

COSI Display Technologies

Course level: Master

Course code: 3312025

ECTS Credits: 5.00

Course instructor/s: Pertti Silfsten with assistant

Education period (Dates): 3rd semester

Language of instruction: English

Expected prior-knowledge: Color Science

Aim:

After completing the course, students understand the basic concepts of display systems in general. Students will understand the main display technologies now in market. These include CRT, LED, EI, LCD, FED, SED, plasma, micro and projection as well as 3D-displays. Future flexible and flat panel displays should also be understood

Teaching methods:

Lectures 20 hours. Guided laboratory demonstration 20 hours. A private project work on a given subject must be completed, too.

Course outline:

To study different display technologies, their operation principles and properties.

Lab experiments:

Laboratory demonstrations of 20 hours are mandatory

Examination:

Written exam 4 hours, ordinary re-sit examination.

Learning Outcomes¹:

- *Knowledge and Comprehension* of the fundamentals, principles, applications, limits, relationships, of all concepts and topics covered by this course;
- *Application, Analysis, Synthesis and Evaluation* skills of the main concepts and topics covered by this course;
- Ability to apply/implement concepts and principles introduced in the lectures and laboratory exercises on practical tasks and on industrial study cases;
- Ability to self-learn, to understand some problems and to suggest/find solutions to solve these problems.

Assessment methods and tasks:

75 % written exam, 25 % exercises and project work

Assessment criterion:

Written exam and Practical works

Excellent - outstanding performance	A
Very Good - above the average standard but with some errors	B
Good - generally sound work with a number of notable errors	C
Satisfactory - fair but with significant shortcomings	D
Sufficient - performance meets the minimum criteria	E
Fail - some more work required before the credit can be awarded	FX
Fail - considerable further work is required	F

¹ The meaning of *keywords* written in italic used to define Learning Outcomes are detailed in Annex.

Detail of criteria used to assess acquired skills :

- *Activities and questionnaires giving evidence of knowing (5%)*
- *Activities and questionnaires giving evidence of comprehension/understanding (5%)*
- *Activities and questionnaires giving evidence of analysis (5%)*
- *Activities and questionnaires giving evidence of synthesis (5%)*
- *Activities and questionnaires giving evidence of evaluation (5%)*

Excellent	A
Very Good - above the average standard	B
Good - generally sound well	C
Satisfactory - but with significant shortcomings	D
Sufficient - performance meets the minimum criteria	E
Fail - some more work required	FX
Fail - considerable further work is required	F

The evaluation of informal learning outcomes will be based on questionnaires and laboratory notebook (self evaluation, learning diary).

Literature and study materials:

- Lecture notes

Contact details:

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