PLAN STUDIÓW

WYDZIAŁ: Wydział Fizyki Technicznej i Matematyki Stosowanej
KIERUNEK: Nanotechnologia
poziom kształcenia: II stopnia
profil: ogólnoakademicki
forma studiów: stacjonarne

Lp.	O/F	kod modułu/ przedmiotu*	nazwa zajęć	efekty kształcenia	grupa zajęć**	SEMESTR							
						forma zaliczenia	liczba godzin						liczba punktów ECTS
							w	ć	l	p	s	razem	
SEMESTR 1													
1 Nanotechnologia (studia w jęz. angielskim) (Kierunek)													
2 Nanostructures and computer simulations in material science (Specjalność)													
1	O	PG_00036985	Physical testing methods of materials	K7_W01 K7_U05 K7_U07 K7_W06 K7_K03	B D	Z	15	0	30	0	0	45	3
2	O	PG_00036981	Basics of nanophysics	K7_W02 K7_W09 K7_K09	B D	Z	15	0	0	0	0	15	1
3	O	PG_00036982	Thermodynamics	K7_W04 K7_U06 K7_W09	B D	Z	30	15	0	0	0	45	3
4	O	PG_00036983	General chemistry	K7_W04 K7_W07	B D	E	30	0	0	0	0	30	2
5	O	PG_00036984	Synthesis methods of nanomaterials	K7_W02 K7_W04 K7_U05	B D	Z	15	0	30	0	0	45	3
6	O	PG_00036979	Physics of materials	K7_W01 K7_W03 K7_U02 K7_W06 K7_W09 K7_K03	B D	E	30	30	30	0	0	90	7
7	O	PG_00036980	Introduction to quantum mechanics	K7_W02 K7_W03 K7_U07 K7_U06 K7_W09	B D	E	30	30	0	0	0	60	5
8	O	PG_M0000198	NAN2AM1-WS1A-Specialist course 1	K7_W02 K7_W03 K7_W09	B D		30	0	0	0	0	30	2
9	O	PG_M0000199	NAN2AM2-WS1B-Specialist course 2	K7_W02 K7_W03 K7_W09	B D		30	0	0	0	0	30	2
10	O	PG_M0000200	NAN2AM3-Humanities and social science course 1	K7_W71 K7_U71 K7_K71	C		30	0	0	0	0	30	2
						suma:	255	75	90	0	0	**420**	**30**

SEMESTR 2													
1 Nanotechnologia (studia w jęz. angielskim) (Kierunek)													
2 Nanostructures and computer simulations in material science (Specjalność)													
1	O	PG_00036989	Microscopy methods in nanotechnology	K7_W03 K7_W04 K7_U02 K7_U05	B D	Z	15	0	30	0	0	45	3
2	O	PG_00036990	Galsses and glass-nanoceramic composites	K7_W01 K7_W03 K7_U07 K7_U01	B D	Z	30	0	0	0	15	45	3
3	O	PG_00036991	Theoretical principles of nanotechnology	K7_W02 K7_W04 K7_U01	B D	E	30	30	0	0	0	60	5
4	O	PG_00036992	Materials Science - classical particle approach	K7_W01 K7_W02 K7_W05 K7_U03 K7_U06	B D	Z	30	0	45	0	0	75	5
5	O	PG_00036986	Experimental nanotechnology	K7_W04 K7_W07 K7_U02 K7_U05 K7_W06 K7_K09	B D	Z	15	0	30	0	0	45	4
6	O	PG_00036987	Magnetism: from fundamentals to spintronics	K7_W02 K7_W03 K7_U07 K7_U01	B D	E	30	0	0	0	0	30	2
7	O	PG_00036988	Nanochemistry	K7_W03 K7_U07	B D	Z	30	0	0	0	0	30	2
8	O	PG_M0000201	NAN2AM4-WS2A-Specialist course 3	K7_W02 K7_W03 K7_W09	B D		30	0	0	0	0	30	2
9	O	PG_M0000202	NAN2AM5-WS2B-Specialist course 4	K7_W02 K7_W03 K7_W09 K7_U10	B D		30	0	0	0	15	45	3
10	O	PG_M0000203	NAN2AM6-Humanities and social science course 2	K7_U01 K7_W71 K7_K71	C		15	0	0	0	0	15	1
						suma:	255	30	105	0	30	**420**	**30**

