



# 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 2017

Course : Analog Systems & Design

Faculty : Mrs. Swati R. Dixit

Unit	Topic Code	Topic Covered	Date	Course	Section
1	1	Introduction to Analog Systems. Difference between Analog & Digital Systems. Introduction to Course Outcomes to students and declaration of TAE-Parameters.	05/12/2016	BECL302	A
1	2	UNIT I: Basic block diagram of operational amplifier, Introduction to Operational Amplifier. Basic Operational amplifier configuration	06/12/2016	BECL302	A
1	1	Numericals on negative feedback amplifiers	08/12/2016	BECL302	A
1	3	Differential amplifier stage, Basic Op-Amp Configuration	09/12/2016	BECL302	A
1	4	Types of Feedback, Advantages of each, An Op-Amp with Negative Feedback	12/12/2016	BECL302	A
1	5	Biasing, Voltage Series and Voltage Shunt Configurations	13/12/2016	BECL302	A
1	2	Numericals on instrumentation amplifier	15/12/2016	BECL302	A
1	6	Instrumentation Amplifier, Derivation of gain. Advantages of Instrumentation amplifier with its Application.	16/12/2016	BECL302	A
1	7	Specification of an Op-Amp, Offset Voltages and Currents	19/12/2016	BECL302	A
1	8	CMRR & Slew Rate with its significance	20/12/2016	BECL302	A
2	3	Numericals on unit II	22/12/2016	BECL302	A
2	9	UNIT II :Use of Constant Current Source and Voltage Source, Circuit and Application	23/12/2016	BECL302	A
2	10	Summing, Scaling and Averaging Amplifiers with its application	02/01/2017	BECL302	A
2	11	Concept of Floating & Grounded Load, Voltage To Current Converter with Floating And Grounded Load	03/01/2017	BECL302	A
2	4	Numericals on Unit II	05/01/2017	BECL302	A
2	12	Current To Voltage Converter & Voltage to Current Converter	06/01/2017	BECL302	A



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Faculty : Mrs. Swati R. Dixit

Unit	Topic Code	Topic Covered	Date	Course	Section
2	13	Basic Differentiator, Disadvantage of Basic Differentiator. Practical Differentiator. Advantage and Application of Differentiator.	13/01/2017	BECL302	A
2	14	Basic Integrator, Disadvantage of Basic Integrator. Practical Integrator. Advantage and Application of Integrator.	16/01/2017	BECL302	A
3	15	UNIT III :AC & DC Analysis of Differential Amplifier	17/01/2017	BECL302	A
3	6	Numericals on unit III	19/01/2017	BECL302	A
3	16	Block Diagram of Op-amp. Differential Amplifier, Cascaded Differential Amplifier Stages and its drawback.	20/01/2017	BECL302	A
3	17	Cascaded Differential Amplifier Stages and its drawback.	23/01/2017	BECL302	A
3	18	Need of Level Shifting Stages. Types of Level Translator.	24/01/2017	BECL302	A
3	19	AC and DC Analysis of Cascade Amplifier	27/01/2017	BECL302	A
3	20	Design of two stage direct-coupled amplifier as an output stage.	30/01/2017	BECL302	A
4	21	UNIT IV :Classification of Filters, Active Filters, First to Sixth -Order Butterworth filter	31/01/2017	BECL302	A
3	7	Numericals on unit III	02/02/2017	BECL302	A
4	22	Frequency response of various filter.	06/02/2017	BECL302	A
4	23	Multiple-Feedback Filters (Band Pass And Band Reject Filters)	07/02/2017	BECL302	A
4	24	IGMF configuration, All Pass Filter, Cascade Design Of Filters, Classification of Oscillators	13/02/2017	BECL302	A
4	25	Design of Various Filters upto sixth order	14/02/2017	BECL302	A
4	26	Design of Op-amp based Phase Shift And Wein Bridge Oscillators	21/02/2017	BECL302	A
3	8	Numericals on unit III	23/02/2017	BECL302	A



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Course : Analog Systems & Design

Faculty : Mrs. Swati R. Dixit

Unit	Topic Code	Topic Covered	Date	Course	Section
4	27	Square, Triangular And Saw Tooth Wave Generators	27/02/2017	BECL302	A
4	28	Square, Triangular And Saw Tooth Wave Generators	28/02/2017	BECL302	A
4	9	Numericals on unit IV.	02/03/2017	BECL302	A
4	29	Comparison of Various Filter	03/03/2017	BECL302	A
5	30	UNIT V :Comparator, Schmitt Trigger & Voltage Comparator	06/03/2017	BECL302	A
5	31	Voltage Limiters And Window Detector	07/03/2017	BECL302	A
4	10	Numericals on unit IV.	09/03/2017	BECL302	A
5	32	Problems on above topics	10/03/2017	BECL302	A
5	33	Clippers And Clampers, Peak Detector	17/03/2017	BECL302	A
5	34	Precision Rectifiers, analog switches	20/03/2017	BECL302	A
6	35	UNIT VI :The 555 Timer, Phase Locked Loops IC565, ICL8038 & XR2206 Function Generator,	21/03/2017	BECL302	A
5	11	Numericals on Unit V	23/03/2017	BECL302	A
6	36	Voltage Controlled Oscillator Basic Operation, IC based Voltage Regulator Circuits i.e 78** & 79** ICs.	24/03/2017	BECL302	A
6	37	Dual Track Voltage Regulator e.g SMPS, Three - Terminal Regulator(Fixed Regulator) Voltage Adjustment And Current Boosting Of Fixed Regulator	27/03/2017	BECL302	A
6	38	Merits And Drawbacks Of Linear Regulators, Advance topics on the subject.	28/03/2017	BECL302	A
5	12	Practice Session	30/03/2017	BECL302	A
6	39	Revision	31/03/2017	BECL302	A



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## Course wise Teaching Plan for Session : Summer 2017

