





Laboratory Name	Thermal Lab 2
Lab. Supervisor	Eng. Ayat Khatatbh
Lab. Location	MechanicalEngineering Department

	Device Name: AIR conditioning laboratory
	Used For: To understand three process in air conditioning sensible heat , humidification & dehumidification
	Experiment associated with it: 1.Sensible heating 2.Cooling & dehumidification 3.Humidification
	Courses associated with it: HVAC system
	Device Name: Air conditioning study unit and reversing cycle heat pump with double evaporator.
	Used For: To measure the coefficient of performance for refrigeration cycle and heat pump can be calculated.
	Experiment associated with it: Air conditioning system/ Refrigeration cycle
	Courses associated with it: Thermo 2
	Device Name: Heating and sanitation unit
	Used For: To realized for training & understanding the operation & design of central heating system
	Experiment associated with it: Central heating system
	Courses associated with it: HVAC system
	Device Name: Film & drop wise condensation unit
	Used For: To measure the heat transfer coefficient for film & drop wise condensation & Demonstration of the film & drop wise condensation on copper & gold plate respectively
	Experiment associated with it: FILM & DROP WISE CONDENSATION

Courses associated with it: Heat transfer



Device Name: Boiling heat transfer apparatus

Used For: To demonstrate three processes of boiling conduction, nucleate & film & to measure the heat transfer coefficient of nickel wire.

Experiment associated with it: Boiling

Courses associated with it: heat transfer

Device Name: SOLAR COLLECTOR

Used For: To measure the efficiency of the solar collector.

Experiment associated with it: solar collector efficiency test.

Courses associated with it: Renewable energy

Device Name: Automatic Weather Station

Used For: To measure the radiation amount at a specific time.

Experiment associated with it: weather station

Courses associated with it: Renewable energy



Device Name: AUTOMOTIVE 3 ENGINE TEST BED VARIABLE COMPRESSION FACILITY.

Used For: To This combination enables tests to be carried out to examine the speed , torque , power specific fuel combustion , efficiency & other essential characteristics of engines using the 4- stroke cycle.

Experiment associated with it: Four stroke SI Engine

Courses associated with it: Internal combustion Engine



Device Name: Industrial Combustion GAS & EMISSION ANALYZER.

Used For: valuable tool designed for emissions monitoring and maintenance and tuning of combustion processes including boilers, burners, gas and diesel engines, turbines, furnaces, kilns, heaters, and laboratory analysis.

Experiment associated with it: Emission Analysis of an SI Engine

Courses associated with it: Internal combustion Engine.