II – Half-yearly course organization sheet

1- Semester 1 :

Teaching unit	Matter	Credit	Coefficient	C	TD	TP	Volume (hour)
Fundamental Unit	Advanced Quantum Mechanics I	7	4	3h00	1h30		67h30
	Quantum statistical physics	6	3	3h00	1h30		67h30
	Quantum Field Theory I	6	3	3h00			45h00
Methodological unit	Advanced mathematical method of physics	4	2	1h30		1h30	45h00
	Group theory	4	2	1h30		1h30	45h00
Discovery unit	Nuclei and elementary particles	1	1	1h30			22h30
Transversale Unit	English	1	1	1h30			22h30

1- Semester 1 :

Teaching unit	Matter	Credit	Coefficient	Courses	TD	Practical Work	Volume (hour)
Fundamental Unit	Advanced Quantum Mechanics II	7	4	3h00	1h30		67h30
	Nuclear structure I	6	3	3h00	1h30		67h30
	Quantum Field Theory II	6	3	3h00			45h00
Methodological unit	Numerical programming	5	3	1h30	1h30	1h30	67h30
	Differential geometry and topology	4	2	1h30	1h30		45h00
Transversale Unit	English II	1	1	1h30			22h30

Third Semester

Teaching unit	Matter	Credit	Coefficient	C	TD	TP	Volume (hour)
Fundamental Unit	Quantum information	6	3	3h00			45h00
	Nuclear structure I	7	4	3h00	1h30		67h30
	Path integrals	6	3	3h00			45h00
Methodological unit	General relativity	5	3	1h30	1h30		45h00
	radiation-matter interaction	4	2	1h30	1h30		45h00
Discovery unit	Initiation to research	2	2	1h30			22h30

Semester 4

Internship in a company sanctioned by a thesis and a defense.

	VHS	Coeff	Crédits
Personal Work	350	1	30
Total Semester 4	350	1	30

5- Global summary of the training: (indicate the separate global VH in progress, TD, for the 04 teaching semesters, for the different types of teaching units)

UE / VH	UEF	UEM	UED	UET	Total
Courses	27h00	7h30	1h30	4h30	41h30
TD	9h00	9h00	0	0	18h30
TP	0	01h30	0	0	1h30
Personnal work	350	0	0	0	350
other					
Total	386	19h30	0	0	411h30
Credits	87	26	1	6	**120**
% in credits for each teaching unit	72.5	21.67	0.83	5.0	100.0