

"Condensed Matter Physics(Theoretical)" guidelines of the standard curriculum

2021~

<integrated master-doctoral degree program>

Semester	Course	Credit	
1	CLASSICAL MECHANICS	3	Required(Major common)
	CLASSICAL ELECTROMAGNETIC THEORY I	3	Required(Major common)
	QUANTUM MECHANICS I	3	Required(Major common)
	SPECIAL TOPICS IN ADVANCED PHYSICS I(Seminar)	3	Major(Choose 1)
2	CLASSICAL ELECTROMAGNETIC THEORY II	3	Required(Major common)
	QUANTUM MECHANICS II	3	Required(Major common)
	WRITING PHYSICS PAPERS	3	Required(Major common)
	SPECIAL TOPICS IN ADVANCED PHYSICS II(Seminar)	3	Major(Choose 1)
3	QUANTUM FIELD THEORY I	3	Major(Choose 1)
	MATHEMATICAL PHYSICS	3	Required(Major common)
	CONDENSED MATTER PHYSICS I	3	Required(Major)
4	STATISTICAL PHYSICS I	0	Major(Choose 1)
	SPECIAL TOPICS IN CONDENSED MATTER PHYSICS I	0	Major(Choose 1)
	ELECTRICAL TRANSPORT THEORY AND EXPERIMENT I	0	Major(Choose 1)
5	SPECIAL TOPICS IN NANO PHYSICS I	0	Major(Choose 1)
	SPECIAL TOPICS IN CONDENSED MATTER PHYSICS II	0	Major(Choose 1)
6	SPECIAL TOPICS IN NANO PHYSICS II	0	Major(Choose 1)
	RESEARCH IN NANO OPTICS I	0	Major(Choose 1)
Total Credits		48	

*Students for the integrated program are required to complete 48 credits in total.

*Insufficient credits can be freely taken according to your choice.

<master's degree>

Semester	Course	Credit	
1	CLASSICAL MECHANICS	3	Required(Major common)
	CLASSICAL ELECTROMAGNETIC THEORY I	3	Required(Major common)
	QUANTUM MECHANICS I	3	Required(Major common)
2	WRITING PHYSICS PAPERS	3	Required(Major common)
3	MATHEMATICAL PHYSICS	3	Required(Major common)
	QUANTUM FIELD THEORY I	3	Major(Choose 1)
	CONDENSED MATTER PHYSICS I	3	Required(Major)
4	STATISTICAL PHYSICS I	3	Major
Total Credits		24	

*Students for the master's degree are required to complete 24 credits in total.

<doctoral degree>

Semester	Course	Credit	
1	SPECIAL TOPICS IN ADVANCED PHYSICS I(Seminar)	3	Major(Choose 1)
	ELECTRICAL TRANSPORT THEORY AND EXPERIMENT I	3	Major(Choose 1)
	SPECIAL TOPICS IN NANO PHYSICS I	3	Major(Choose 1)
	CONDENSED MATTER PHYSICS II	3	Major(Choose 1)
2	CLASSICAL ELECTROMAGNETIC THEORY II	3	Required(Major common)
	QUANTUM MECHANICS II	3	Required(Major common)
	SPECIAL TOPICS IN ADVANCED PHYSICS II(Seminar)	3	Major(Choose 1)
3	SPECIAL TOPICS IN CONDENSED MATTER PHYSICS II	0	Major(Choose 1)
	SPECIAL TOPICS IN NANO PHYSICS II	0	Major(Choose 1)
	RESEARCH IN NANO OPTICS I	0	Major(Choose 1)
4	SPECIAL TOPICS IN CONDENSED MATTER PHYSICS II	0	Major(Choose 1)
	ELECTRICAL TRANSPORT THEORY AND EXPERIMENT II	0	Major(Choose 1)
Total Credits		30	

*Students for the doctoral degree are required to complete 30 credits in total.

*Insufficient credits can be freely taken according to your choice.