

PMSC Physics (Theory) Course 2018 - 2019

- 1) **Three trimesters system.**
- 2) **Four compulsory basic courses** are to be taught in the I trimester.
- 3) **Mandatory Review/Project** work is to be done during IInd and IIIrd trimesters.
- 4) **Three advanced courses** with a combination of (2+1) or (1+2) during the II and the III trimesters together. A student can also audit any number of advanced courses if (s)he may desire.

5) Courses to be offered during the I, II and III trimester:

First Trimester (Aug-Nov.)		Second Trimester (Dec - Mar)		Third Trimester (April-July)	
Compulsory Course	Instructor	Optional Course	Instructor	Optional Course	Instructor
1. Advanced Quantum Mechanics	Kumar S Gupta & Rudranil Basu	1. Advanced Mathematical Methods	Amit Ghosh	1. General Theory of Relativity	Arnab Kundu
2. Advanced Statistical Mechanics	Arti Garg	2. Particle Physics	Gautam Bhattacharyya	2. Quantum Field Theory – III (FTFT)	Munshi G. Mustafa
3. Numerical Methods and Algorithm	D. Das, N. Majumdar, S. Mukhopadhyay, Sandip Sarkar	3. Critical phenomena and critical dynamics in classical systems	Abhik Basu	3. Astro Particle Physics	Debasish Majumdar
4. Quantum Field Theory -I	Kaushik Dutta	4. Quantum Field Theory – II	Harvendra Singh	4. Neutrino Physics	Ambar Ghosal
		5. Advanced Condensed Matter-I	Kalpataru Pradhan	5. Non-equilibrium Statistical Mechanics	Pradeep K. Mohanty
Review/Project -I (compulsory) & Research Methodology (compulsory)				Review/Project -II (compulsory)	