

**KSSEM****K.S. SCHOOL OF ENGINEERING AND MANAGEMENT, BENGALURU - 560109****DEPARTMENT OF CIVIL ENGINEERING****SESSION: 2022-2023 (EVEN SEMESTER)****LESSON PLAN****NAME OF THE STAFF : Mrs. AMRUTHA DHIRAJ****COURSE CODE/TITLE : BESCK204A/ INTRODUCTION TO CIVIL ENGINEERING****SEMESTER/YEAR : II / I-'B' Section (CSE)**

Sl. No.	Topic to be covered	Mode of Delivery	Teaching Aid	No. of Periods	Cumulative No. of Periods	Proposed Date	Execution Date
MODULE 1							
1	Civil Engineering Disciplines and Building Science Introduction to Civil Engineering: Surveying, Structural Engineering	L+D	LCD+BB	01	01	25/05/2023	25/5/23
2	Geotechnical Engineering, Hydraulics & Water Resources, Transportation Engineering, Environmental Engineering, Construction planning & Project management	L+ D	LCD+BB	01	02	29/05/2023	29/5/23
3	Tutorials	L+D	LCD+BB	02	04	31/05/2023	31/5/23
4	Basic Materials of Construction: Bricks, Cement & mortars, Plain Concrete	L+ D	LCD+BB	01	05	01/06/2023	1/6/23
5	Reinforced & Pre-stressed Concrete, Structural steel, Construction Chemicals	L+ D	LCD+BB	01	06	05/06/2023	7/6/23
6	Tutorials	L+ D	LCD+BB	02	08	07/06/2023	8/6/23
7	Structural elements of a building: foundation, plinth, lintel, Chejja, Masonry wall	L+ D	LCD+BB	01	09	08/06/2023	14/6/23
8	Column, beam, slab and staircase	L+D	LCD+BB	01	10	12/06/2023	15/6/23
MODULE 2							
9	Tutorials	L+ D	LCD+BB	02	12	14/06/2023	19/6/23

10	Societal and Global Impact of Infrastructure: Introduction to sustainable development goals, Smart city concept, Clean city concept, Safe city concept	L+D	LCD+BB	01	13	15/06/2023	21/6/23
11	Environment: Water Supply and Sanitary systems, urban air pollution management	L+D	LCD+BB	01	14	19/06/2023	22/6/23
12	Tutorials	L+D	LCD+BB	02	16	21/06/2023	22/6/23
13	Solid waste management, Identification of Landfill sites, urban flood control	L+D	LCD+BB	01	17	22/06/2023	24/6/23
14	Built-environment: Energy efficient buildings, recycling, Temperature and Sound control in buildings, Security systems; Smart buildings	L+D	LCD+BB	01	18	03/07/2023	8/7/23
15	Tutorials	L+D	LCD+BB	02	20	05/07/2023	10/7/23
MODULE 3							
16	Analysis of force systems: Concept of idealization, system of forces, principles of superposition and transmissibility	L+D	BB	01	21	06/07/2023	12/7/23
17	Tutorials	L+D, PS	BB	00	21	08/07/2023	13/7/23
18	Resolution and composition of forces, Law of Parallelogram of forces	L+D, PS	BB	01	22	10/07/2023	13/7/23
19	Tutorials	L+D, PS	BB	02	24	12/07/2023	19/7/23
20	Resultant of concurrent and non-concurrent coplanar force systems	L+D, PS	BB	01	25	13/07/2023	19/7/23
21	Moment of forces, couple, Varignon's theorem	L+D, PS	BB	01	26	17/07/2023	24/7/23
22	Tutorials	L+D, PS	BB	02	28	19/07/2023	26/7/23
23	Free body diagram, Equations of equilibrium, Equilibrium of concurrent force systems	L+D, PS	BB	01	29	20/07/2023	27/7/23
24	Equilibrium of concurrent and non-concurrent coplanar force systems	L+D, PS	BB	01	30	24/07/2023	31/7/23
MODULE 4							
25	Tutorials	L+D	BB	02	32	26/07/2023	1/8/23

26	Centroid: Importance of centroid and center of gravity	L+D, PS	BB	01	33	27/07/2023	3/8/23
27	Methods of determining the centroid	L+D, PS	BB	01	34	03/08/2023	7/8/23
28	Locating the centroid of plane laminae from first principles	L+ D, PS	BB	01	35	05/08/2023	16/8/23
29	Centroid of built-up sections	L+ D, PS	BB	01	36	07/08/2023	16/8/23
30	Tutorials	L+ D, PS	BB	02	38	09/08/2023	17/8/23
31	Centroid of built-up sections	L+ D, PS	BB	01	39	10/08/2023	19/8/23
32	Numerical examples	L+ D, PS	BB	01	40	14/08/2023	21/8/23
MODULE 5							
33	Tutorials	L+D	BB	02	42	16/08/2023	23/8/23
34	Moment of Inertia: Importance of Moment of Inertia, Method of determining the second moment of area (moment of inertia) of plane sections from first principles	L+D	BB	01	43	17/08/2023	24/8/23
35	Tutorials	L+D	BB	00	43	19/08/2023	28/8/23
36	Method of determining the second moment of area (moment of inertia) of plane sections from first principles	L+ D,PS	BB	01	44	21/08/2023	30/8/23
37	Tutorials	L+ D,PS	BB	02	46	23/08/2023	31/8/23
38	Parallel axis theorem and perpendicular axis theorem, Section modulus, radius of gyration	L+D, PS	BB	01	47	24/08/2023	4/9/23
39	Moment of inertia of built-up sections, Numerical Examples	L+ D,PS	BB	01	48	28/08/2023	6/9/23
40	Tutorials	L+ D,PS	BB	02	50	30/08/2023	6/9/23
41	Revision	L+ D,PS	BB	00	50	07/09/2023	7/9/23

Total No. of Lecture Hours = 26

Total No. of Tutorial Hours = 24+4

Total No. of Revision Hours= 01

Annette D
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