

Cursus intégré Saar-Lor-Lux en physique Licence / Bachelor

Integrierter Saar-Lor-Lux-Bachelor-Studiengang in Physik

Integrated bachelor study program Saar-Lor-Lux in physics

Module	Module Elements	Structure	Hours	CP	Description
1st Semester UdL			per term		
	Physique Théorique 1 CI	CM+TD	90	6	Physics 1
	Chimie	CM+TD	60	6	Chemistry
	Mathématiques 1	CM+TD	90	6	Mathematics
	Introduction à la physique	CM	30	3	Introduction to Physics
	Mécanique du point	CM+TD	60	6	Additional Physics Course
	Langues Cursus Intégré	CM	30	3	Language Course French
2nd Semester UdL					
	Physique Théorique 2 CI	CM+TD	60	6	Theoretical Physics 2
	Mathématiques 2	CM+TD	60	6	Mathematics 2
	Langues et APP	CM	30	3	Languages 2
	Electromagnétisme 1	CM+TD	60	6	Electromagnetism 1
	Méthodologie	TP	60	6	Practical Course
	Electromagnétisme 1bis	CM	-	3	Electromagnetism 1b

CM: cours magistraux / Vorlesung / lecture

TD: travaux dirigés / Übung / exercise

TP: travaux pratiques / Praktikum / practical training

Module	Module Elements	Structure	Hours	CP	Description
3rd Semester UL			per week		
3.1	Physique expérimentale 3	CM+TD	6	6	Exp. Phys. 3: Modern Physics
3.1	Physique Mathématique 2	CM+TD	6	6	Math. Phys. 2: Electrodynamics
3.2	TP Physique 3	TP	3	5	Physics Practical Course 3
3.2	Chimie 2	CM	3	2	Chemistry 2
3.3	Analyse 3b	CM	2	3	Calculus 3b
3.3	Méthodes mathématiques de la Physique 2	CM+TD	2	6	Math. Methods of Physics 2
3.4	Anglais scientifique 1	CM	4	2	Scientific English
3.4	Français scientifique 1	CM	2	2	Scientific French
3.4	Probabilités et Stat. 1	CM	2	3	Probability and Statistics 1
4th Semester UL					
4.1	Physique exp. 4a, 4b: Optique et TD	CM+TD	6	6	Exp. Phys. 4: Optics
4.1	Thermodynamique I et II	CM+TD	6	6	Thermodynamics I and II
4.1	Physique math. 3a, 3b: Mécanique quantique	CM+TD	3	6	Math. Phys. 3: Quantum Mechanics
4.2	TP Physique 4	TP	3	5	Pract. Course: Physics 4
4.2	TP Chimie 2	TP	4	1	Pract. Course: Chemistry 2
4.2	Analyse 4b, 4c	CM	3	4	Calculus 4b, 4c
4.3	Programming for physicists	CM	2	2	Programming for physicists
4.3	Anglais scientifique 2	CM	2	2	Scientific English 2
4.3	Français scientifique 2	CM	2	2	Scientific French 2
4.3	Probabilités et Stat. 2	CM	2	3	Probability and Statistics 2

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Module	Module Elements	Structure	Hours	CP	Description
5th Semester UdS			per week		
Experimental-physik IV	Experimentalphysik IVa	V+Ü	3+1	4	Solid state physics
Theoretische Physik IV	Theoretische Physik IV	V+Ü	4+2	8	Quantum mechanics Ib and statistical physics Ib
Phys. Praktikum f. Fortgeschr. I	Phys. Praktikum für Fortgeschrittene I	P	6	9	Advanced practical course
Allgemeine Wahlpflicht I	Computational Thinking	V+Ü	4	6	Computational Thinking
Allgemeine Wahlpflicht I	Einführung in die Kosmologie	V	4	5	Introduction to Cosmology
6th Semester UdS					
Experimental-physik IV	Experimentalphysik IVb	V+Ü	3+1	4	Nuclear physics, elementary particles
Allgemeine Wahlpflicht II	Wissenschaftsmanagement	V	2	3	Science management
Bachelor-seminar	Seminar zur Bachelorarbeit	S	2	6	Seminar on the bachelor thesis
Bachelorarbeit	Bachelorarbeit	P		12	Bachelor thesis

V: cours magistraux / Vorlesung / lecture

Ü: travaux dirigés / Übung / exercise

P: travaux pratiques / Praktikum / practical training

S: séminaire / Seminar / seminar