

## **SME4-22: HEAT TRANSFER LAB**

- 1 To Determine Thermal Conductivity of Insulating Powders- <https://youtu.be/0xtcHIOWt88>
- 2 To Determine Thermal Conductivity of a Good Conductor of Heat (Metal Rod). - <https://youtu.be/Xe2TM8biZA>
- 3 To determine the transfer Rate and Temperature Distribution for a Pin Fin. - <https://youtu.be/jVW891LzrxU>
- 4 To Measure the Emissivity of the Test plate Surface. - [https://youtu.be/3VKZdT5\\_zVY](https://youtu.be/3VKZdT5_zVY)
- 5 To Determine Stefan Boltzmann Constant of Radiation Heat Transfer. - [https://youtu.be/MUAc\\_pAMNig](https://youtu.be/MUAc_pAMNig)
- 6 To Determine the Surface Heat Transfer Coefficient For Heated Vertical Cylinder in Natural Convection. – <https://youtu.be/W1yJwreRYwg>
- 7 Determination of Heat Transfer Coefficient in Drop Wise and Film Wise condensation. - <https://youtu.be/smtTByJ2k3l>
- 8 To Determine Critical Heat Flux in Saturated Pool Boiling. - <https://youtu.be/BLDg7s6rE3E>
- 9 To Study and Compare LMTD and Effectiveness in Parallel and Counter Flow Heat Exchangers. - [https://youtu.be/w9A\\_0lJrdg](https://youtu.be/w9A_0lJrdg)
- 10 To Find the Heat transfer Coefficient in Forced Convection in a tube. - [https://youtu.be/OVd0\\_ValiDM](https://youtu.be/OVd0_ValiDM)
- 11 To study the rates of heat transfer for different materials and geometries - <https://youtu.be/m7PvME2UzSY>
- 12 To understand the importance and validity of engineering assumptions through the lumped heat capacity method.- <https://youtu.be/Di8G5iPDPEQ>