



**SARDAR PATEL UNIVERSITY**  
**VALLABH VIDYANAGAR**  
**Programme: M.Sc. Applied Physics**  
**(Under CBCS)**  
**Semester- IV**



Syllabus with effective from: June-2019

Course Type	Course Code	Course Title	Theory/ Practical	Credit	Contact Hrs/ Week	Exam durati on in Hrs.	Component of Marks		
							Internal	External	Total
							Total/ Passing	Total/ Passing	Total/ Passing
Core Course	PT04CAPC01	Elements of Nuclear and Particle Physics	Theory	4	4	3	30/12	70/28	100/40
	PT04CAPC02	Sophisticated Experimental & Characterization Techniques	Theory	4	4	3	30/12	70/28	100/40
	PT04CAPC03	Advanced Devices and Sensors	Theory	4	4	3	30/12	70/28	100/40
	PT04CAPC04	Experimental Methods –VII	Practical	4	8	3.5	30/12	70/28	100/40
	PT04CAPC05		Experimental Methods -VIII	Practical	4	8	3.5	30/12	70/28
			OR						
	PT04CAPC07	Project Work	Project Work	8	8	-	24/60	56/140	80/200
PT04CAPC06	Comprehensive Viva	---	1	2	--	-	50/20	50/20	
Elective Course	PT04EAPC01	Crystallography and Crystal Growth Methods	Theory	4	4	3	30/12	70/28	100/40
	PT04EAPC02	Advanced Electronic Devices	Theory	4	4	3	30/12	70/28	100/40

**Credits (per semester)**

Theory + Seminar : 16  
 Practical or Project Work : 08  
 Comprehensive Viva : 01  
**Total : 25**