

**GUJARAT TECHNOLOGICAL UNIVERSITY****Syllabus for Bachelor of Vocation (B.Voc), 2nd Semester****Branch: Production Technology****Subject Name: Manufacturing Process Lab****Subject Code: 21120305****With effective
from academic
year 2021-22****Teaching and Examination Scheme:**

Teaching Scheme			Credits C	Examination Marks						Total Marks
L	T	P		Theory Marks			Practical Marks			
				ESE (E)	PA (M)		PA(V)		PA (I)	
00	00	02	02	50	00	00	30	00	20	50

L- Lectures; P- Practical; OJT- On Job Training; C- Credit; ESE- End Semester Examination; PA- Progressive Assessment

Content:

Sr. No.	Topic	No. of Hours
01	Metal Casting Pattern Making, Sand preparation, core making, sand testing, moulding, Melting and pouring, cleaning and fettling of casting, inspection for defect. Industrial Visit with student's individual report	12
02	Welding To Study about Gas Welding Processes To Study about Arc Welding Processes To Study about Resistant Welding Processes To Study about Solid State Welding Processes To Study about Thermo Chemical Welding Processes To Study about Welding Defects & Distortion To Study about Arc Welding Electrodes To Study about Weld Joints & Metallurgy Industrial Visit with student's individual report	12
03	Metal Forming To Study about Forging To Study about Rolling To Study about Forging To Study about Extrusion To Study about Drawing To Study about Sheet Metal Forming Industrial Visit with student's individual report	6

Course Outcomes:

Students will be able to:

Sr. No.	CO statement	Marks % weightage
CO-1	Demonstration of various equipment used in casting process	10
CO-2	Demonstration of various equipment used in joining process	10
CO-3	Demonstration of various equipment used in forming process	10
CO-4	Demonstration of various manufacturing processes	70