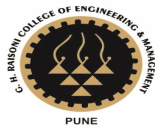


**Course wise Teaching Plan for Session : Summer 2019****Course : MACHINE DESIGN II****Faculty : prashant.ambhore@raisoni.net - PRASHANT JANUJI AMBHORE**

Unit	Topic Code	Topic Covered	Date	Course	Section
1	1	Types of rolling contact Bearings, ,	17/12/2018	BMEL309	A
1	2	Static and dynamic load carrying capacities, Stribeck equation	18/12/2018	BMEL309	A
1	3	Equivalent bearing load, Load- life relationship	18/12/2018	BMEL309	A
1	4	Selection of bearing life Selection of rolling contact bearings from manufacturer's catalog	24/12/2018	BMEL309	A
1	5	Design for cyclic loads and speed	07/01/2019	BMEL309	A
1	6	bearing with probability of survival other than 90%	08/01/2019	BMEL309	A
1	7	Taper roller bearing: Force analysis and selection criteria. (Theoretical Treatment only)	08/01/2019	BMEL309	A
2	8	Classification of sliding contact bearing	14/01/2019	BMEL309	A
2	9	Lubricating oils: Properties, additives, selection of lubricating oils	15/01/2019	BMEL309	A
2	10	Properties & selection of bearing materials	21/01/2019	BMEL309	A
2	11	Hydrodynamic Lubrication: Theory of Hydrodynamic Lubrication, Pressure Development in oil film,	22/01/2019	BMEL309	A
2	12	2D Basic Reynolds Equation, Somerfield number, Raimondi and Boyd method,	22/01/2019	BMEL309	A
2	13	Thermal considerations, Parameters of bearing design,	28/01/2019	BMEL309	A
2	14	Length to Diameter ratio	29/01/2019	BMEL309	A
3	15	Unit bearing Pressure, Radial Clearance, minimum oil film thickness.	29/01/2019	BMEL309	A
3	16	Review of kinematics of gears and terminology, types of gears,	04/02/2019	BMEL309	A
3	17	force analysis of spur gear	05/02/2019	BMEL309	A
3	18	interference, tooth profiles.	05/02/2019	BMEL309	A
3	19	Beam strength (Lewis) equation, Velocity factor	11/02/2019	BMEL309	A
3	20	Service factor, Load concentration factor, Effective load on gear, Wear strength (Buckingham's) equation,	12/02/2019	BMEL309	A

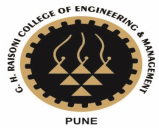


**Course wise Teaching Plan for Session : Summer 2019**

**Course : MACHINE DESIGN II**

**Faculty : prashant.ambhore@raisoni.net - PRASHANT JANUJI AMBHORE**

Unit	Topic Code	Topic Covered	Date	Course	Section
3	21	Estimation of module based on beam and wear strength	12/02/2019	BMEL309	A
4	22	Estimation of dynamic tooth load by velocity factor, Buckingham Equation, Design of spur gear	18/02/2019	BMEL309	A
4	23	Types of Helical gears, Force analysis of helical gear, formative number of teeth	19/02/2019	BMEL309	A
4	24	Beam strength (Lewis) equation, Velocity factor, Service factor, Load concentration factor	19/02/2019	BMEL309	A
4	25	Effective load on gear, Wear strength (Buckingham's) equation	25/02/2019	BMEL309	A
4	26	and wear strength,	26/02/2019	BMEL309	A
4	27	Estimation of module based on beam	26/02/2019	BMEL309	A
4	28	Estimation of dynamic tooth load by velocity factor design of helical gear drive.	02/03/2019	BMEL309	A
5	29	Worm gear drive Introduction	02/03/2019	BMEL309	A
5	30	types and proportion of worm and worm gear,	02/03/2019	BMEL309	A
5	31	force analysis, beam strength of worm gear teeth,	04/03/2019	BMEL309	A
5	32	dynamic tooth load, wear load,	05/03/2019	BMEL309	A
5	33	thermal rating of worm gear, Design of worm & worm gear	05/03/2019	BMEL309	A
5	34	Bevel gear drive: types of bevel gear, Design of Gear	05/03/2019	BMEL309	A
5	35	proportions of bevel gear, force analysis of bevel gear drive,	05/03/2019	BMEL309	A
6	36	Materials and construction of flat and V belts,	05/03/2019	BMEL309	A
6	37	geometric relationships for length of belt	05/03/2019	BMEL309	A
6	38	belt tensioning methods, relative advantages and limitations of Flat and V- belts, wire ropes drives design	09/03/2019	BMEL309	A
6	39	construction and applications of timing belts.	09/03/2019	BMEL309	A



# G H RAISONI COLLEGE OF ENGINEERING AND MANAGEMENT WAGHOLI PUNE

(An Autonomous Institute under UGC Act 1956 & Affiliated to Savitribai Phule Pune University)

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## Course wise Teaching Plan for Session : Summer 2019

Course : MACHINE DESIGN II

Faculty : prashant.ambhore@raisoni.net - PRASHANT JANUJI AMBHORE

Unit	Topic Code	Topic Covered	Date	Course	Section
6	40	power rating of belts, concept of slip & creep initial tension effect of centrifugal force	11/03/2019	BMEL309	A
6	41	maximum power condition,	12/03/2019	BMEL309	A
6	42	Selection of Flat and V-belts from manufacturer's catalog,	12/03/2019	BMEL309	A