Course : Computer Architecture & Organization

Faculty : Shweta V Bondre

Unit	Topic Code	Topic Covered	Date	Course	Section
1	1	Computer Architecture	06/12/2016	BCSL202	A
1	2	Basic Structure of Computers	08/12/2016	BCSL202	A
1	3	Functional Units	08/12/2016	BCSL202	A
1	4	Basic operational concepts	09/12/2016	BCSL202	A
1	5	Bus structures	13/12/2016	BCSL202	A
1	6	Addressing modes	15/12/2016	BCSL202	A
1	7	Subroutines: parameter passing	15/12/2016	BCSL202	A
1	8	Instruction formats	16/12/2016	BCSL202	A
1	9	Expanding opcodes method	20/12/2016	BCSL202	A
2	10	Bus architecture	22/12/2016	BCSL202	A
2	11	Execution of a Complete Instruction	22/12/2016	BCSL202	A
2	12	Execution of a Complete Instruction	23/12/2016	BCSL202	A
2	13	Sequencing of control signals	03/01/2017	BCSL202	A
2	14	Hardwired control	05/01/2017	BCSL202	A
2	15	Microprogrammed Control	05/01/2017	BCSL202	A
2	16	Microinstruction format	06/01/2017	BCSL202	A
2	17	Bit slice concept	12/01/2017	BCSL202	A
3	18	Number representations and their operations	12/01/2017	BCSL202	A
3	19	Design of Fast Adders	13/01/2017	BCSL202	A
3	20	Signed multiplication	17/01/2017	BCSL202	A
3	21	Booth's Algorithm	19/01/2017	BCSL202	A
3	22	Bitpair recoding	19/01/2017	BCSL202	A



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## Course wise Teaching Plan for Session : Summer 2017

Course : Computer Architecture & Organization

Faculty : Shweta V Bondre

Unit	Topic Code	Topic Covered	Date	Course	Section
3	23	Integer Division	20/01/2017	BCSL202	A
3	24	Floating point numbers and operations	24/01/2017	BCSL202	A
3	25	Guard bits and rounding	27/01/2017	BCSL202	A
3	26	Various technologies used in memory design	02/02/2017	BCSL202	A
4	27	Higher order memory design	02/02/2017	BCSL202	A
4	28	Multimodal memories and interleaving	03/02/2017	BCSL202	A
4	29	I/O mapped I/O and memory mapped I/O	14/02/2017	BCSL202	A
5	30	Interrupts and interrupts handling mechanisms	21/02/2017	BCSL202	A
5	31	Vectored interrupts	23/02/2017	BCSL202	A
5	32	Synchronous vs. asynchronous data transfer	23/02/2017	BCSL202	A
5	33	Direct Memory Access	28/02/2017	BCSL202	A
5	34	COMPUTER PERIPHERALS: I/O devices such as magnetic disk	02/03/2017	BCSL202	A
5	35	Magnetic tape, CDROM systems	02/03/2017	BCSL202	A
6	36	Pipelining	03/03/2017	BCSL202	A
6	37	Basic concepts in pipelining	07/03/2017	BCSL202	A
6	38	Delayed branch	09/03/2017	BCSL202	A
6	39	Branch prediction	09/03/2017	BCSL202	A
6	40	Influence of pipelining on instruction set design	10/03/2017	BCSL202	A
6	41	Multiple execution Units	17/03/2017	BCSL202	A
6	42	Performance considerations	21/03/2017	BCSL202	A
6	43	Basic concepts in parallel processing & classification of parallel architectures	23/03/2017	BCSL202	A



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## Course wise Teaching Plan for Session : Summer 2017

Course : Computer Architecture & Organization

Faculty : Shweta V Bondre

Unit	Topic Code	Topic Covered	Date	Course	Section
6	44	Vector Processing, Array Processors	23/03/2017	BCSL202	A
6	45	Recent trends in Computer Architecture & Organization	24/03/2017	BCSL202	A
6	46	Advanced topics & its Application	28/03/2017	BCSL202	A



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## Course wise Teaching Plan for Session : Summer 2017

Course : Digital System Design

Faculty : Ms. Surekha Krishnarao Tadse

Unit	Topic Code	Topic Covered	Date	Course	Section
1	1	programming on data flow	05/12/2016	BECL301	A
1	1	Introduction to Subject with reference to Cos & TAE Planner	06/12/2016	BECL301	A
1	2	Unit-1 Introduction toVHDL	07/12/2016	BECL301	A
1	3	Methodologies,	09/12/2016	BECL301	A
1	2	programming on data flow	12/12/2016	BECL301	A
1	4	Different Coding Styles in VHDL	13/12/2016	BECL301	A
1	5	Design Units,	14/12/2016	BECL301	A
1	6	Data objects,	16/12/2016	BECL301	A
2	3	programming on data flow	19/12/2016	BECL301	A
1	7	VHDL data types,	20/12/2016	BECL301	A
1	8	Attributes.	21/12/2016	BECL301	A
1	9	Sample Example's	23/12/2016	BECL301	A
2	4	programming on behavioural flow	26/12/2016	BECL301	A
1	10	Revision +TAE	27/12/2016	BECL301	A
1	11	Practice problems	28/12/2016	BECL301	A
2	12	Unit-2 VHDL Statements and concept of delays.	30/12/2016	BECL301	A
2	5	programming on behavioural flow	02/01/2017	BECL301	A
2	13	Concurrent statements,	03/01/2017	BECL301	A
2	14	Sequential Statements	04/01/2017	BECL301	A
2	15	Inertial and Transport delays	06/01/2017	BECL301	A
2	16	Delta delay, Signal drivers.	13/01/2017	BECL301	A
3	6	programming on behavioural flow	16/01/2017	BECL301	A



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Course : Digital System Design

