COMPUTER AIDED MANUFACTURING

Brief Introduction: The main objective of this program is to make the aspiring 1st year B.Tech students acquainted with conceptual as well as practical knowledge of the industries needs. This course will provide good understanding to beginners to become a competent production technologist. This course will provide knowledge to write programs that are used to operate manufacturing tools and equipments like CNC Turning machine.

Audience: 1st Year B.Tech Students
Duration: - Theory and Practice :- 2 weeks
                      Project   :- 2 weeks
Intake(per batch) :20 Students   **Maximum Capacity** : 2 Batches;60 Students

Contents:

S.No.	Contents	Topics Covered	Theory (Hrs)	Simulation (Hrs)
1	CAM	Introduction to Computer Aided Manufacturing	1	0
		Introduction of CNC/NC Machines	1	0
		Applications of CNC/NC machine tools	1	0
		Health and Safety	1	0
2	Fundamentals of Programming	Programming concepts	1	0
		Coordinate system for CNC Turning Machine	1	0
		Control Panel	1	2
		Programming with G & M codes: Turning, Step Turning, Facing, Taper Turning, Circular Interpolation, Grooving, Boring, Internal & External Threading.	6	40
		Canned Cycle & Sub program	1	10
		Cutting Tools		
3	Tool & Holders	Cutting parameters for CNC machining.	1	6
		Work holding devices.	1	6
4	Project	Generation of part program and simulation using 828 D Siemens Controller as per drawing.		80
	Total (Hrs)		16	64+80

Mentor:
- Ajay Pratap Singh
- Udit Narayan

Venue:

- Advance Manufacturing Centre.

Course Co-ordinator