STUDY PLAN OF PHYSICS AND ASTRONOMY (PandA) 2024/25

CODE 0800-	SUBJECT	sum	winter sem.				summer sem.				credit form	ECTS
			lect.	classes	labor.		lect.	classes	labor.			
	I YEAR 2024/25											
PA-CELMECH	Classical and celestial mechanics	60	30	30							E	5
PA-STELPHYS	Stellar physics	60	30	30							E	5
PA-AMATH	Advanced mathematical methods	75	45	30							E	6
PA-ELFIELD	Electrodynamics and field theory	75	30	45							E	6
PA-QUANTOPT1	Quantum optics 1	60	30	30							E	5
PA-ATMOLPHY	Atomic and molecular physics	60					30	30			E	5
PA-GENREL	General relativity	75					30	45			E	6
	Astrophysics laboratory	45							45		G	3
PA-HENERGY	High-energy astrophysics	30					30				E	3
	Module 1 or 2	90				30				60	G/E	8
PA-MON	Monographic lecture	30					30				E	3
	University-wide courses	50	20				30				G/E	5
		710	**185**	**165**		**30**	**150**	**75**	**45**	**60**		**60**
	II YEAR 2025/26											
PA-CONMAT	Condensed matter physics	30	30								E	3
PA-DIPROS	Diploma proseminar	15				15					G	2
PA-PHYSLAB	Physics laboratory	60			60						G	5
PA-ASTROHYD	Astrohydrodynamics	45	30	15							E	4
PA-DIPSEM	Diploma seminar	15								15	G	2
PA-LASCUNIV	Large-scale Universe	30					30				E	3
PA-MATHE	Master thesis										E	20
PA-COMCHEM	From complex chemistry to new physics	45					45				E	4
	Module 1 or 2	120				60				60	G/E	10
PA-MON	Monographic lecture	30	30								E	3
	University-wide courses	40	20				20				G/E	4
		430	**110**	**15**	**60**	**75**	**95**			**75**		**60**
		1140	**295**	**180**	**60**	**105**	**245**	**75**	**45**	**135**		**120**

Module 1												
PA-QUANOPT2	Quantum optics 2	60					30	30			E	5
PA-QUANTOL	Quantum optics laboratory	60			60						G	5
PA-OPTELA	Optoelectronics laboratory	60			60						G	5
PA-QUANTINF	Quantum information	30	30								E	3
PA-STAPHY	Statistical physics	60	30	30							E	5
PA-BIOPHY	Biophysics	60					30		30		E	5
												28

Module 2												
PA-INASTRA	Introduction to astrophysics (not for BSc in astronomy)	30	30								E	3
PA-GALAX	Galaxies: formation and evolution	60					30		30		E	5
PA-PLANETSYS	Physics of planetary systems	60					30		30		E	5
PA-THEOASTLA1	Theoretical astrophysics laboratory 1	45			45						G	3
PA-THEOASTLA2	Theoretical astrophysics laboratory 2	45							45		G	3
PA-THEOASTLA3	Theoretical astrophysics laboratory 3	45							45		G	3
PA-ASCHEMA	Astrochemistry and astrobiology	30	30								E	3
												25

Astrophysics laboratory												
PA-OPASTLA	Optical astrophysics laboratory				45						G	3
PA-RADASTRO	Radioastronomy laboratory									45	G	3
												6

All the courses can be held jointly with their counterparts on the programms: Fizyka s2 and Astronomia s2