BIRLA INSTITUTE OF TECHNOLOGY AND SCIENCE, PILANI, HYDERABAD CAMPUS INSTRUCTION DIVISION, FIRST SEMESTER 2016-2017 (COURSE HANDOUT PART II)

Dated: 01/08/2016

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

Team of Instructors : N SURESH KUMAR REDDY, S.S. Deshmukh, Nitin K. J. Sravan kumar, S. Sundaram,

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	Component	Duration	Weightage	Date & time	Natur
No.	Component	Duration	(200 marks)	Date & time	e
1	Laboratory Practical Regular class work		120 marks		
2	Laboratory Practical Comprehensive exam	90 minutes	30 marks	3 rd – 4 th week of Nov	
3	Quiz	30 minutes	50 marks	3 rd – 4 th week of Nov	

^{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.
- b. For practicals, two turns are provided for makeup towards the end of semester. Hence, no in between makeup are envisaged.

Instructor-in-Charge ME F110