



System Design Introduction

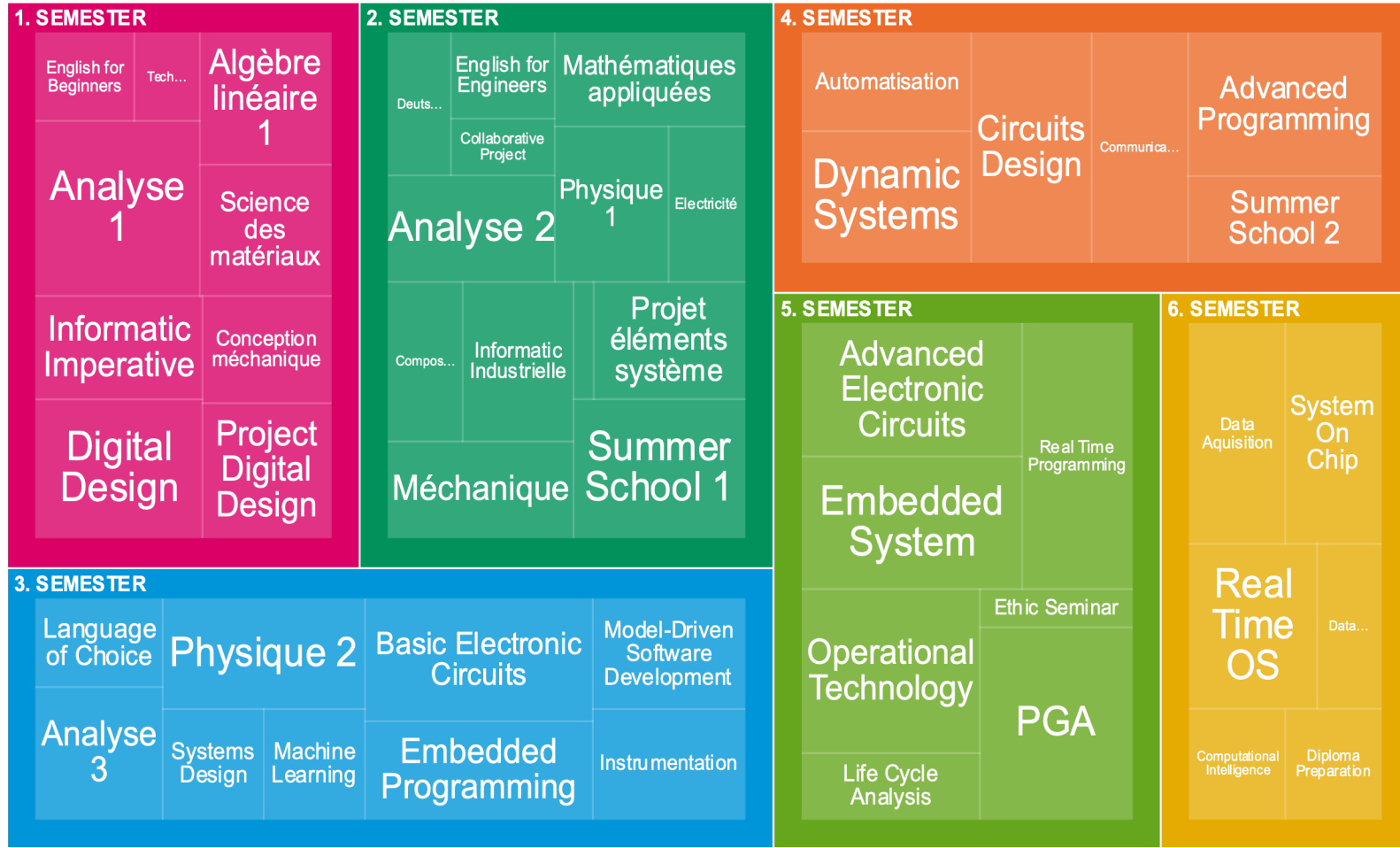
Systems Engineering program

Silvan Zahno silvan.zahno@hevs.ch

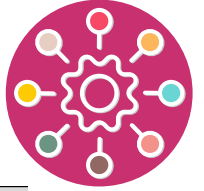


Modules

SYND



This Intervention



Objectifs AE4 à couvrir par le cours Systems Design	Niveau	Sujets/Contenus du cours	Intervenant	Nb de sem [2h/sem]	Sem du semestre	sem calendaires
--		Introduction au cours Systems Design (généralités, qu'est-ce qu'un système, problématiques et outils qui seront abordés dans ce cours)	Gabriel Paciotti	1	1	38
	c	Etude de cas	Philippe Barrade	1	1	39
Appliquer les principes de cycle en V et/ou en spirale comme références pour les développements d'un système industriel	c	Introductions aux méthodes d'approche projet (GIT, SCRUM, Spirale, V)	Silvan Zahno	3	2, 3, 4	40, 41, 42
Connaître les principes des approches agiles						
Analyser des besoins multifactoriels en tenant compte des besoins des utilisateurs		Analyse et description de systèmes : Analyser des besoins multifactoriels, description (Analyse fonctionnelle, etc...)	Samuel Rey-Mermet	2	5, 6	43, 45
	c	Analyse de risques, Analyse de défaillances	Samuel Rey-Mermet	2	7, 8	46, 47
Etablir des cahiers des charges de systèmes, ainsi que des matrices décisionnelles	c	Méthodologie et matrice décisionnelle : Analyses de variantes, Choix de sol. (Matrice décisionnelle), Anal. de vérification et validation	Gabriel Paciotti	2	10, 11	48, 49
Cycle de vie	c	Eco-conception, Cycle de Vie, et Lowtech (y.c. Design for -, Mise hors service, Démantèlement, Réutilisation et Recyclage)	Dominique Bollinger	2	12, 13	50, 51
		Introduction à l'Assurance Produit et Management du risque (évent. avec référence Samuel Rey-Mermet)	Thomas Gandy	2	14, 15	2, 3
TOTAL semaines				15		