Faculty : Ms. Surekha Krishnarao Tadse

Unit	Topic Code	Topic Covered	Date	Course	Section
2	17	Practice problems on Concurrent and Sequential Statements,	17/01/2017	BECL301	A
3	18	Unit-3 Programming concepts.	18/01/2017	BECL301	A
3	19	Subprograms – Functions,	20/01/2017	BECL301	A
3	7	programming on behavioural flow	23/01/2017	BECL301	A
3	20	Procedures,	24/01/2017	BECL301	A
3	21	Revision +TAE	25/01/2017	BECL301	A
3	22	Generic and Generate Statements	27/01/2017	BECL301	A
3	8	programming on behavioural flow	30/01/2017	BECL301	A
3	23	Package, IEEE standard and logic library	31/01/2017	BECL301	A
3	24	File I/O, Test bench,	01/02/2017	BECL301	A
3	25	Component declaration, instantiation, configuration.	03/02/2017	BECL301	A
4	9	programming on structural flow	06/02/2017	BECL301	A
3	26	Revision +TAE	07/02/2017	BECL301	A
4	27	Unit-4 Combinational System Design	08/02/2017	BECL301	A
4	10	programming on structural flow	13/02/2017	BECL301	A
4	28	Combinational logic circuit design and VHDL implementation of Adder,	14/02/2017	BECL301	A
4	29	Subtractor , Decoder,	15/02/2017	BECL301	A
4	11	programming on structural flow	20/02/2017	BECL301	A
4	30	Encoder, Multiplexer,	21/02/2017	BECL301	A
4	31	Revision +TAE	22/02/2017	BECL301	A
4	32	ALU, Barrel shifter,	24/02/2017	BECL301	A
5	12	programming on structural flow	27/02/2017	BECL301	A





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Course : Digital System Design

Faculty : Ms. Surekha Krishnarao Tadse

Unit	Topic Code	Topic Covered	Date	Course	Section
4	33	4X4 key Board Encoder,	28/02/2017	BECL301	A
4	34	Multiplier, Divider,	01/03/2017	BECL301	A
4	35	Hamming Code Encoder and Correction circuits.	03/03/2017	BECL301	A
6	13	programming on structural flow	06/03/2017	BECL301	A
4	36	Revision +TAE	07/03/2017	BECL301	A
5	37	Unit-5 Sequential System Design	08/03/2017	BECL301	A
5	38	Synchronous Sequential circuits design	10/03/2017	BECL301	A
6	14	programming on FSM	13/03/2017	BECL301	A
5	39	Mealy State Machine	17/03/2017	BECL301	A
6	15	programming on FSM	20/03/2017	BECL301	A
5	40	Moore State Machine and State assignments,	21/03/2017	BECL301	A
6	41	Unit-6 Introduction to PLDS	22/03/2017	BECL301	A
6	42	Introduction to place & route process,	24/03/2017	BECL301	A
6	16	programming on FSM	27/03/2017	BECL301	A
6	43	Introduction to ROM,	28/03/2017	BECL301	A
6	44	PLA, PAL	29/03/2017	BECL301	A
6	45	Architecture of CPLD (Xilinx / Altera)	31/03/2017	BECL301	A



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## Course wise Teaching Plan for Session : Summer 2017

Course : Field Theory

Faculty : Farhina Ansari

Unit	Topic Code	Topic Covered	Date	Course	Section
1	1	Course Objective, Syllabus, course Outcome, TAE Discussion, Subject Overview. Points to be known before starting the Syllabus.	06/12/2016	BECL205	A
1	2	Vector Calculus,	07/12/2016	BECL205	A
1	3	Introduction to Cartesian coordinate systems	08/12/2016	BECL205	A
1	1	Vector calculus problem	09/12/2016	BECL205	A
1	4	Introduction to Cylindrical coordinate systems	13/12/2016	BECL205	A
1	5	Spherical coordinate systems	14/12/2016	BECL205	A
1	6	Conversion into different coordinate system	15/12/2016	BECL205	A
1	2	problem based on Coordinate conversion	16/12/2016	BECL205	A
1	7	Coulomb's Law	20/12/2016	BECL205	A
1	8	Electric Field Intensity, Electric field intensity for point Charge distribution	21/12/2016	BECL205	A
1	9	Electric field intensity for line & Volume charge distribution	22/12/2016	BECL205	A
1	3	electric field Intensity, derivation and problem	23/12/2016	BECL205	A
1	10	Flux density	27/12/2016	BECL205	A
1	11	Gauss's law & Its Application	28/12/2016	BECL205	A
1	12	Divergence Theory, Divergence Theorem & Its Application	29/12/2016	BECL205	A
1	13	Electric potential, Potential gradient	03/01/2017	BECL205	A
2	14	Current density, Continuity equation	04/01/2017	BECL205	A
2	15	B-S law	05/01/2017	BECL205	A
1	4	Guass law problems	06/01/2017	BECL205	A
2	16	Ampere's circuital law and Applications	12/01/2017	BECL205	A



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Course : Field Theory

Faculty : Farhina Ansari

Unit	Topic Code	Topic Covered	Date	Course	Section
1	5	potential gradient problems	13/01/2017	BECL205	A
2	17	Ampere's circuital law and Applications	17/01/2017	BECL205	A
2	18	Stokes Theorem	18/01/2017	BECL205	A
2	19	Magnetic flux, Flux density	19/01/2017	BECL205	A
2	6	magnetic field intensity, ampere circuital law problems	20/01/2017	BECL205	A
2	20	Scalar and Vector magnetic potentials	24/01/2017	BECL205	A
2	21	Maxwell's equations for steady fields	25/01/2017	BECL205	A
2	7	numericals based on Magnetic flux density	27/01/2017	BECL205	A
3	22	Maxwell's equations for time varying fields	31/01/2017	BECL205	A
3	23	Electric and magnetic boundary conditions	07/02/2017	BECL205	A
4	24	Electromagnetic wave equation	08/02/2017	BECL205	A
4	25	Wave propagation in free space	08/02/2017	BECL205	A
4	26	Wave propagation in a perfect dielectric	14/02/2017	BECL205	A
4	27	Wave propagation in perfect conductor	15/02/2017	BECL205	A
4	28	Skin effect	21/02/2017	BECL205	A
4	29	Poynting vector	22/02/2017	BECL205	A
4	30	Reflection and refraction of uniform plane wave at normal incidence plane	23/02/2017	BECL205	A
3	8	Numericals based on Maxwell's wave equation	24/02/2017	BECL205	A
4	31	Reflection and refraction of uniform plane wave at normal incidence plane	28/02/2017	BECL205	A
4	32	Reflection at oblique incident angle	01/03/2017	BECL205	A
4	33	Reflection at perfect dielectric medium	02/03/2017	BECL205	A



