

Cryptographic Engineering

General information about this course

Radboud University, Nijmegen, The Netherlands



Spring 2021

Two parts to this course

Part I: Engineering crypto software

- ▶ Teacher: **Peter Schwabe**
Office: Mercator I, 3.11b
peter@cryptojedi.org
- ▶ Assistant: **Denisa Greconici**
Office: Mercator I, 3.11b
D.Greconici@cs.ru.nl
- ▶ Lectures from Jan. 25 until Mar. 8
- ▶ Deadline for assignment: Apr. 9
- ▶ Resit deadline for assignment: Jul. 9

Two parts to this course

Part II: Engineering crypto hardware

- ▶ Teacher: **Lejla Batina**
Office: Mercator I, 3.10
lejla@cs.ru.nl
- ▶ Assistant: **Konstantina Miteloudi**
Office: Mercator I, 3.11
konstantina.miteloudi@ru.nl
- ▶ Lectures from Apr. 12 until May 31
- ▶ Deadline for assignment: Jun. 18
- ▶ Resit deadline for assignment: Jul. 9

About this course

- ▶ **Coordinator: Lejla Batina**
- ▶ Lecture/Tutorial: Monday, 15:30–17:30 on Zoom
- ▶ No exam
- ▶ 6 EC points
- ▶ Material (slides etc.) online on Brightspace
- ▶ Recommended prerequisite knowledge:
 - ▶ C programming
 - ▶ TRU/e Cryptology (or similar course)

Computation of final grade

- ▶ Two assignments:
 - ▶ Software assignment (in Part I)
 - ▶ Hardware assignment (in Part II)
- ▶ Work on assignments in **groups of 2**
- ▶ Final grade = $0.5SW + 0.5HW$, where
 - ▶ SW = grade of the software assignment
 - ▶ HW = grade of the hardware assignment
- ▶ Additional requirement for passing the course:
 $SW \geq 5$ and $HW \geq 5$

Schedule for Part I

Date	Lecture/Tutorial	Assignment
Jan 25	Lecture	Start SW Assignment Deadline SW Assignment Resit Deadline SW Assignment
Feb 1	Lecture/Tutorial	
Feb 8	Lecture	
Feb 15	No Lecture (Carnival)	
Feb 22	Lecture	
Mar 1	Lecture	
Mar 8	Lecture	
Apr 9		
Jul 9		

Distribution of Hardware

- ▶ SW Assignment needs STM32F4 Discovery board
- ▶ Two options for obtaining one

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Pick it up on Thursday, Jan. 28

- ▶ Enter Mercator I, one student at a time
- ▶ Denisa and Konstantina will be around from 10:00 to 16:00
- ▶ Pick up board from desk in the reception area
- ▶ Return board after the end of the course

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Buy one yourself

- ▶ For example, at RS-Components:
<https://nl.rs-online.com/web/p/microcontroller-development-tools/9107951/>
- ▶ Additionally need Mini-USB cable and USB-TTL converter, e.g.,
https://www.amazon.nl/dp/B089QJZ51Z/ref=sspa_dk_detail_1