

#### 4/1/2/3 Curriculum Study Plan (Material Science track)

Level	Course Code	Course Title	Required or Elective	Prerequisite Courses	Credit Hours	
Level 1	403662	Solid State Physics	Required	Academic guide	3	
	403664	Advanced Crystallography	Required	Academic guide	3	
	403666	Characterization techniques	Required	Academic guide	3	
	4036XX	Phys. 647, 649, 651	Elective	Academic guide	3	
	<b>Semester Hours</b>					<b>12</b>
Level 2	403663	Physical Properties of solid materials	Required	403662	3	
	403665	New and Renewable Energy	Required	403662	3	
	403643	Research Methodology	Required	Academic guide	3	
	403645	Seminar*	Required	Academic guide	1	
	<b>Semester Hours</b>					<b>10</b>
Level 3	403652	Special topics (1)**	Required	Academic guide	2	
	403654	Thesis	Required	Department approval	6	
	<b>Semester Hours</b>					<b>8</b>
Level 4	403653	Special topics (2)**	Required	Academic guide	2	
	403654	Thesis	Required	Department approval		
	<b>Semester Hours</b>					<b>2</b>
	<b>Total Hours</b>					<b>32</b>
Elective Courses	403647	Advanced Programming		Academic guide	3hrs	
	403649	Semiconductor device modelling			3hrs	
	403651	Advanced Research Lab.			3hrs	
<p>*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. **This course is proposed by faculty members based on students 'track and new trends in Physics.</p>						

**Include additional levels or courses if needed**