I'M JUST OUTSIDE TOWN, SO I SHOULD
BE THERE IN FIFTEEN MINUTES.

ACTUALLY, IT'S LOOKING
MORE LIKE SIX DAYS.

NO, WAIT, THIRTY SECONDS.



THE AUTHOR OF THE WINDOWS FILE
COPY DIALOG VISITS SOME FRIENDS.

<https://xkcd.com/612/>

THE KEY TO LEADING
A PRODUCTIVE LIFE
IS TIME MANAGEMENT.



CHOOSE GOALS, BUILD A
SCHEDULE, AND HAVE THE
WILLPOWER TO FOLLOW IT—
OR BE LEFT BEHIND BY
THOSE OF US WHO DO.



SCHEDULE

7:00 AM	WAKE UP
7:15 AM - 8:00 AM	POST ON PRODUCTIVITY BLOGS ABOUT MY SCHEDULE
8:00 AM - WHENEVER	FUCK AROUND

Goal of the chapter



Know and understand tools for the technical management of a project and project files within a team.

This means:

- Technical management tools
- git file versioning



Organisation

Contact points

Professor



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Organisation



- 3 weeks
 - 1 week project management
 - 1 week git
 - 1 week git project
- Evaluation
 - git lab
 - The repo structure
 - Responses in answers.md

Documents and Informations

Moodle Cyberlearn

- <https://cyberlearn.hes-so.ch/course/view.php?id=24734>
- 23_HES-SO-VS_S3.3_SYSTEMS DESIGN

Github Repo

- syd-docs
- <https://github.com/hei-synd-syd/syd-docs>



PRJ & GIT

INTRODUCTIONS AUX METHODES D'APPROCHE PROJECT
EINFÜHRUNG IN DIE METHODEN DES PROJEKTANSATZES



f = français / d = deutsch / e = english

Tous les documents sont disponibles sur Github Repo / Alle Dokumente sind im Github Repo verfügbar:

<https://github.com/hei-synd-syd/syd-docs>

INTRO

- Slides IND d
- Slides IND f
- Slides IND e

GESTION TECHNIQUE / TECHNISCHES MANAGEMENT


- Slides PRJ d
- Slides PRJ f
- Slides PRJ e

INTRODUCTION GIT / EINFÜHRUNG GIT 

- Slides GIT d
- Slides GIT f
- Slides GIT e

LABO GIT / LABO GIT 

- Labo GIT d
- Labo GIT f
- Labo GIT e




syd-docs Public

Edit Pins Unwatch

main 1 branch 0 tags Go to file Add file Code

tschinz	2023-07-10 13:0...	928c5d8	3 weeks ago	6 commits
img	ADD: readme		3 months ago	
labo	2023-06-21 10:58:54: Automatic ...		2 months ago	
slides	2023-07-10 13:09:59: Automatic ...		3 weeks ago	
Makefile	ADD: readme		3 months ago	
README.md	ADD: readme		3 months ago	

README.md



HEI-VS DiD Course Documents

Description

All student documents for the [HEI-Vs](#) Engineering Course Systems Design

Additional Literature



- [1]
S. Sharma and N. Hasteer, “A comprehensive study on state of Scrum development,” in *2016 International Conference on Computing, Communication and Automation (ICCCA)*, Apr. 2016, pp. 867–872. doi: [10.1109/CCAA.2016.7813837](https://doi.org/10.1109/CCAA.2016.7813837).
- [2]
“Kanban and Scrum - Making the Most of Both,” Nov. 09, 2019. <https://www.infoq.com/minibooks/kanban-scrum-minibook/> (accessed Nov. 09, 2019).
- [3]
S. Chacon and B. Straub, *Pro Git*, 2nd ed. apress, 2023. [Online]. Available: <https://git-scm.com/book/en/v2>
- [4]
K. Schwaber and J. Sutherland, “Scrum Guide Deutsch.” 2020.
- [5]
K. Schwaber and J. Sutherland, “Scrum Guide English.” 2020.
- [6]
K. Schwaber and J. Sutherland, “Scrum Guide Français.” 2020.
- [7]
“Scrum Guides.” <https://scrumguides.org/index.html> (accessed Apr. 20, 2023).
- [8]
K. H. Pries and J. M. Quigley, *Scrum Project Management*. CRC Press, 2010.
- [9]
B. Gloger and K. Schwaber, *Scrum: Produkte zuverlässig und schnell entwickeln*, 4., Überarb. Aufl. München: Hanser, 2013.
- [10]
Office of Strategic Services, “Simple Sabotage Field Manual.” US Government, Jan. 17, 1944.