



GUJARAT TECHNOLOGICAL UNIVERSITY

Syllabus for Bachelor of Vocation (B.Voc), 3rd Semester

Branch: Automobile Servicing

Subject Name: Auto Body Repair, Denting & Painting

Subject Code: 1130104

**With effective
from academic
year 2018-19**

Teaching Scheme			Credits	Examination Marks				Total Marks
L	P	OJT		Theory		Tutorial/ Practical		
			University exams (ESE)	Progressive Assessment (PA)	External Practical /viva Exam(ESE)	Internal evaluation Practical /viva Exam(PA)		
3	-	-	3	50	-	-	-	50

Course Content:

Unit No.	Content	Hrs.
1	Safety precautions and first aid, Proper use, care and maintenance of tools and equipment.	08
2	Introduction on types, function of body and panels, Procedure for inspection, removing and refitting of body components panels, doors and other body parts, Arc welding-basic electricity and welding power source. Electrodes types, description and specification.arc welding procedure Gas welding-gas welding, brazing and soldering procedures Description of gas cutting, Resistance welding-resistance welding, process-spot, seam and butt welding Details of MIG welding, Method of fixation of wind screen, glass Procedure for cut open, beat out, dents, stripping of old paints, sanding at different stages, smooth surface preparation at different stages, putty application & primer application at different stages of affected area(chronological order for repair of auto body)fitment of repaired part and aligning to the original shape	12
3	Personal safety – three key areas of risk eyes, skin and inhalation Details of personal protective, equipments-RPE,PPE Details of ingredients of paint, Procedure of refinishing process, Selection of consumable for doing painting work Procedure for doing painting(in chronological order),selection of materials, tools and equipments application of body filler for surface preparation, sanding on the affected area for smooth surface preparation, primer coating on the affected area, preparing affected surfaces for base coating, applying Base coat painting, clear coat painting for metallic paints, rubbing and polishing,	12
4	Application of paint production, treatment/anti rust treatment Procedure for inspection of painting, work and fixing the wind screen glass Details of spray gun-types-standard air, gap design-different sizes of nozzles, Details of different types sanding - 15 equipments Different types of sand paper-grades, Possible defects in painting, objects, causes and its cure	10
Total Hours:		42



GUJARAT TECHNOLOGICAL UNIVERSITY

Syllabus for Bachelor of Vocation (B.Voc), 3rd Semester

Branch: Automobile Servicing

Subject Name: Auto Body Repair, Denting & Painting

Subject Code: 1130104

**With effective
from academic
year 2018-19**

Suggested Specification table with Marks (Theory):

Distribution of Theory Marks				
R Level	U Level	A Level	N Level	E Level
5	15	15	10	5

Legends: R: Remembrance; U: Understanding; A: Application, N: Analyze and E: Evaluate and above Levels (Bloom's Taxonomy)

Reference Books:

1. Automobile Engineering II: Kirpal Singh
2. Basic Automobile Engineering: CP Nakra
3. Automobile Engineering: RB Gupta