



Design Practice Laboratory

Details of Laboratory:

Lab in-charge: Mr. Munshi R. Islam

The objective of the course is to make students practice design and analysis of several power transmission devices like shafts, gears, bearings, brakes and clutches. This laboratory is scheduled for 6th semester Mechanical engineering students. Apart from curriculum, some additional experimental setups are there which helps the students to enhance their knowledge. Students also get opportunity to implement their ideas through various application oriented micro projects.

Major Equipments:

1	Shafts
2	Gears
3	Bearings
4	Brakes
5	Clutches

List of Experiments.

Sl. No.	Description
1	Design of shafts
2	Design of Gears
3	Design of Bearings
4	Design of Brakes
5	Design of Clutches

Lab Occupancy

JIS College of Engineering
Lecture and Lab schedule for odd semester 2018-2019 STREAM/BATCH: ME- 3A
B.Tech 3rd Year classes Room No.Main Building 420

DAYS	10 am to 11 am	11 am to 12 am	12 pm to 1pm	1 to 2pm	2 to 3pm	3 to 4 pm	4 to 5 pm	5 to 6 pm
MON				B R E A K				
TUE						ME 681,Gr.ME3A(2)[SKB]		
WED						ME 691,Gr.ME3A(2)[BCB] ME 692,Gr.ME3A(1)[SKB]		
THU						ME 691,Gr.ME3A(1)[BCB] ME 692,Gr.ME3A(2)[SKB]		
FRI								

ME 601-IC Engine & Gas Turbine, ME 602- Machining Principles & Machine Tools, ME 603- Design of Machine Elements-II, ME604A-Power Plant Engineering, ME 604B-Gas Dynamics and Jet Propulsion, ME605A-Advanced Welding Technology, ME 605B-CAD/CAM, HU(ME)601-Economics & Accountancy, ME 691- Internal Combustion Engine Lab, ME 692- Machining & Machine Tools Lab, ME 681-Mini Project, ME682-Machine Design Practice.

Faculty name: PKB- Dr. P.K. Bardhan,, SG-Dr. Sandip Ghosh, ARS-Dr.Anal Ranjan Sengupta, MRI- Mr. Munshi Rasidul Islam, SKB- Mr. Shishir Kumar Biswas, AS - Mr. Anirban Sarkar, SH-Mr. Subhasish Halder, BCB - Mr. Bikash Chandra Bhunia, TP- Mrs.Thia Paul, DM- Mr.Dhiraj Mondal, AK-Mr.Arnab Kundu, SM- Mr. Sourav Majumder,AG-Dr.Anindya Guha

Routine Coordinator
(Prof. P. Biswas)

HOD
(Prof. (Dr.) S. Ghosh)

Principal
(Prof. (Dr.) M. R. Dave)

JIS College of Engineering
Lecture and Lab schedule for odd semester 2018-2019 **STREAM/BATCH: ME-3B**
B.Tech- 3rd Year classes - Room No.202 ME Building Block-A

DAYS	10 am to 11 am	11 am to 12 am	12 pm to 1pm	1 to 2pm	2 to 3pm	3 to 4 pm	4 to 5 pm	5 to 6 pm
MON				B R E A K	ME 691,Gr.ME3B(1)[UR]			
					ME 692,Gr.ME3B(2)[AK]			
TUE						ME 692,Gr.ME3B(1)[AK]		
						ME 691,Gr.ME3B(1)[UR]		
WED						ME 681,Gr.ME3B(1)[SS]		
						ME 682,Gr.ME3B(2)[TS]		
THU						ME 681,Gr.ME3B(2)[TS]		
						ME 682,Gr.ME3B(1)[SP]		
FRI								

ME 601- IC Engine & Gas Turbine, ME 602- Machining Principles & Machine Tools, ME 603- Design of Machine Elements-II, ME604A-Power Plant Engineering, ME 604B-Gas Dynamics and Jet Propulsion, ME605A-Advanced Welding Technology, ME 605B-CAD/CAM,HU(ME)601-Economics & Accountancy, ME 691- Internal Combustion Engine Lab, ME 692- Machining & Machine Tools Lab, ME 681-Mini Project, ME682 -Machine Design Practice.

Faculty name: PKB - Dr. P.K. Bardhan,SP- Dr. Suresh Prasad, UR-Mr.Uttam Roy,SS-Mr.Sujoy Saha, SG - Dr. Sandip Ghosh,MM-Dr.

Manish Mukhopadhyaya, MRI-Mr.Munshi Rasidul Islam, SKB-Mr.Shishir Kumar Biswas, AS-Mr.Anirban Sarkar, SH-Mr. Subhasish Halder, BCB - Mr. Bikash Chandra Bhunia, TP- Mrs.Thia Paul, DM-Mr.Dhiraj Mondal,TS-Tanmoy Sarkar, AK-Mr.Arnab Kundu ,SM-Mr.Sourav Majumder

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Course Name : **Machine Design Practice**

Course Code : **ME 692**

Prerequisite: Design of machine elements theory

Course Objective: The objective of the course is to make students practice design and analysis of several power transmission devices like shafts, gears, bearings, brakes and clutches

Course Outcomes (CO):

Upon successful completion of this course, the student will be able to:

ME 692.1 Demonstrate the knowledge of basic machine elements to withstand loads and deformations for a given application, while considering additional specifications.

ME 692.2 Formulate and solve engineering problems based on design of spur gears with respect to tooth bending strength and surface strength specifications

ME 692.3 Analyze the design of bearings using design charts and custom software and select appropriate bearings for an application using printed and electronic catalog data.

ME 692.4 Design shafts, brakes and clutches subjected to static or dynamic loads and present their designs orally and in writing.

Course Articulation Matrix:

CO	PO 1	PO 2	PO 3	PO 4	PO 5	PO 6	PO 7	PO 8	PO 9	PO 10	PO 11	PO 12	PS O 1	PS O 2	PS O 3
ME 692.1	3	1	2	-	-	2	-	2	-	-	1	2	2	1	
ME 692.2	3	2	3	-	-	1	-	-	-	-	1	2	2	3	2
ME 692.3	3	3	3	1	-	1	-	-	-	-	1	2	1	3	3
ME 692.4	3	3	3	1	-	2	-	1	-	-	1	1	2	3	2
AV G	3	2.25	2.75	1	-	1.5	-	1.5	-	-	1	1.75	1.75	2.5	2.33



Drawing room



Drafter



T Scale



Set Square