

2024(S)

Discipline	Semester	Name of the Teaching Faculty
Mech. Engg.	4th	Sipra Patel
Subject	NO. of Days / Per Week	Semester from
MFT	4th	Jan 16 to April 23
		NO. of Weeks
		17

Week	Class Days	Theory Topic
	Wed	- Introduction about Manufacturing Technology. - Tool materials
1st	Fri	- Composition of various tools materials physical properties & uses of tool materials.
	Mon	- Cutting tools, Cutting action of various &
	Tue	Such as chisel, hacksaw blade, dies & reamer.
2nd	Wed	- Turning tool geometry & purpose of tool angle.
	Fri	x
	Mon	- Machining process parameters (speed, feed & depth of cut)
	Tue	- Coolant & lubricants in machining & purpose.
3rd	Wed	- Lathe machine, Construction & working of lathe & CNC machine.
	Fri	- Major components of a lathe & their function.

	MON	- operation Carried out in a lathe (Turning, thread Cutting, taper turning)
	Tue	- Internal machining, parting off, facing, Knurling.
4th	wed	- Safety measures during machining.
	Fri	- Capstan lathe
	MON	- Different work engine lathe
	Tue	- Major Components & their functions
5th	wed	x
	Fri	- Define multiple tool holders.
	MON	- Turret lathe
	Tue	- Difference work Capstan lathe
6th	wed	- Major Components & their functions
	Fri	- Draw the tooling lay out for proportion of a hexagonal bolt & bush.
	MON	- Shaper
	Tue	- potential application areas of Shaper m/c.
7th	wed	- Major Components & their functions.
	Fri	- Explain the automatic feed mechanism

8th Mon - Explain the construction & working of tool head

Tue - Explain the quick return mechanism through sketch.

Wed - State the specification of a shaping machine

Fri X

Mon - planning machine

Tue X

9th Wed - Application area of a planer & its difference with to shaper.

Fri - major components & their functions. The table drive mechanism

Mon X

Tue X

10th Wed - working of tool & tool support.

Wed

Fri X

Mon - clamping of work through sketch

Tue - Milling machine

11th

Wed - Types of milling m/c & operation performed by them & also some

Fri for CNC milling m/c.

12th	Mon	- Explain work holding attachment
	Thu	- Construction & working of Simple dividing head.
13th	Wed	- procedure of Simple & Compound indexing.
	Fri	
	Mon	- Introduction of different indexing methods
14th	Thu	- Slotted, Major Components & their functions
	Wed	X
	Fri	- Construction & working of Slotted machine.
15th	Mon	- Tool used in Slotted
	Thu	- Grinding.
	Wed	- Specification of grinding wheels with example working of cylindrical, Surface grinder.
	Fri	- Internal machining operation - Classification of Drilling machine.
15th	Mon	- working of bench drilling machine Pillar drilling, radial drilling machine
	Thu	→ Boring; principle of Boring.
	Wed	- Difference bet <sup>n</sup> boring & Drilling.
	Fri	- Broaching - Types of Broaching.