

MME 306: Composite Materials

Fundamental aspect of modern composite materials. Types of composite materials viz: fibre, reinforced, particulate dispersion strengthened and laminar types. Metal matrix composites, ceramic matrix composites and polymer matrix composites. Methods of fabricating composites, solid state and liquid state fabricating techniques. Characteristics and properties of composites. Measurement and testing of properties of composites. Application of composites in engineering design. Micromechanics and failure modes of composites.