

4/1/2/1 Curriculum Study Plan (Nuclear and High energy physics track)

Level	Course Code	Course Title	Required or Elective	Prerequisite Courses	Credit Hours	
Level 1	403600	Mathematical Physics	Required		3	
	403602	Statistical Physics	Required		3	
	403604	Electrodynamics	Required		3	
	403606	Computational physics	Required		3	
	Semester Hours					12
Level 2	403601	Introduction to Nuclear & High Energy Physics	Required	Academic guide	3	
	403603	Quantum Field theory	Required	Academic guide	3	
	403605	Nuclear Reactions	Required	Academic guide	3	
	403607	Detector Physics	Required	Academic guide	3	
	Semester Hours					12
Level 3	403608	High Energy Physics	403603	Academic guide	3	
	4036XX	Phys. 610, 620 & 626	Elective	Academic guide	3	
	403612	Computational methods in Medical physics	403606	Academic guide	3	
	403614	Research Methodology	Required	Academic guide	3	
	Semester Hours					12
Level 4	403616	Special topics*	Required	Academic guide	2	
	403617	Research Project	Required	Academic guide	5	
	403619	Seminar**	Required	Department approval	1	
	Semester Hours					8
	Total Hours					44
Elective Courses	403610	Advanced Programming		Academic guide	3hrs	
	403620	Semiconductor device modelling			3hrs	
	403626	Advanced Research Lab.			3hrs	
<p>*This course is proposed by faculty members based on students 'track and new trends in Physics. **Scheduled discussions of current problems in physics, centered around guest lecturer and student presentations. It is designed to acquaint the graduate student with current research areas in physics.</p>						

Include additional levels or courses if needed