Andersson

Course Aim

After the course, the student

1. has knowledge about a) the scientific foundation of distributed systems for global distribution of real-time media for human communication and b) the proven experience programmers in this field of Computer Science;
2. has the capacity for carrying out teamwork and collaboration with various constellations, both in groups where the students choose whom to work with and in groups put together by others;
3. can create, analyse and critically evaluate various technical solutions in terms of the design and implementation of multimedia systems and to show insight in research and development by understanding limitations and possibilities;
4. can plan and use appropriate methods to undertake advanced programming tasks within predetermined parameters and show the ability to identify knowledge gaps and bridging these gaps by gaining new knowledge.
5. Show the ability to understand, interpretate and present scientific publications in the area.

Contents

The course gives knowledge about multimedia components, systems and applications with an emphasis on networked computers as conveyors of real-time information. Multimedia applications, real-time distributed systems, time dependent media, coding and compression, systems and software architectures, multi-modal communication systems.

Realization

Each course occasion's language and form is stated and appear on the course page on Luleå University of Technology's website.

The education consists of lectures, programming and theoretical assignments. The assignments can require written or verbally presentations and may contain a deadline. During the course home-exams may occur.

Examination

If there is a decision on special educational support, in accordance with the Guideline Student's rights and obligations at Luleå University of Technology, an adapted or alternative form of examination can be provided.

Final exam, assignments (laborations/project) and seminars. The final grade will be based on all parts of the course.

Overlap

The course M7017E is equal to M7001E

Literature. Valid from Autumn 2011 Sp 2

Parag Havaladar and Gérard Medioni, Multimedia Systems: Algorithms, Standards, and Industry Practices, Course Technology, Boston, MA, USA. ISBN-13: 978-1-4188-3594-1

Course offered by

Department of Computer Science, Electrical and Space Engineering

Items/credits

Number	Type	Credits	Grade
0001	Written exam	3	G U 3 4 5
0003	Seminar	1.5	G U 3 4 5
0005	Laboratory Work	3	G U 3 4 5

Study guidance

Study guidance for the course is to be found in our learning platform Canvas before the course starts. Students

applying for single subject courses get more information in the Welcome letter. You will find the learning platform via My LTU.

Last revised

by Jonny Johansson, HUL SRT 2015-02-16

Syllabus established

by huvudansvarig utb.ledare vid SRT, Jonny Johansson 2011-02-04