Condensed Matter Physics and Nanotechnology

is a joint interdisciplinary double degree Master's program run by Gdańsk Tech and <u>University of L'Aquila</u> (UNIVAQ) in Italy. It is structured in two academic years of full-time study and requires students to achieve 122 ECTS credits to gain their final qualification.

Upon successful completion of the program students are awarded the following degrees:

- Master of Nanotechnology (awarded by Gdańsk Tech)
- Master of Physics (awarded by UNIVAQ)

Students will spend their first year at UNIVAQ, gaining in-depth mostly theoretical background in solid state physics, and the second year at Gdańsk Tech, where they will have their hands on experiments. At least 60 ECTS credits will be collected in each partner university, according to the following study plan:

Semester 1, winter, L'Aquila Condensed Matter Physics and Nanotechnology				
1	Condensed Matter Physics	6		
2	Nuclear and Subnuclear Physics	6		
3	Statistical Mechanics	6		
4	Quantum Electrodynamics	6		
5	Experimental Methods in Physical Research	6		
6	foreign language: Italian (A1) for non-Italian students or English	3		
	sum:	33		
Semester 2, summer, L'Aquila				
С	ondensed Matter Physics and Nanotechnology			
1	Advanced Physics Laboratory - Condensed Matter Physics	6		
2	CHEMISTRY OF SURFACES AND INTERFACES	6		
3	Solid State Physics	10		
4	APPRENTICESHIP	6		
	sum:	28		
Semester 3, winter, Gdańsk				
Condensed Matter Physics and Nanotechnology				
1	Computer modeling and design of materials	5		
2	Physics of materials laboratory	2		
3	Magnetism: from fundamentals to spintronics	2		
4	Materials Science - classical particle approach	5		
5	Group project	2		
6	Humanities and social science course 3 (Methodology of scientific research)	1		
7	Humanities and social science course 1, Gdańsk Tech offer	2		
8	Polish Language I	2		
9	MSc thesis laboratory	10		
	sum:	31		
S	Semester 4, summer, Gdańsk			

Condensed Matter Physics and Nanotechnology			
1	Experimental nanotechnology	4	
2	Polish Language II	1	
3	Synthesis methods of nanomaterials	3	
4	MSc thesis	20	
5	Nanotechnology and Human Environment	2	
	sum:	30	
1	total for 4 semesters:	122	

Individual study plans may also be taken into account, if appropriately motivated, but they will have to be approved by coordinators of both universities.

For further details please contact one of our coordinators:

- Justyna Szostak (Gdańsk Tech, justyna.szostak@pg.edu.pl)
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