

Advanced Material Testing (R19)	
CO#	# Student will be able to
CO 1	Prepare the specimens for metallographic examination with best practice, can operate the optical microscope and understand, interpret, analyze the microstructure of materials.
CO 2	Classify the different mechanical testing methods with their inherent merits and limitations
CO 3	Apply various test methods for characterizing physical properties of materials.
CO 4	Practise the principles of material testing experimentally and characterize them for various engineering applications.
CO 5	Suggest materials testing techniques based upon desired results, perform basic statistical analysis on data, and summarily present test results in a concise written format
CO 6	Understand the concept of mechanical behaviour of materials with change in alloying elements and suggest the heat treatment processes by evaluating its behavioural response with microstructure.