SEMESTR 3													
1 Nanotechnologia (studia w jęz. angielskim) (Kierunek)													
2 Nanostructures and computer simulations in material science (Specjalność)													
1	O	PG_00037003	Computer modeling and design of materials	K7_W02 K7_W05 K7_U03 K7_U06 K7_K03	B D	Z	15	0	45	0	0	60	5
2	O	PG_00037004	Diploma laboratory and seminar	K7_W81 K7_U81 K7_K81 K7_U05 K7_W06 K7_U10	B D	Z	0	0	30	0	30	60	4
3	O	PG_00037005	Group project	K7_U07 K7_U01 K7_W06 K7_K03	B	Z	0	0	0	30	0	30	2
4	O	PG_00036999	Spectroscopy methods in nanotechnology	K7_W03 K7_W04 K7_U03 K7_U05 K7_K03	B D	E	30	0	30	0	0	60	5
5	O	PG_00037000	Surface science	K7_W02 K7_U10	B D	E	15	0	0	0	15	30	2
6	O	PG_00037001	Solid state electronics and nanoelectronics	K7_W02 K7_W03 K7_U07 K7_K09	B D	E	30	0	0	0	0	30	2
7	O	PG_00037002	Materials Science - quantum particle approach	K7_W02 K7_W05 K7_U03 K7_U06	B D	Z	30	0	30	0	0	60	4
8	O	PG_M0000207	NAN2AM7-WS3A-Specialist course 5	K7_W02 K7_U01 K7_W09 K7_K09 K7_U10	B D		15	0	0	0	15	30	2
9	O	PG_M0000209	NAN2AM8-WS3B-Specialist course 6	K7_W02 K7_U01 K7_W03 K7_W09 K7_U10	B D		30	0	0	0	15	45	3
10	O	PG_M0000210	NAN2AM9-Humanities and social science course 3	K7_W71 K7_K71	C		15	0	0	0	0	15	1
						suma:	180	0	135	30	75	**420**	**30**

SEMESTR 4													
1 Nanotechnologia (studia w jęz. angielskim) (Kierunek)													
2 Nanostructures and computer simulations in material science (Specjalność)													
1	O	PG_00037006	Msc thesis	K7_W07 K7_U05 K7_U01 K7_W06 K7_U06 K7_U10 K7_K04 K7_K09	B D	Z	0	0	0	120	0	120	20
2	O	PG_00037008	Diploma seminar	K7_W03 K7_U01 K7_U10 K7_W09	B D	Z	0	0	0	0	30	30	3
3	O	PG_00037010	Ethics in nanotechnology	K7_W71 K7_W03 K7_K09	C	Z	15	0	0	0	0	15	1
4	O	PG_M0000211	NAN2AM10-WS4A-Specialist course 7	K7_W02 K7_K09	B D		30	0	0	0	0	30	3
5	O	PG_M0000212	NAN2AM11-WS4B-Specialist course 8	K7_W02 K7_U01 K7_K09 K7_U10	B D		30	0	0	0	15	45	3
						suma:	75	0	0	120	45	**240**	**30**

						ŁĄCZNIE							
			PRAKTYKI										

Kurs	
Nanostructures and computer simulations in material science (Specjalność)	
SUMA GODZIN	1500
SUMA ECTS	120

objaśnienia:

O - przedmiot obowiązkowy do zaliczenia danego roku studiów

F - przedmiot fakultatywny (do wyboru)

w - wykład

ć - ćwiczenia

l - laboratorium

p - projekt

s - seminarium

*kod nadawany przez system "Programy kształcenia"

**grupy zajęć zgodne z załącznikiem nr 1 do niniejszego zarządzenia (w spraiwe zasad tworzenia oraz likwidacji kierunków studiów wyższych na Politechnice Gdańskiej)