

Faculty of Engineering University of Freiburg



Master of Science in Embedded Systems Engineering Examination regulations version 2012 example for study plan sorted by modules



ese
embedded systems
engineering

Sem	modules/courses	type of course	PL SL	hours/week				ECTS	total
				L	E	S	Pr		
Mandatory area								69	
Please consider the regulations									
1 / 2	algorithms theory (winter)	key course	PL	3	1	0	0	6	
1 / 2	image processing and computer graphics (winter)	key course	PL	3	1	0	0	6	
1 / 2	data bases and information systemes (winter)	key course	PL	3	1	0	0	6	
1 / 2	software engineering (summer)	key course	PL	3	1	0	0	6	
1 / 2	artificial intelligence (summer)	key course	PL	3	1	0	0	6	
1 / 2	computer architecture (summer)	key course	PL	3	1	0	0	6	
1 / 2	Specialization course in Computer Science	specialization course	PL	3	1	0	0	6	
1 / 2	Cyber-Physical-Systems - Discrete Models	mandatory lecture	PL	3	1	0	0	6	
1 / 2	Modelling and System Identification	mandatory lecture	PL	3	1	0	0	6	
1 / 2	Sensors	mandatory lecture	PL	3	0	0	1	5	
1 / 2	Assembly and Packaging Technology	mandatory lecture	PL	2	1	0	0	5	
1 / 2	Microelectronics	mandatory lecture	PL	2	1	0	0	5	
Elective area								mind. 51	
Concentrations areas									
Please consider the regulations									
1 to 4	Circuits and Systems - Moduls	Concentrations	PL	x	x	x	x	3,5,6	
1 to 4	Design und Simulation - Moduls	Concentrations	PL	x	x	x	x	3,5,6	
1 to 4	Sensors and Actuators - Moduls	Concentrations	PL	x	x	x	x	3,5,6	
1 to 4	Reliable Embedded Systems - Moduls	specialization course, lab course, seminar	PL	x	x	x	x	4,6	
1 to 4	Distributed Systems - Moduls	specialization course, lab course, seminar	PL	x	x	x	x	4,6	
1 to 4	Robotics and Computer Vision - Moduls	specialization course, lab course, seminar	PL	x	x	x	x	4,6	

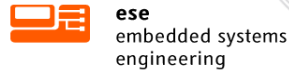
legend:

PL = graded assessment , SL= pass/fail assessment, L=Lecture, E=Exercises, S=Seminar, Pr=Project or Lab course
X=unknown/depends on subject

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Personal Profile - area								mind. 15	
Please consider the regulations									
1 to 4	Personal Profile - Module 4	Concentrations, specialization course, lab course, seminar	PL	x	x	x	x	3,4,5,6	
Mastermodul								30	
4	Masterarbeit	-	PL	x	x	x	x	27	
4	Masterseminar	Präsentation	SL	0	0	2	0	3	

*** REGULATIONS:**

In the mandatory area you have to select 1 key course.
You can either choose a 2. key course or a specialization course.

The elective area is divided into the areas Concentrations and Personal Profile.
In total you have to acquire at least 51 ECTS credits.

In the concentrations areas you have to choose one specific area in each group:

Group 1:

- Circuits and Systems
- Design and Simulation
- Sensors and Actors

Group 2:

- Reliable Embedded Systems
- Distributed Systems
- Robotics and Computer Vision

You have to select courses amounting to at least 15 ECTS credits in each of the two groups.
You are allowed to take only 2 seminars in total.

In the Personal Profile you have to select courses amounting to at least 15 ECTS credits.

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