

# The Hebrew University of Jerusalem

Syllabus

## INTERFACING ANALOG AND DIGITAL WORLDS - 83394

Last update 01-09-2021

HU Credits: 4

<u>Degree/Cycle:</u> 1st degree (Bachelor)

Responsible Department: Applied Physics

Academic year: 0

Semester: 2nd Semester

<u>Teaching Languages:</u> Hebrew

Campus: E. Safra

Course/Module Coordinator: Gabriel Zini

Coordinator Email: gabi.zini@phys.huji.ac.il

Coordinator Office Hours: Sun, 13:00 to 14:00

Teaching Staff:

#### Mr. Gabriel Zini

## Course/Module description:

Understanding the digital design process from discrete gates to programmable components FPGA.

Exposure to Verilea

Exposure to Verilog

### **Course/Module aims:**

See learning outcomes

<u>Learning outcomes - On successful completion of this module, students should be</u> able to:

Understanding the digital design process Exposure to Verilog language for digital design Learning the process of digital design FPGA based Hands-on the design of a step motor controller and a basic processor circuit

## Attendance requirements(%):

80

Teaching arrangement and method of instruction: Lab

#### Course/Module Content:

familiarity with digital design process reaching basic skills with Verilog design language familiarity with design based on FPGA design and implementation of 2 projects

## Required Reading:

NA

#### Additional Reading Material:

<u>Course/Module evaluation:</u> End of year written/oral examination 0 % Presentation 0 %
Participation in Tutorials 0 %
Project work 0 %
Assignments 0 %
Reports 70 %
Research project 0 %
Quizzes 30 %
Other 0 %

## Additional information:

Final grade will be composed of succeeding in 2 projects together with a short oral quizze.