



# G H RAISONI COLLEGE OF ENGINEERING NAGPUR

(An Autonomous Institute affiliated to Rashtrasant Tukadoji Maharaj Nagpur University, Nagpur)

CRPF Gate No.3, Hingna Road, Digdoh Hills, Nagpur. Maharashtra-440016 (India)

## Course wise Teaching Plan for Session : Summer Term 2018

Course : Elements of Electromagnetics

Faculty : vprajderkar - Mrs. Vedashree

Prakash Rajderkar

Unit	Topic Code	Topic Covered	Date	Course	Section
1	1	dot product , scalar product in cartesian coordinates systems	03/05/2018	BEEL203	A
1	2	conversion of variables from cartesian to cylindrical, spherical & vice versa	03/05/2018	BEEL203	A
1	3	transformation of cartesian to spherical and viceversa	04/05/2018	BEEL203	A
1	4	numericals and introduction to finite element analysis	04/05/2018	BEEL203	A
1	5	numericals and introduction to finite element analysis	05/05/2018	BEEL203	A
2	6	coulombs law,electric field intensity	05/05/2018	BEEL203	A
2	7	coulombs law,electric field intensity	05/05/2018	BEEL203	A
2	8	point charges, field often	05/05/2018	BEEL203	A
2	9	point charges, field often	10/05/2018	BEEL203	A
2	10	field due to continuous volume charge distribution	10/05/2018	BEEL203	A
2	11	field of line charge,field of sheets charges	11/05/2018	BEEL203	A
2	12	concept of flux density	11/05/2018	BEEL203	A
2	13	concept of flux density	12/05/2018	BEEL203	A
3	14	gauss law, applications of gauss laws	12/05/2018	BEEL203	A
3	15	gauss law, applications of gauss laws	12/05/2018	BEEL203	A
3	45	numericals	12/05/2018	BEEL203	A
3	16	divergences theorem, potential and definition of potential difference	17/05/2018	BEEL203	A
3	17	potential of a point charges	17/05/2018	BEEL203	A
3	18	potential field of system charges	18/05/2018	BEEL203	A
3	19	potential gradients	18/05/2018	BEEL203	A
3	20	potential gradients	19/05/2018	BEEL203	A



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3	21	energy density in electrostatic fields	19/05/2018	BEEL203	A
3	22	energy density in electrostatic fields	19/05/2018	BEEL203	A
4	23	current and current density	19/05/2018	BEEL203	A
4	24	current and current density	24/05/2018	BEEL203	A
4	25	continuity of current, metallic conductors	24/05/2018	BEEL203	A
4	26	conductor properties and boundary conditions	25/05/2018	BEEL203	A
4	27	nature of dielectric materials capacitances and capacitances	25/05/2018	BEEL203	A
4	28	capacitances of parallel plate capacitor	26/05/2018	BEEL203	A
4	29	capacitances of parallel plate capacitor	26/05/2018	BEEL203	A
4	30	numericals	26/05/2018	BEEL203	A
4	46	numericals	26/05/2018	BEEL203	A
4	31	numericals	31/05/2018	BEEL203	A
4	32	capacitances of two wire line	31/05/2018	BEEL203	A
4	33	poissons and laplace equations, uniqueness theorems	01/06/2018	BEEL203	A
4	34	poissons and laplace equations, uniqueness theorems	01/06/2018	BEEL203	A
5	35	biots savarts law, ampere circuital law	02/06/2018	BEEL203	A
5	36	stokes theorems, magnetic flux density	02/06/2018	BEEL203	A
5	37	scalar and vector magnetic potentials	02/06/2018	BEEL203	A
5	38	scalar and vector magnetic potentials	02/06/2018	BEEL203	A
5	39	forces on moving charges	07/06/2018	BEEL203	A
5	40	force between differential current elements	07/06/2018	BEEL203	A



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Unit	Topic Code	Topic Covered	Date	Course	Section
5	41	nature of magnetic materials, magnetization and permeability	08/06/2018	BEEL203	A
6	42	maxwells equations ,elementary idea ,uniform plane waves boundary conditions	08/06/2018	BEEL203	A
6	43	maxwells equations ,elementary idea ,uniform plane waves boundary conditions	09/06/2018	BEEL203	A
6	44	maxwells equations ,elementary idea ,uniform plane waves boundary conditions	09/06/2018	BEEL203	A
6	45	numericals	09/06/2018	BEEL203	A
6	46	numericals	09/06/2018	BEEL203	A