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 L E S Pr	ECTS	total
Mandatory area **Please consider the regulations**						**69**
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**						**mind. 30**
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

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 L	E	S	Pr	ECTS	total
Personal Profile - area Please consider the regulations									**mind. 15**
1 to 4	**Personal Profile - Module**	**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:	Group 2:
- Circuits and Systems	- Reliable Embedded Systems
- Design and Simulation	- Distributed Systems
- Sensors and Actors	- 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.

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