Mittuniversitetet
MID SWEDEN UNIVERSITY

Course Syllabus:

Electrical Engineering BA (B), Digital System Design with VHDL, 6 Credits

General data

Code	ET062G
Subject/Main field	Electrical Engineering
Cycle	First cycle
Progression	B
Credits	6.00
Progressive specialisation	First cycle, has less than 60 credits in first-cycle course/s as entry requirements
Answerable department	Faculty of Science, Technology and Media
Established	2010-02-18
Date of change	2015-03-04
Version valid from	2013-08-15

Aim

This course aims to provide students with advanced knowledge of specification and design of digital systems for implementation in FPGA technology with hardware description language. It can include systems with embedded microcontroller cores and/or dedicated hardware designs.

Course of objectives

After the course the student should be able to:
- Practically perform construction work and the realization of a system on FPGA
- Design, implement and verify FPGA based systems
- Draw conclusions about the design, engineering and verification

Content

The course contains:
- Planning and implementing a development project programmed in VHDL and implemented in a FPGA
- Complementary theory needed for the specific project
- Job specification, systems design, implementation and verification
- Practice in oral and written presentation

Entry requirements

Electrical engineering BA (A), Digital Electronics, 6 Credits.

Selection rules and procedures

The selectionprocess is in accordance with the Higher Education Ordinance and the local order of admission.

Examination form

6.0 hp, P102: Projects with an oral presentation at the seminar, active participation and technical documentation.
Grades: A, B, C, D, E, Fx and F. A-E are passed and Fx and F are failed.

Grading criteria for this subject can be found on www.miun.se/betygskriterier.

Grading system

The grades A, B, C, D, E, Fx and F are given on the course. On this scale the grades A through E represent pass levels, whereas Fx and F represent fail levels.

Course reading

Required literature

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För genomförande av projekt tillhandahåller kursansvarig viss litteratur och övrig litteratur får införskaffas av studenten via internet.

The responsible course lecturer will supply some necessary litterature required to complete the project. Additional litterature is required to obtain by the student through internet.