# BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI, HYDERABAD CAMPUS SECOND SEMESTER 2018-2019 (COURSE HANDOUT PART II)

Dated: 07/01/2019

In addition to Part-I (General Handout for all courses appended to the timetable) this portion gives specific details regarding the course.

Course No. : ME F110

Course Title : Workshop Practice
Instructor-in-charge : N Suresh Kumar Reddy

# 1. Course description (as given in the Institute Bulletin):

Casting; metal forming; forging, welding and brazing; metal cutting machines e.g., lathe shaper and planer; drilling milling and grinding; laboratory exercise involving machining, fitting and joining.

# 2. Scope and Objective of the Course:

This course is required for all first-degree students at first year level. The course will provide an overview of the techniques and applications of basic manufacturing processes used for producing finished articles from raw materials. The course is practice-orientated and requires that basic skills in handling of tools, machines and machine tools used in different manufacturing processes are acquired through the hands-on experience. The primary objective of this course is to learn how the physical artifacts we use are manufactured and gain technical knowledge and skills. Much of the knowledge in the course is conceptual and no great mathematics is involved. This knowledge will be useful in whatever discipline the students are going to specialize.

## 3. Laboratory:

The practical classes will be conducting in the Central Workshop. Any negligence in practical classes will have serious consequences. The practicals are intended to provide hands-on experience in handling of basic tools, machines, machine tools and make simple utility jobs. Laboratory marks mentioned includes marks for models and attendance in practicals. Details of practicals schedule and evaluation scheme are available in the "Laboratory Manual".

### 4. Books:

- (i) Laboratory Manual: Practical Manual for Workshop Practice, Sangwan, K S & Others Notes EDD 2007.
- (ii) **Textbook:** B S Nagendra Parashar and R K Mittal, *Elements of Manufacturing Process*, Prentice Hall of India, 2003.

# 5. Evaluation Scheme:

| EC<br>No. | Component                               | Duration   | Weightage<br>(200 marks) | Date & time     | Nature |
|-----------|-----------------------------------------|------------|--------------------------|-----------------|--------|
| 1         | Laboratory Practical Regular class work |            | 120 marks                |                 |        |
| 2         | Laboratory Practical Comprehensive exam | 90 minutes | 30 marks                 | Announced later |        |
| 3         | Quiz                                    | 30 minutes | 50 marks                 | Announced later |        |

- **6. Chamber consultation hour:** Chamber consultation hours of Instructors will be announced separately.
- 7. Notices: All notices of this course will be displayed on Notice Board of Central Workshop.

# 8. Make-up Policy:

- a. Make-up for components will be granted for genuine reasons, only when prior-permission is obtained from Instructor-in-charge.
- For practicals, two turns are provided for makeup towards the end of semester. Hence, no in between makeup are envisaged.
- **9. Academic Honesty and Integrity Policy:** Academic honesty and integrity are to be maintained by all the students throughout the semester and no type of academic dishonesty is acceptable.

Instructor-in-Charge ME F110