

MASTER OF PHYSICS

A. UNDERGRADUATE PREREQUISITE SUBJECTS

Prospective students of the Master of Physics program should have an undergraduate degree in physics or equivalent, and should have successfully passed the equivalent mathematics (differential equations, vector calculus, linear algebra, complex analysis, and special functions) and major physics subjects (classical mechanics, electrodynamics, quantum mechanics, and statistical mechanics) associated with an undergraduate physics degree.

B. REQUIRED (CORE) SUBJECTS

		UNITS
PS 201 S	Theoretical Mechanics	3
PS 208 S	Quantum Mechanics I	3
PS 271 S	Electrodynamics	3
TOTAL:		9

C. COMPREHENSIVE EXAMINATIONS

PS COMPRE 200 Comprehensive Examinations

D. OTHER REQUIRED SUBJECTS

PS 212 S	Statistical Mechanics	3
PS 223 S	Math I	3
PS 224 S	Math II	3
TOTAL:		9

E. ELECTIVES

A minimum of **12 units** from the courses listed below with the approval of the Academic Adviser.

PS 200.XX S	Special Topics	3
PS 205 S	Mathematical Physics	3
PS 210 S	Quantum Mechanics II	3
PS 211 S	Fluid Mechanics	3
PS 222 S	Introduction to Solid State Physics	3
PS 225 S	Thermodynamics and Phase Transformations	3
PS 226 S	Materials Characterization	3
PS 230 S	Geophysical Fluid Dynamics	3
PS 231 S	Computational Models for the Environment	3
PS 232 S	Physical Meteorology	3
PS 233 S	Dynamic Meteorology	3
PS 241 S	Fundamentals of Air Pollution	3
PS 242 S	Physics of the Environment and Climate	3
PS 243 S	Remote Sensing and Environmental Mapping	3
PS 244 S	Environmental Instrumentation	3
PS 256 S	Experiments in Photonics, Laboratory	3
PS 258 S	Optical Waveguides	3
PS 259 S	Quantum Electronics and Photonic Devices	3
PS 261 S	Modern Optics	3
PS 265 S	Lasers, Spectroscopy and Applications	3
PS 266 S	Advanced Fiber Devices	3
PS 268 S	Optical Networks	3
PS 272 S	Quantum Electrodynamics	3
PS 280 S	Astrophysics	3
PS 281 S	Cosmology	3
TOTAL:		12

SUMMARY

Required Subjects	9	Units
Comprehensive Examinations	---	
Other Required Subjects	9	Units
Electives	12	Units
TOTAL:	30	Units