ESS: Elektronische Schaltungen und Systeme // Electronic Circuits and Systems — State 03.10.2023

timetable_ESS.pdf

dif	Date	Class	Elektronische Schaltungen und Systeme			Lab	Practical Training for ESS	
d	Monday							
#	date	Room	Classroom Training: Lectures	proj.	sco	Room	Practical Training	proj.
0	28.09.2023	Zoom	no lectures			S081	no lectures	
1	05.10.2023	S104	C1:introduct., Test of skills	1,06		S081	Intro., safety instruction, procedure, grouping	
2	12.10.2023	S104	C2: Switch-Mode Conversion, Ch 2.1 ready	2,08		S081	P1: Getting Started with DE1-SoC Board	2,08
3	19.10.2023	S104	C2: Switch-Mode Conversion, Ch 2.2.2 ready	2,15		S081	P1: Getting Started DE1-SoC * *P3.1: p.1-6 @ home*	2,12
4	26.10.2023	S104	C2: Switch-Mode Convers., C. 2.2, Matlab: PTF p+z	2,20		S081	P2: DCDCbuck Start, *H: Ch.1+2* * Ch. 3.1+3.2,p.7-16	3,16
5	02.11.2023	S104	C2: Starting with Simulink, Loop model nearly finished	2,27		S081	P2: DCDCbuck Start, Ch.3.3 + 4.embedded, p. 17-22	3,22
6	09.11.2023	S104	C3: ADA Conversion Modeling	3,05		S081	P3: LoopGain: *H.: C.1-2* , p.1-11 * C.3.1+2:open-loop	4,15
7	16.11.2023	S104	C3: ADA Conversion Modeling	3,11		S081	P3: LoopGain: Ch.3.3-3.6, p.16-20: open-loop finished	4,20
8	23.11.2023	S104	C4: Control Loops	4,12		S081	P3: LoopGain. *H: C.4.1+2* , C.4 3-6:MB p.20-28, *H:C5*	4,30
9	30.11.2023	S104	C4: Control Loops \ 4.1.3.1 Nyquist/Shannon Criterion	4,21		S081	P4: CharComp: *H: C.1+2.1,p1-6* * C.2: Tools pp.7-13	5,13
10	07.12.2023	S104	C5: Analog PID Controllers	5,09		S081	P4: CharComp: Ch. 3.2+3.3, characterize C + L	5,20
11	14.12.2023	S104	C5: Analog PID Controllers	5,20		S081	P4: CharComp: Ch. 3.4+3.4, characterize+model RLC	5,30
12	21.12.2023	S104	C5: Analog PID Controllers	5,30		S081	P5: Debugging DCDCbuck_R10 Board	3,12
13	11.01.2024	S104	C6: Digitalization: s -> z	6,08		S081	P6: Adapt Matlab/Spice model to your board	
14	18.01.2024	S104	C6: Digitalization: s -> z	6,12		S081	P6: Finishing	

Legend: C. or Ch: chapter, p. or pp.: pages, *H: homework*

P1: Intruduction to required *EDA* *) tools, cunducted by supervisor
P2: Document: GettingStarted_with_DE1SoC_Board
P3: Document: GettingStarted_with_DCDCbuck_Board_Rev10
P4: Document: Characterize_LoopGains of DCDCbuck
P5: Document: Characterize Passive Components of DCDCbuck
P6: Document: Debugging the DCDCbuck Board
P7: Adapt *Matlab/Spice* model to meas. data, begin project thesis