

4/1/2/3 Curriculum Study Plan (Material Science 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	403631	Solid State Physics	Required	Academic guide	3	
	403633	Advanced Crystallography	Required	Academic guide	3	
	403635	Characterization techniques	Required	Academic guide	3	
	403637	Physical Properties of solid materials	Required	Academic guide	3	
	Semester Hours					12
Level 3	403624	New and Renewable Energy	403631	Academic guide	3	
	4036XX	Phys. 610, 620 & 626	Elective	Academic guide	3	
	403628	Nanotechnology in Medicine	403631	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			3hrs	
	403620	Semiconductor device modelling		Academic guide	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