

COURSE TITLE : ADVANCED MACHINE TOOL LAB
COURSE CODE : 6029
COURSE CATEGORY : A
PERIODS/ WEEK : 3
PERIODS/ SEMESTER : 45
CREDIT : 2

TIME SCHEDULE

MODULE	TOPIC	PERIODS
1	Lathe work	10
2	Shaping and milling practice	12
3	Slotting, planning and grinding	10
4	CNC Machining and programming	13
TOTAL		45

COURSE OUTCOME :

sl.no.	sub	student will be able to
1	1	Perform various operations on machine tools.
	2	Carryout special turning operations to produce machine handle, eccentric turning.
	3	Carryout practice on shaper, milling machine and planning machine.
	4	Perform key way cutting, T slot cutting, gear cutting, spline cutting.
	5	Carryout practice on CNC programming and CNC machines.

CONTENT DETAILS

MODULE I

Lathe Work

Advanced lathe operations such as machine handle manufacturing- male and female assembly etc.

MODULE II

Shaping & Milling Practice-V -Blocks, Key- way cutting T- Slot Cutting, Gear cutting.

MODULE III

Grinding- Planning-& Slotting practice-Practice on grinding- planning & slotting machines

MODULE IV

CNC Programming Practice-machining

TEXT BOOKS

1. Mechanical Workshop Practice By K. C. John (PHI Learning Private Limited)
2. Mechanical Workshop & Laboratory Manual By K. C. John

REFERENCE

1. Workshop Technology Vol. I by S K Hajra Choudhary
2. Workshop Technology Vol. II by S K Hajra Choudhary