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## Course wise Teaching Plan for Session : Summer 2017

Course : Field Theory

Faculty : Farhina Ansari

Unit	Topic Code	Topic Covered	Date	Course	Section
5	34	Introduction to Waveguides	02/03/2017	BECL205	A
3	9	Boundary condition Problems	03/03/2017	BECL205	A
5	35	Wave equation in Cartesian coordinates	07/03/2017	BECL205	A
5	36	Rectangular waveguide, TE waves in rectangular guides	08/03/2017	BECL205	A
5	37	TEM waves in rectangular guides	09/03/2017	BECL205	A
4	10	Electromagnetic wave equation and its numericals	10/03/2017	BECL205	A
4	11	different medium wave equations and related numericals	17/03/2017	BECL205	A
5	38	Wave impedance, losses in wave guide	21/03/2017	BECL205	A
6	39	Introduction to Radiation, Electric and magnetic fields due to oscillating dipole (alternating current element)	22/03/2017	BECL205	A
6	40	Power radiated and radiation resistance	22/03/2017	BECL205	A
6	41	application to short monopole and dipole	23/03/2017	BECL205	A
5	12	numerical based on Rectangular waveguide	24/03/2017	BECL205	A
6	42	Antenna Efficiency, Beam width, Radiation Intensity, Directive, Gain Power Gain & Front To Back Ratio.	28/03/2017	BECL205	A



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## Course wise Teaching Plan for Session : Summer 2017

Course : Power Electronics

Faculty : Vaidehi Padamwar

Unit	Topic Code	Topic Covered	Date	Course	Section
1	1	Discussion of Cos and TAE parameters	05/12/2016	BEEL310	A
1	2	UNIT I: Introduction to subject	06/12/2016	BEEL310	A
1	3	Introduction to basic power electronics devices and SCR Characteristics	08/12/2016	BEEL310	A
1	4	Two transistor analogy of SCR	09/12/2016	BEEL310	A
1	5	SCR turn off Methods: Classification Class A,B,C,D,E,F. Study of Class A	12/12/2016	BEEL310	A
1	6	Class B Commutation theory with waveform description	13/12/2016	BEEL310	A
1	7	Class C and Class D Commutation Description	15/12/2016	BEEL310	A
1	8	Class E and Class F Commutation methods	16/12/2016	BEEL310	A
1	9	Triac and its applications	19/12/2016	BEEL310	A
1	10	Uni- junction transistors, UJT as a relaxation oscillator	20/12/2016	BEEL310	A
1	11	Numericals based on UJT characteristics	22/12/2016	BEEL310	A
1	12	Ratings of SCR, series and parallel circuits,	23/12/2016	BEEL310	A
1	13	Opto couplers Circuit, Description.	02/01/2017	BEEL310	A
2	14	UNIT II : Converters : Basics, Classification and comparison with uncontrolled converters	03/01/2017	BEEL310	A
2	15	Working of single phase single pulse converter with R and RL Load	05/01/2017	BEEL310	A
2	16	Derivations based on single phase single pulse	06/01/2017	BEEL310	A
2	17	Numericals based on single phase single pulse converter	12/01/2017	BEEL310	A
2	18	Single phase two pulse midpoint converter with R and RL load .Derivation.	13/01/2017	BEEL310	A
2	19	Single phase two pulse Bridge converter description with derivation	16/01/2017	BEEL310	A



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## Course wise Teaching Plan for Session : Summer 2017

Course : Power Electronics

Faculty : Vaidehi Padamwar

Unit	Topic Code	Topic Covered	Date	Course	Section
2	20	Numericals based on Full wave mid-point and bridge converters	17/01/2017	BEEL310	A
2	21	Three phase three pulse midpoint converter with R and RL load	19/01/2017	BEEL310	A
2	22	Three phase six pulse bridge converter with R and RL load	20/01/2017	BEEL310	A
2	23	Effect of source inductance in Converters	23/01/2017	BEEL310	A
2	24	Effect of free wheeling diode	24/01/2017	BEEL310	A
3	25	UNIT III: Speed control of DC motors using line commutated converters commutated converters	27/01/2017	BEEL310	A
3	26	Speed control of DC motors using line commutated converters: Basic DC motor equations, Half wave converter drive, Full wave converter drive, Chopper drive	30/01/2017	BEEL310	A
3	27	Cycloconverters (single phase): Midpoint	31/01/2017	BEEL310	A
3	28	Cycloconverters (single phase): Bridge	02/02/2017	BEEL310	A
4	29	UNIT IV: Characteristic and working of Power MOSFET	03/02/2017	BEEL310	A
4	30	Gate turn off thyristor working	06/02/2017	BEEL310	A
4	31	Insulated gate bipolar transistor	07/02/2017	BEEL310	A
4	32	Protection of SCR : Introduction, Enlisting Major factors against which SCR needs to be protected	13/02/2017	BEEL310	A
4	33	Over voltage and over current protection circuits: Snubber circuit and its design	14/02/2017	BEEL310	A
4	34	Snubber circuit design examples	20/02/2017	BEEL310	A
4	35	Snubber circuit design examples	21/02/2017	BEEL310	A
4	36	Gate protection Circuit	23/02/2017	BEEL310	A
5	37	UNIT V: Introduction to Choppers, Principles of step down chopper	24/02/2017	BEEL310	A



