

# UTKAL GOURAV MADHUSUDAN INSTITUTE OF TECHNOLOGY, RAYAGADA

## Academic Lesson Plan for 1<sup>st</sup> Semester-2024(Winter)

Name of teaching faculty: Sri Sagar Jena,

Guest Faculty(Mechanical)

Discipline : Electrical & E&TC Engg.

Deptt. : Mathematics & Science

Semester : 1<sup>st</sup>

Subject : PR3(b):Engineering Workshop Lab

No. of periods per week : 2 Total Periods: 40

Sessional: 25 Marks End semester Exam : 75 Marks

Total Marks : 100 Marks

Week	Period	List of Practical to be performed
1 <sup>st</sup>	2	Introduction and demonstration of Engineering Workshop, different tools, basic engineering practice to identify, select and use various marking, measuring, and holding, striking and cutting tools & equipment's and machines, how to understand the job drawing, explain the importance of safety practices and how to obtain the safety rules inside workshop.
2 <sup>nd</sup>	2	<b>Carpentry:</b> Demonstration of different wood working tools/machines.
3 <sup>rd</sup>	2	Demonstration of different wood working processes like planing, marking, chiseling, grooving, turning of wood etc.
4 <sup>th</sup>	2	Simple job involving any one joint like mortise and tenon dovetail, bridle, half lap etc.
5 <sup>th</sup>	2	Continue and finish job work from Previous week.
6 <sup>th</sup>	2	Submission of Record, Performance evaluation of students, conducting of viva.
7 <sup>th</sup>	2	<b>Fitting:</b> Demonstration of different fitting tools and drilling machines and power tools
8 <sup>th</sup>	2	Demonstration of different operations like chipping, filing, drilling, tapping, sawing, cutting etc.
9 <sup>th</sup>	2	Simple fitting job involving practice of chipping, filing, drilling, tapping, cutting
10 <sup>th</sup>	2	Submission of Record, Performance evaluation of students, conducting of viva.
11 <sup>th</sup>	2	<b>Welding:</b> Demonstration of different welding tools/machines.

12 <sup>th</sup>	2	Demonstration on Arc Welding, Gas Welding, MIG, MAG welding, gas cutting and rebuilding of broken parts with welding.
13 <sup>th</sup>	2	Simple job involving butt and lap joint
14 <sup>th</sup>	2	Submission of Record, Performance evaluation of students, conducting of viva.
15 <sup>th</sup>	2	<b>Sheet Metal Working:</b> Demonstration of different sheet metal tools/machines.
16 <sup>th</sup>	2	Demonstration of different sheet metal operations like sheet cutting, bending, edging, end curling, lancing, soldering, brazing, and riveting.
17 <sup>th</sup>	2	Simple job involving sheet metal operations and soldering and riveting.
18 <sup>th</sup>	2	Submission of Record, Performance evaluation of students, conducting of viva.
19 <sup>th</sup>	2	Conducting Extra Lab for absentee's students and complete the pending job and final submission of all the Jobs.
20 <sup>th</sup>	2	Conducting final Lab Examination and Final Viva ,and final Evaluation.

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