

BACHELOR OF PHYSIS

Courses Specifications

Level	Course Code/ Link to CS	Course Title	Required or Elective	Pre-Requisite Courses
Level 2	PHS 101	General Physics (1)	Required	N/A
Level 3	PHS 202	General Physics (2)	Required	PHS101
	PHS 211	Classical Mechanics (1)	Required	PHS101
Level 4	PHS 212	Classical Mechanics (2)	Required	PHS 211
	PHS 213	Vibrations and Waves	Required	PHS 101
	PHS 203	Mathematical Physics (1)	Required	PHS101
	PHS 231	Electromagnetism	Required	PHS202
Level 5	PHS 341	Modern Physics	Required	PHS 202
	PHS 332	Electromagnetism Lab	Required	PHS 231
	PHS 304	Mathematical Physics (2)	Required	PHS 203
	PHS 351	Optics	Required	PHS 202
	PHS 352	Optics Lab	Required	PHS 202, Synchronous with PHS 351
	PHS 321	Thermal and Statistical Physics	Required	PHS 202
Level 6	PHS 342	Modern Physics Lab	Required	PHS341
	PHS 333	Electronics	Required	PHS 231
	PHS 334	Electronics Lab	Required	PHS 231, Synchronous with PHS 333
	PHS 335	Computational Physics	Required	PHS 304
	PHS 361	Solid State Physics (1)	Required	PHS 341
	PHS 343	Renewable energy transformations and	Elective	PHS 321



	PHS 353	environment Laser physics and its applications	Elective	PHS351
	PHS 364	Plasma Physics	Elective	PHS 231
	PHS 374	Biophysics	Elective	PHS 202
	PHS 365	Semiconductor Physics	Elective	PHS 333
Level Level 7	PHS 422	Quantum Mechanics (1)	Required	PHS 341
	PHS 471	Nuclear Physics	Required	PHS 341
	PHS 462	Solid State Physics (2)	Required	PHS 361
	PHS 498	Field Training	Required	Pass 90 units
	PHS 414	Fluid Physics	Elective	PHS 101
	PHS 444	Astronomy Physics	Elective	PHS 202
	PHS 466	Materials Science	Elective	PHS 361 + PHS 364
PHS 475	Medical physics	Elective	PHS 374	
Level 8	PHS 423	Quantum Mechanics (2)	Required	PHS 422
	PHS 472	Radiation Physics	Required	PHS 471
	PHS 473	Nuclear Physics Lab	Required	PHS 471
	PHS 463	Solid State Physics Lab	Required	PHS 462
	PHS 499	Research Project	Required	Pass 100 units
	PHS 445	Atomic physics and spectra	Elective	PHS 422
	PHS 467	Introduction to Nanoscience and Nanotechnology	Elective	PHS 462 + PHS 466
	PHS 476	Physics of nuclear reactors and accelerators	Elective	PHS 471 + PHS 475
	PHS 491	Selected Topics	Elective	Pass 90 units

