universität freiburg

Example for a study plan for M.Sc. ESE (PO 2021)

The following table provides an example of what an individual study plan might look like when starting in winter semester. It's color coded to differentiate between the areas of Computer Science (red) and Microsystems Engineering (blue).

Sem	Module/Course	PL/SL	C/E	SWS	ECTS
Semester 1					30
1	Micro-electronics	PL	C	4	6
1	Sensors	SL+PL	C	4	6
1	Introduction to Embedded Systems	SL+PL	C	4	6
1	Machine Learning	SL+PL	C	4	6
1	MST Technologies and Processes	SL+PL	E	4	6
Semester 2					30
2	Assembly and Packaging Technology	PL	C	4	6
2	Image Processing and Computer Graphics	SL+PL	C	4	6
2	Hardware Security and Trust (Specialization course CS)	PL	C	4	6
2	Introduction to Mobile Robotics (Specialization course CS)	PL	C	4	6
2	Energy harvesting (MSE Conc. Circuits & Systems)	PL	C	4	6
Semester 3					30
3	Seminar in Computer Science	SL+PL	E	2	3
3	Cyber-Physical Systems – Program Verification (Specialization course CS)	SL+PL	C	4	6
3	Reliability Engineering (MSE Conc. Circuits & Systems)	PL	C	2	3
3	Microcontroller Techniques – Praktikum (MSE Conc. Circuits & Systems)	PL	C	2	3
3	Numerical Optimization (MSE Conc. Circuits & Systems)	SL+PL	C	6	6
3	Model Predictive Control and Reinforcement Learning (MSE Conc. Circuits & Systems)	SL+PL	C	2	3
3	German Language Course at SLI	SL	E	2	6
Semester 4					30
4	Master Thesis	PL	C	x	30

Abbreviations:

PL=*Prüfungsleistung*/graded assessment; SL= *Studienleistung*/coursework or pass/fail assessment; V=*Vorlesung*/lecture; Ü=*Übung*/exercise; S=*Seminar*/seminar; Pr=*Praktikum*/practical exercise; C=module from compulsory area, E=module from elective area; SWS=*Semesterwochenstunden*/hours per week per semester; x=undefined, depends on the subject/module; Semester=start in winter semester assumed