topics

• Oral exam
• Lab session
• Distribution paper and administration
ET4054 Web Site

- The home page for this course is in http://ens.ewi.tudelft.nl/Education/courses/et4054 (Link from Blackboard)
- Additional information about tools: http://ens.ewi.tudelft.nl/Education/courses/et4351
Content ET4054 Exam 2014/2015

• Chapter 3,4,5,6,9.3.1 de Michelli, chapter 3 Petru Eles, chapter 8.5.1 Gajski, chapter 6 EDA for IC implementation
• Paper presentation: Presentation of the paper you have studied.
• Lab session: Bring the printouts and short report of the lab exercise you have done.

• You can bring to the exam any material you want (open book).
• Collect your question ¾ hours before your scheduled timeslot.
• Duration: 30 minutes.
Course Content

Chapt. 3 (diMicheli)
Chapt. 4: 4.1,2,3,4,5,6,7 (diMicheli)
Chapt. 5: 5.1,2,3,4 (excl. 5.3.4, 5.4.5) (diMicheli)
Additional material: Chapter 3 High-Level Synthesis (Petru Eles)
Chapt. 6: 6.1,2, 6.4,5,6. (excl. 6.2.4,6.2.5, 6.3, 6.5.2) (diMicheli)
Additional material: Chapter 8.5.1 Clique partitioning (Gajski)
Chapt. 9: 9.3.1 (diMicheli)

Chap 6. Static timing analysis, EDA for IC implementation (Scheffer)
ET4054 Exam Registration

• On December 10, 2014, during the lecture we will distribute lab user accounts and papers.
• After December 10,
  • you can register for the oral exam.
  • At the same time you can select a paper.
  • (Go to the secretary on the 17th floor H17.320 (exit right, first room right))
Dates Oral Exam 2015

Week 4 & 5 2015.

Dates:

Jan 23 & 27, 28, 30, 2015
(Fri, Tue, Wed, Fri)

4x2 slots of 5,
9.30 – 12.30, and 13.30 – 16.30 hours
(40 student slots).
ET4054 Lab Session Web Site

The home page for this course is in
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(Link from Blackboard)
Additional information about tools:
http://ens.ewi.tudelft.nl/Education/courses/et4351
ET4054 Paper presentation

- Each student will select/get a recent paper (journal/conference/workshop)
- Read and study the paper
- Present its content at the exam
ET4054 Lab Session

- Goal: Architectural study of some high-level unit, in our case some digital filter.
- Parameter study, implementation aspects
- Scheduling of operations, use of resources.
- Retiming of circuit
- Simulation (functional and timed) of realization of the high-level unit.
ET4054 Lab Session Getting Started

• After/on December 10, you may login using your ‘NetID’ and password

• 1) Desktop PC in lab:
  – After login, press start, select ‘matlab et4054’; you will find a icon in your desktop, called Assignment2014….. that lists your 'personal assignment'.

• 2) Remote Desktop:
  – After command prompt type: % et4054_init, or % et4054_start
ET4054 Lab Location

• Room 'Veemhallen' LH 00.530.
• Open 24/7.
• Doors have ‘campus card lock’.

• 12 PC’s. There is no reservation list. Come and go.
• First couple of days busy, thereafter quiet.

• Also available: Remote Desktop
ET4054 Lab Tools

- OS: Linux (!) Opensuse 13.1
- Desktop: KDE
- MATLAB, version > 2011 b, …
- Modelsim, 10.1
- Synplify_pro
- A text editor, e.g. gvim, or kedit
- Open Office, 3.2 or better LaTex
- Printer: webprint ;
ET4054 Basic Steps

- Study scheduling parameters
- Study retiming options
- High level simulation (MATLAB)
- Generate VHDL code, RTL simulation (Modelsim), netlist simulation (Modelsim)
- Study/fix timing errors
- Optional: synthesis with Synplify and retime
ET4054 Lab Session Report

- a print-out of the Data Flow Graph, including operations, delays and interconnect (Also print the values of the input and calculated output variables),
- plots of Pareto curves of the Sequencing Graphs, including used scheduling parameters,
- a print-out of the Scheduled Sequencing Graph, and the scheduling parameters involved,
- Experiments with timing simulation (e.g. clockperiod),
- A print-out of the retime parameters and retimed SG,
- a print-out of the simulation results (wave viewer)
- (optionally) a print-out of the schematic diagram of your design.
Subject: ET4054 Lab Session

Accounts/Help

• You need an account and password: We are ‘NetID’ based.

• Go to the MSc Lab; login and obtain your assignment.

• In case of problems with the general operation of the PC’s go to room H17.250.

• In case of a specific problem with the lab assignment go to H17.260.
Subject: ET4054 Exam

• Please note, that in order to participate to the oral exam, it is not required to finish the ET4054 exercise!
• However, you need to submit the report within a 3 months period. If you fail to do so, your result of the oral exam will be void.
• In case you did not complete the exercise, bring the printouts of those steps you have completed.
Distribution account and paper

- Enter name, student number, NetID and paper ID.
- Use less than 10 seconds to select a paper,
  - Otherwise a paper will be selected for you.

- Select a timeslot on the ‘exam forms’ / add your name, email, phone number