

IMT6141 Selected topics in Colour Imaging - 2014-2015

Course code:

IMT6141

Course name:

Selected topics in Colour Imaging

Course level:

PhD (syklus 3)

ECTS Credits:

5

Duration:

Other

Duration (additional text):

The course can be run at any time on agreement with the course responsible.

Language of instruction:

English

Prerequisite(s):

- Fundamental programming and algorithms
- Fundamental image processing
- Fundamental colour science

Expected learning outcomes:

Knowledge

- The candidate is in the forefront of knowledge within the selected topics in colour imaging
- The candidate can evaluate the appropriateness and applicability of advanced colour imaging methods
- The candidate has the ability to discuss and explain advanced colour imaging methods

Skills

- The candidate can formulate and evaluate appropriate solutions to different problems and applications within the interdisciplinary field of colour imaging
- The candidate can implement advanced colour imaging algorithms

General competence

- The candidate has the ability to communicate and discuss recent research in advanced topics in colour imaging
- The candidate has the ability to evaluate other people's work on advanced colour imaging techniques

Topic(s):

Recent topics within the field of colour imaging, included but not limited to colorimetric device characterization, cross-media colour reproduction, colour image processing and enhancement, quality evaluation, spectral imaging techniques

Teaching Methods:

Lectures

Project work

Meeting(s)/Seminar(s)

Tutoring

Form(s) of Assessment:

Other

Form(s) of Assessment (additional text):

- The candidate must provide one term paper and a final paper.
- In the term paper he or she discusses an open research topic assigned by the course responsible, including a thorough critical review of the state of the art, providing his or her own contribution to the field for instance by presenting a limited experimental setup and results and/or by proposing new ideas and promising directions for future research.
- In the final paper the candidate address a problem related to his or her own PhD thesis work within the field of colour imaging. The final paper should be in the form of a scientific paper, including proposed novel idea(s) supported by thorough discussion, experimental results and analysis, in a close to publishable scientific form.
- Candidates must pass both parts

Grading Scale:

Pass/Failure

External/internal examiner:

Internal examiner

Tillatte hjelpemidler:**Coursework Requirements:**

- Give 2 presentations consisting of an introductory lecture (15 min) and a full lecture (30 min). The first on the basis of the term paper and the second based on the final paper.
- Attend at least 5 lectures, guest lectures, seminars, or presentations by fellow students

Academic responsibility:

Faculty of Computer Science and Media Technology

Course responsibility:

Professor Jon Yngve Hardeberg

Teaching Materials:

Selected conference proceeding and peer-reviewed publications.

Additional information:

In case there will be less than 5 candidates that applies for the course, it will be at the discretion of the course responsible whether the course will be offered or not and, if yes, in which form.

Publish:

Yes