

Classification	Course No.	Course Title(Kor)	Course Title(Eng)	Hrs.:E.:Credits
Required	PH5001	고급 전자기학 I	Advanced Electrodynamics I	3/0/3
Required	PH5002	현대양자물리 I	Modern Quantum Physics I	3/0/3
Elective	PH5003	현대양자물리 II	Modern Quantum Physics II	3/0/3
Elective	PH5101	레이저 광학	Laser Optics	3/0/3
Elective	PH5102	고급 고전역학	Classical Dynamics	3/0/3
Elective	PH5103	고급 통계물리	Advanced Statistical Physics	3/0/3
Elective	PH5104	분광학 개론	Introduction to spectroscopy	3/0/3
Elective	PH5105	현대 생물분석학	Advanced Bioanalytical Science	1/4/3
Elective	PH5106	광학 부품 및 소재의 이해와 응용	Understanding and application of optical components and materials	3/0/3
Elective	PH5107	과학계산	Scientific Computing	3/0/3
Elective	PH5108	나노 중시계 물리학	Nanoscale and Mesoscopic Physics	3/0/3
Elective	PH5109	고급 양자 물리	Advanced quantum physics	3/0/3
Elective	PH5110	플라즈마 물리	Plasma physics	3/0/3
Elective	PH5111	고급 전자기학 II	Advanced Electrodynamics II	3/0/3
Elective	PH6001	초고속 광학	Ultrafast Optics	3/0/3
Elective	PH6002	파동물리	Physics of Wave Phenomena	3/0/3
Elective	PH6004	현대 광학 실험	Experimental methods of modern optics	1/4/3
Elective	PH6005	고급 분광학	Advanced Molecular Spectroscopy	3/0/3
Elective	PH6006	고급 고체물리	Advanced Solid State Physics	3/0/3
Elective	PH7001	양자 광학	Elements of Quantum Optics	3/0/3
Elective	PH7002	고급 X-ray 물리	Modern X-ray Physics	3/0/3
Elective	PH7003	나노포토닉스	Nanophotonics	3/0/3
Elective	PH7004	비선형 광학	Nonlinear Optics	3/0/3
Elective	PH7005	가속기 물리	Accelerator Physics	3/0/3
Elective	PH7006	고급 플라즈마 물리	Advanced Plasma physics	3/0/3
Elective	PH7007	광과학특론 I	Special Topics in Photon Science I	3/0/3
Elective	PH7008	광과학특론 II	Special Topics in Photon Science II	3/0/3
Elective	PH7009	응집물리학 특론	Special Topics in Condensed Matter Physics	3/0/3
Elective	PH7010	입자물리학 특론	Special Topics in Particle Physics	3/0/3
Elective	PH7011	실험 레이저-플라즈마 물리학	Experimental Laser-Plasma physics	3/0/3
Elective	PH8001	양자장론	Quantum Field Theory	3/0/3
Elective	PH8002	양자 전기역학	Quantum Electrodynamics	3/0/3
Elective	PH8003	우주론	Cosmology	3/0/3
Research	PH9401	석사논문연구	Thesis Research / M.S.	0/0/0
Research	PH9600	첨단광융합과학 콜로퀴움	Advanced Photon Science Colloquium	0/0/1
Research	PH9701	박사논문연구	Thesis Research / Ph.D.	0/0/0