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## Course wise Teaching Plan for Session : Summer 2017

Course : Power Electronics

Faculty : Vaidehi Padamwar

Unit	Topic Code	Topic Covered	Date	Course	Section
5	38	Derivation and Numericals based on step down chopper	27/02/2017	BEEL310	A
5	39	Step up chopper theory and Derivation	28/02/2017	BEEL310	A
5	40	Numericals based on Step up chopper	02/03/2017	BEEL310	A
5	41	Impulse commutated and resonant pulse chopper	03/03/2017	BEEL310	A
5	42	Multi phase choppers	06/03/2017	BEEL310	A
5	43	Application of choppers	07/03/2017	BEEL310	A
5	44	Inverters: Introduction and classification. Basic series resonant Inverter, Modified series inverter	09/03/2017	BEEL310	A
5	45	Half bridge and full bridge	10/03/2017	BEEL310	A
6	46	UNIT VI: Three phase bridge Inverters 120deg mode	17/03/2017	BEEL310	A
6	47	Three phase bridge Inverters 180 deg mode	20/03/2017	BEEL310	A
6	48	Output voltage control, trigger-circuits for forced commutated thyristor inverters	21/03/2017	BEEL310	A
6	49	Harmonics in output voltage waveform	23/03/2017	BEEL310	A
6	50	Harmonic attenuation by filters	24/03/2017	BEEL310	A
6	51	Analysis for single pulse width modulation	27/03/2017	BEEL310	A



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## Course wise Teaching Plan for Session : Summer 2017

Course : Computer Architecture & Organization

Faculty : Sachin Manohar Gaikwad

Unit	Topic Code	Topic Covered	Date	Course	Section
1	1	Functional Units	06/12/2016	BCSL202	B
1	2	Basic Operational Concepts	07/12/2016	BCSL202	B
1	3	Bus Structures	08/12/2016	BCSL202	B
1	4	Addressing Modes	09/12/2016	BCSL202	B
1	5	Subroutines: Parameter Passing	13/12/2016	BCSL202	B
1	6	Instruction Formats	14/12/2016	BCSL202	B
1	7	Expanding Opcodes Method	15/12/2016	BCSL202	B
2	8	Bus Architecture	16/12/2016	BCSL202	B
2	9	Execution of a Complete Instruction	20/12/2016	BCSL202	B
2	10	Sequencing of Control Signals	21/12/2016	BCSL202	B
2	11	Hardwired Control	22/12/2016	BCSL202	B
2	12	Micro-programmed Control	23/12/2016	BCSL202	B
2	13	Micro instruction Format	27/12/2016	BCSL202	B
2	14	Bit Slice Concept	28/12/2016	BCSL202	B
3	15	Number Representations and their Operations	29/12/2016	BCSL202	B
3	16	Design of Fast Adders	30/12/2016	BCSL202	B
3	17	Signed Multiplication	03/01/2017	BCSL202	B
3	18	Booth's Algorithm	04/01/2017	BCSL202	B
3	19	bit-pair recoding	05/01/2017	BCSL202	B
3	20	Integer Division	06/01/2017	BCSL202	B
3	21	Floating Point Numbers and Operations	10/01/2017	BCSL202	B
3	22	Guard Bits and Rounding	11/01/2017	BCSL202	B





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## Course wise Teaching Plan for Session : Summer 2017

Course : Computer Architecture & Organization

Faculty : Sachin Manohar Gaikwad

Unit	Topic Code	Topic Covered	Date	Course	Section
4	23	Various Technologies used in Memory Design	12/01/2017	BCSL202	B
4	24	Higher Order Memory Design	13/01/2017	BCSL202	B
4	25	Multimodal Memories and Interleaving	17/01/2017	BCSL202	B
4	26	Associative Memory	18/01/2017	BCSL202	B
4	27	Cache Memory	19/01/2017	BCSL202	B
5	28	Synchronous vs. Asynchronous Data Transfer	20/01/2017	BCSL202	B
5	29	Direct Memory Access	24/01/2017	BCSL202	B
5	30	COMPUTER PERIPHERALS: I/O devices such as Magnetic Disk, Magnetic Tape, CDRom Systems.	25/01/2017	BCSL202	B
6	31	Pipelining	27/01/2017	BCSL202	B
6	32	Delayed Branch, Branch Prediction	31/01/2017	BCSL202	B
6	33	Data Dependency	01/02/2017	BCSL202	B
6	34	Influence of Pipelining on Instruction Set Design	02/02/2017	BCSL202	B
6	35	Multiple Execution Units, Performance Considerations	03/02/2017	BCSL202	B
6	36	Performance considerations	07/02/2017	BCSL202	B
6	37	Basic concepts in parallel processing & classification of parallel architectures	08/02/2017	BCSL202	B
6	38	Vector Processing	09/02/2017	BCSL202	B
6	39	Array Processors	10/02/2017	BCSL202	B
6	40	Recent trends in Computer	14/02/2017	BCSL202	B
6	41	Advanced topics & its Application	15/02/2017	BCSL202	B



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## Course wise Teaching Plan for Session : Summer 2017

