

## **AMMR-15: HEAT TREATMENT OF METALS**

### **Course Details:**

Iron-carbon phase diagram, heat treatment of steel, hardenability of steels. TTT diagrams, CCT diagrams in steels, quench hardening & tempering of martensite Martensitic transformation nature of martensitic transformation, ham distortion, nucleation & growth of martensite, athermal, isothermal & burst transformations Spinodal decomposition Surface hardening processes, tool steels & their heat treatments, heat treatment of cast iron Thermochemical & thermo mechanical treatments Heat treatment of Ni-base superalloys & Ti alloys,

### **Text Books and Reference:**

1. Physical Metallurgy, Lakhtin

