

G. NARAYANAMMA INSTITUTE OF TECHNOLOGY & SCIENCE
(For Women)

(AUTONOMOUS)
Shaikpet, HYDERABAD - 500 104

B.Tech. I Year

L T P C
1 - 3 2.5

ENGINEERING WORKSHOP
(Common to EEE, ECE, CSE, IT & ETE)

Prerequisites: -

Course Objectives:

The course will enable the students

1. To study of different hand operated Power Tools, uses and their demonstration.
2. To gain a good basic working knowledge required for the production of various engineering products.
3. To provide hands on experience about use of different engineering materials, tools, equipments and processes those are common in the Engineering field.
4. To develop a right attitude, team working, precision and safety at work place.
5. To study commonly used carpentry joints.
6. To have practical exposure to various welding and joining processes.

I) TRADES FOR EXERCISES: (~ 12 Lecture Hours and 36 Practices)

At least two exercises from each trade:

- | | |
|---|-------------------|
| i) Carpentry | 12) — |
| ii) Fitting | 13) <i>Mreddy</i> |
| iii) Tin-Smithy and Development of jobs carried out and Soldering | |
| iv) House-wiring | 14) <i>Rmy</i> |
| v) Foundry | 15) <i>Roy</i> |
| vi) Black smithy | |

II) TRADES FOR DEMONSTRATION and EXPOSURE: (~ 12 Lecture Hours)

- i) Plumbing
- ii) Machine Shop
- iii) Wood Turning
- iv) Welding

16) *R. Balasubraman*

Text Books:

1. B.L. Juneja, Workshop Practice, Cengage publications.
2. K. Venugopal, Workshop Manual, Anuradha Publications.

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|--------------------------|---------------------|-------------------|
| 1) <i>N. Madhukar</i> | 4) <i>S. Sankar</i> | 8) <i>11/1/08</i> |
| 2) <i>S. Subramanian</i> | 5) — | 9) <i>Chellu</i> |
| 3) <i>gmr</i> | 6) <i>Sankar</i> | 10) <i>Sankar</i> |
| | 7) <i>Mreddy</i> | 11) <i>Roy</i> |

Reference Books:

1. P. Kannaiah & K. L. Narayana, Workshop manual , 2nd Edition, Scitech publications (I) Pvt. Ltd., Hyderabad.
2. K. Venugopal, Dr. V. Prabhu Raja, G. Sreekanjana "Workshop Manual" 1 st Edition, Anuradha Publications 2012
3. Hajra Choudury S.K., Hajra CHoudury A.K. and Nirjhar Roy S.K., Elements of Workshop technology, voll 2008 and Vol II 2010, Media Promoters and Publishers private limited, Mumbai.

Online Resources:

1. www.technologystudent.com

Course Outcomes:

At the end of the course, the students will be able to

1. Demonstrate and understand the Engineering workshop safety regulations.
2. Identify and use marking tools, measuring equipment and to work to prescribed accuracies.
3. Know various operations in basic engineering workshops.
4. Understand the practical difficulties encountered in industries during any assembly work.
5. Do simple electrical work through their carrier.
6. Design different prototype in the fittings, carpentry, foundry, black smithy and sheet metal work.

1) N. Madhukar

2) N. Subramanian

3) M

4) S. Srinivasan

5) —

6) H. S.

7) M. S.

8) K. S.

9) S. S.

10) S. S.

11) R. S.

12) —

13) M. S.

14) R. S.

15) M. S.

16) R. Balasubramanian