Course : Analog Systems & Design

Faculty : Juber Sheikh

Unit	Topic Code	Topic Covered	Date	Course	Section
1	1	Introduction to Analog Systems. Difference between Analog & Digital Systems. Introduction to Course Outcomes to students and declaration of TAE-Parameters.	06/12/2016	BECL302	B
1	2	UNIT I: Basic block diagram of operational amplifier, Introduction to Operational Amplifier. Basic Operational amplifier configuration	07/12/2016	BECL302	B
1	3	Differential amplifier stage, Basic Op-Amp Configuration	08/12/2016	BECL302	B
1	4	Types of Feedback, Advantages of each, An Op-Amp with Negative Feedback	13/12/2016	BECL302	B
1	5	Instrumentation Amplifier, Derivation of gain. Advantages of Instrumentation amplifier with its Application.	14/12/2016	BECL302	B
1	6	Specification of an Op-Amp, Offset Voltages and Currents	15/12/2016	BECL302	B
1	7	CMRR & Slew Rate with its significance	20/12/2016	BECL302	B
1	8	Numericals on negative feedback amplifiers	21/12/2016	BECL302	B
2	9	UNIT II :Use of Constant Current Source and Voltage Source, Circuit and Application	22/12/2016	BECL302	B
2	10	Summing, Scaling and Averaging Amplifiers with its application	03/01/2017	BECL302	B
2	11	Concept of Floating & Grounded Load, Voltage To Current Converter with Floating And Grounded Load	04/01/2017	BECL302	B
2	12	Current To Voltage Converter & Voltage to Current Converter	05/01/2017	BECL302	B
2	13	Basic Differentiator, Disadvantage of Basic Differentiator. Practical Differentiator. Advantage and Application of Differentiator.	12/01/2017	BECL302	B
2	14	Basic Integrator, Disadvantage of Basic Integrator. Practical Integrator. Advantage and Application of Integrator.	17/01/2017	BECL302	B



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## Course wise Teaching Plan for Session : Summer 2017

Course : Analog Systems & Design

Faculty : Juber Sheikh

Unit	Topic Code	Topic Covered	Date	Course	Section
3	15	UNIT III :AC & DC Analysis of Differential Amplifier	18/01/2017	BECL302	B
3	16	Block Diagram of Op-amp. Differential Amplifier, Cascaded Differential Amplifier Stages and its drawback.	19/01/2017	BECL302	B
3	17	Stability of Oscillators, Bark Hausen Criteria	24/01/2017	BECL302	B
3	18	Cascaded Differential Amplifier Stages and its drawback.	25/01/2017	BECL302	B
3	19	Need of Level Shifting Stages. Types of Level Translator.	31/01/2017	BECL302	B
3	20	AC and DC Analysis of Cascade Amplifier	01/02/2017	BECL302	B
3	21	Design of two stage direct-coupled amplifier as an output stage. TAE-2:Presentation	02/02/2017	BECL302	B
4	22	UNIT IV :Classification of Filters, Active Filters, First to Sixth -Order Butterworth filter	07/02/2017	BECL302	B
4	23	Frequency response of various filter.	08/02/2017	BECL302	B
4	24	Multiple-Feedback Filters (Band Pass And Band Reject Filters)	14/02/2017	BECL302	B
4	25	IGMF configuration, All Pass Filter, Cascade Design Of Filters, Classification of Oscillators	15/02/2017	BECL302	B
4	26	Design of Various Filters upto sixth order	21/02/2017	BECL302	B
4	27	Design of Op-amp based Phase Shift And Wein Bridge Oscillators	22/02/2017	BECL302	B
4	28	Square, Triangular And Saw Tooth Wave Generators	23/02/2017	BECL302	B
5	29	UNIT V :Comparator, Schmitt Trigger & Voltage Comparator	28/02/2017	BECL302	B
5	30	Voltage Limiters And Window Detector	01/03/2017	BECL302	B
5	31	Problems on above topics	02/03/2017	BECL302	B
5	32	Clippers And Clampers, Peak Detector	07/03/2017	BECL302	B
5	33	Precision Rectifiers, analog switches	08/03/2017	BECL302	B



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## Course wise Teaching Plan for Session : Summer 2017

Course : Analog Systems & Design

Faculty : Juber Sheikh

Unit	Topic Code	Topic Covered	Date	Course	Section
6	34	UNIT VI :The 555 Timer, Phase Locked Loops IC565, ICL8038 & XR2206 Function Generator,	09/03/2017	BECL302	B
6	35	Voltage Controlled Oscillator Basic Operation, IC based Voltage Regulator Circuits i.e 78** & 79** ICs.	21/03/2017	BECL302	B
6	36	Dual Track Voltage Regulator e.g SMPS, Three - Terminal Regulator(Fixed Regulator) Voltage Adjustment And Current Boosting Of Fixed Regulator	22/03/2017	BECL302	B
6	37	Merits And Drawbacks Of Linear Regulators, Advance topics on the subject.	23/03/2017	BECL302	B
6	38	Revision	29/03/2017	BECL302	B
6	39	Revision	30/03/2017	BECL302	B



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## Course wise Teaching Plan for Session : Summer 2017

Course : Digital System Design

Faculty : Mrs. Vaishali Ashok Tehre

Unit	Topic Code	Topic Covered	Date	Course	Section
1	1	Introduction to Subject with reference to Cos & TAE Planner	05/12/2016	BECL301	B
1	1	Basic Programs in Data Flow style	06/12/2016	BECL301	B
1	2	Unit-1 Introduction to VHDL	08/12/2016	BECL301	B
1	3	Methodologies,	09/12/2016	BECL301	B
1	4	Different Coding Styles in VHDL	12/12/2016	BECL301	B
2	2	Basic Programs in Structural style	13/12/2016	BECL301	B
1	5	Design Units,	15/12/2016	BECL301	B
1	6	Data objects, VHDL data types	16/12/2016	BECL301	B
1	7	Attributes.	19/12/2016	BECL301	B
2	3	Basic Programs in Behavioral style	20/12/2016	BECL301	B
2	8	Unit-2 VHDL Statements and concept of delays.	22/12/2016	BECL301	B
2	9	Concurrent statements,	23/12/2016	BECL301	B
2	4	Programs on Concurrent statements	27/12/2016	BECL301	B
2	10	Sequential Statements	02/01/2017	BECL301	B
3	5	Programs on Concurrent statements	03/01/2017	BECL301	B
2	11	Inertial and Transport delays	05/01/2017	BECL301	B
2	12	Delta delay, Signal drivers.	06/01/2017	BECL301	B
2	13	Practice problems on Concurrent and Sequential Statements,	12/01/2017	BECL301	B
3	14	Unit-3 Programming concepts.	13/01/2017	BECL301	B
3	15	Subprograms – Functions,	16/01/2017	BECL301	B
3	6	Programs on Sequential Statements	17/01/2017	BECL301	B
3	16	Procedures,	19/01/2017	BECL301	B



