



Manufacturing and Mechanics of Composites

Phase-II

Mon, 19 Feb 2024 – Sat, 24 Feb 2024 (2hr/day);
8 – 10 pm; **ONLINE- 12 hr lectures**

Eligibility	<i>Anyone interested in the theory of manufacturing and mechanics of composites</i>
Syllabus	Manufacturing and Mechanics of Composite Materials (Includes Assessment)
Lec 1 - 2	Introduction to Composites; Composites 4.0; Manufacturing of Fibres
Lec 3 – 4	Micromechanics of UD and Short Fibre Composites; Manufacturing of Fabrics
Lec 5 – 7	PMC, MMC; Meso-mechanics incl. Classical Lamination Theory
Lec 8 – 10	CMC; Nanocomposites; Mean-field Homogenisation. incl. theory behind software
Lec 11 – 12	Bio-composites; Component Level Simulation; Testing of Composites
Course Fee	Students outside IITKGP (₹2,360); Outside faculty/researcher (₹3,540); Industry/R&D (₹5,900); All prices are inclusive of GST.
Lecture Plan	https://drive.google.com/file/d/1JacZdfEkXXoxevYfhGroIfzRSj8sYG7b/view?usp=sharing
Registration Link	https://forms.gle/yr7kyDtPG6LaZzgY7 (Read instructions before filling)
Organisers:	Principal Coordinator: Dr Nilanjan Das Chakladar, Assistant Professor (+91 8442953215) https://sites.google.com/view/nilanjan-das-chakladar/outreach Joint Coordinator: Dr Atul Jain, Assistant Professor (+91 9434355466) https://sites.google.com/view/m3siitkgp/home
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***Note: The course is not open for IITKGP faculty/researcher/students**