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## Course wise Teaching Plan for Session : Summer 2017

Course : Digital System Design

Faculty : Mrs. Vaishali Ashok Tehre

Unit	Topic Code	Topic Covered	Date	Course	Section
3	17	Generic and Generate Statements	20/01/2017	BECL301	B
3	18	Package, IEEE standard and logic library	23/01/2017	BECL301	B
3	7	Programs on Sequential Statements	24/01/2017	BECL301	B
3	19	File I/O, Test bench,	27/01/2017	BECL301	B
3	20	Component declaration, instantiation, configuration.	30/01/2017	BECL301	B
4	8	Subtractor in all three coding styles	31/01/2017	BECL301	B
4	21	Unit-4 Combinational System Design	02/02/2017	BECL301	B
4	22	Combinational logic circuit design and VHDL implementation of Adder,	03/02/2017	BECL301	B
4	23	Subtractor , Decoder,	06/02/2017	BECL301	B
4	9	Subtractor in all three coding styles	07/02/2017	BECL301	B
4	24	Encoder, Multiplexer,	13/02/2017	BECL301	B
4	10	multiplier in all three coding styles	14/02/2017	BECL301	B
4	25	ALU, Barrel shifter,	16/02/2017	BECL301	B
4	26	4X4 key Board Encoder,	17/02/2017	BECL301	B
5	11	Encoder in all three coding styles	21/02/2017	BECL301	B
4	27	Multiplier, Divider,	21/02/2017	BECL301	B
4	28	Hamming Code Encoder and Correction circuits.	23/02/2017	BECL301	B
5	29	Unit-5 Sequential System Design	24/02/2017	BECL301	B
5	12	Encoder in all three coding styles	28/02/2017	BECL301	B
5	30	Synchronous Sequential circuits design	28/02/2017	BECL301	B
5	31	Mealy State Machine	02/03/2017	BECL301	B
5	32	Revision and Practice on topics covered till date	03/03/2017	BECL301	B



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## Course wise Teaching Plan for Session : Summer 2017

Course : Digital System Design

Faculty : Mrs. Vaishali Ashok Tehre

Unit	Topic Code	Topic Covered	Date	Course	Section
5	13	Multiplexer in all three coding styles	07/03/2017	BECL301	B
5	33	Moore State Machine and State assignments,	07/03/2017	BECL301	B
5	34	Design and VHDL implementation of Mealy M/C	09/03/2017	BECL301	B
5	35	Design and VHDL implementation of Moore M/C	10/03/2017	BECL301	B
6	14	Multiplexer in all three coding styles	14/03/2017	BECL301	B
5	36	Revision +TAE	17/03/2017	BECL301	B
5	37	Revision +TAE	20/03/2017	BECL301	B
6	15	VHDL Codes on State Machines	21/03/2017	BECL301	B
6	38	Unit-6 Introduction to PLDS	23/03/2017	BECL301	B
6	39	Introduction to place & route process,	24/03/2017	BECL301	B
6	40	Introduction to ROM, PLA, PAL	27/03/2017	BECL301	B
6	16	VHDL Codes on State Machines	28/03/2017	BECL301	B
6	41	Architecture of CPLD (Xilinx / Altera)	30/03/2017	BECL301	B
6	42	Advanced topics in digital system design	31/03/2017	BECL301	B



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## Course wise Teaching Plan for Session : Summer 2017

Course : Power Electronics

Faculty : Rudraksh P. Gatkal

Unit	Topic Code	Topic Covered	Date	Course	Section
1	1	UNIT I: Introduction to basic power electronics devices and SCR Characteristics	05/12/2016	BEEL310	B
1	2	Two transistor analogy of SCR	08/12/2016	BEEL310	B
1	3	SCR turn off Methods: Classification Class A, B, C, D, E, F. Study of Class A	09/12/2016	BEEL310	B
1	4	Class B Commutation theory with waveform description	09/12/2016	BEEL310	B
1	5	Class C and Class D Commutation Description	12/12/2016	BEEL310	B
1	6	Class E and Class F Commutation methods	15/12/2016	BEEL310	B
1	7	Triac and its applications	16/12/2016	BEEL310	B
1	8	Uni-junction transistors, UJT as a relaxation oscillator	16/12/2016	BEEL310	B
1	9	Numericals based on UJT characteristics	19/12/2016	BEEL310	B
1	10	Ratings of SCR, series and parallel circuits,	22/12/2016	BEEL310	B
1	11	Opto couplers Circuit, Description.	23/12/2016	BEEL310	B
2	12	UNIT II: Working of single phase single pulse converter with R and RL Load, Effect of free wheeling diode	23/12/2016	BEEL310	B
2	13	Derivations based on single phase single pulse	26/12/2016	BEEL310	B
2	14	Numericals based on single phase single pulse converter	29/12/2016	BEEL310	B
2	15	Single phase two pulse midpoint converter with R and RL load .Derivation.	30/12/2016	BEEL310	B
2	16	Single phase two pulse Bridge converter description with derivation	30/12/2016	BEEL310	B
2	17	Numericals based on Full wave mid-point and bridge converters	02/01/2017	BEEL310	B
2	18	Three phase three pulse midpoint converter with R and RL load	05/01/2017	BEEL310	B
2	19	Three phase six pulse bridge converter with R and RL load	06/01/2017	BEEL310	B





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## Course wise Teaching Plan for Session : Summer 2017

Course : Power Electronics

Faculty : Rudraksh P. Gatkal

Unit	Topic Code	Topic Covered	Date	Course	Section
2	20	Effect of source inductance in Converters	06/01/2017	BEEL310	B
3	21	UNIT III:Speed control of DC motors using line commutated converters: Basic DC motor equations,Half wave converter drive,Full wave converter drive,Chopper drive	12/01/2017	BEEL310	B
3	22	Cycloconverters (single phase): Midpoint	13/01/2017	BEEL310	B
3	23	Cycloconverters (single phase): Bridge	13/01/2017	BEEL310	B
4	24	UNIT IV:Characteristic and working of Power MOSFET	16/01/2017	BEEL310	B
4	25	Gate turn off thyristor working	19/01/2017	BEEL310	B
4	26	Insulated gate bipolar transistor	20/01/2017	BEEL310	B
4	27	Protection of SCR : Introduction, Enlisting Major factors against which SCR needs to be protected	20/01/2017	BEEL310	B
4	28	Over voltage and over current protection circuits:Snubber circuit and its design	23/01/2017	BEEL310	B
4	29	Snubber circuit design examples	27/01/2017	BEEL310	B
4	30	Snubber circuit design examples	27/01/2017	BEEL310	B
4	31	Gate protection Circuit	02/02/2017	BEEL310	B
5	32	UNIT V:Introduction to Choppers,Principles of step down chopper	03/02/2017	BEEL310	B
5	33	Derivation and Numericals based on step down chopper	03/02/2017	BEEL310	B
5	34	Step up chopper theory and Derivation	06/02/2017	BEEL310	B
5	35	Numericals based on Step up chopper	13/02/2017	BEEL310	B
5	36	Impulse commutated and resonant pulse chopper	20/02/2017	BEEL310	B
5	37	Multi phase choppers,Application of choppers	23/02/2017	BEEL310	B



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## Course wise Teaching Plan for Session : Summer 2017

Course : Power Electronics

Faculty : Rudraksh P. Gatkal

Unit	Topic Code	Topic Covered	Date	Course	Section
6	38	Inverters: Introduction and classification. Basic series resonant Inverter	24/02/2017	BEEL310	B
6	39	Half bridge and full bridge series resonant Inverters	24/02/2017	BEEL310	B
6	40	UNIT VI: Single phase and three phase bridge Inverters	27/02/2017	BEEL310	B
6	41	Single phase and three phase bridge Inverters	02/03/2017	BEEL310	B
6	42	trigger-circuits for forced commutated thyristor inverters	03/03/2017	BEEL310	B
6	43	Output voltage control	03/03/2017	BEEL310	B
6	44	Harmonics in output voltage waveform	06/03/2017	BEEL310	B
6	45	Harmonic attenuation by filters	09/03/2017	BEEL310	B
6	46	Analysis for single pulse width modulation	10/03/2017	BEEL310	B
6	47	Numericals on Inverters	10/03/2017	BEEL310	B



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## Course wise Teaching Plan for Session : Summer 2017

Course : Field Theory

Faculty : Mrs. Vibha Rajesh Bora

Unit	Topic Code	Topic Covered	Date	Course	Section
1	1	Vector Calculus, Introduction to Cartesian coordinate systems	05/12/2016	BECL205	B
1	2	Introduction to Cylindrical coordinate systems	06/12/2016	BECL205	B
1	1	Numericals on Coordinate System and Conversion	07/12/2016	BECL205	B
1	3	Spherical coordinate systems	08/12/2016	BECL205	B
1	4	Conversion into different coordinate system	12/12/2016	BECL205	B
1	5	Coulomb's Law	13/12/2016	BECL205	B
1	2	Numericals on Electric field intensity	14/12/2016	BECL205	B
1	6	Electric Field Intensity, Electric field intensity for point Charge distribution	15/12/2016	BECL205	B
1	7	Electric field intensity for line & Volume charge distribution	19/12/2016	BECL205	B
1	8	Flux density	20/12/2016	BECL205	B
1	3	Numericals on Divergence Theorem	21/12/2016	BECL205	B
1	9	Gauss's law & Its Application	22/12/2016	BECL205	B
1	10	Divergence Theory, Divergence Theorem & Its Application	02/01/2017	BECL205	B
1	11	Electric potential	03/01/2017	BECL205	B
2	4	Numericals on Magnetic field intensity	04/01/2017	BECL205	B
1	12	Potential gradient	05/01/2017	BECL205	B
2	13	Current density, Continuity equation	12/01/2017	BECL205	B
2	14	B-S law	16/01/2017	BECL205	B
2	15	Ampere's circuital law and Applications	17/01/2017	BECL205	B
2	5	Numericals on Ampere circuital law	18/01/2017	BECL205	B
2	16	Stokes Theorem	19/01/2017	BECL205	B



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## Course wise Teaching Plan for Session : Summer 2017

Course : Field Theory

Faculty : Mrs. Vibha Rajesh Bora

Unit	Topic Code	Topic Covered	Date	Course	Section
2	17	Magnetic flux, Flux density	23/01/2017	BECL205	B
2	18	Scalar and Vector magnetic potentials	24/01/2017	BECL205	B
2	6	Numericals on Stokes theorem	25/01/2017	BECL205	B
3	19	Maxwell's equations for steady fields	30/01/2017	BECL205	B
3	20	Maxwell's equations for time varying fields	31/01/2017	BECL205	B
3	7	Numericals on Maxwells field	01/02/2017	BECL205	B
3	21	Electric and magnetic boundary conditions	02/02/2017	BECL205	B
4	22	Electromagnetic wave equation	06/02/2017	BECL205	B
4	23	Wave propagation in free space	07/02/2017	BECL205	B
3	8	Numericals on Maxwells field	08/02/2017	BECL205	B
4	24	Wave propagation in a perfect dielectric	13/02/2017	BECL205	B
4	25	Wave propagation in perfect conductor	14/02/2017	BECL205	B
4	9	Numericals on Uniform plane wave	15/02/2017	BECL205	B
4	26	Skin effect	20/02/2017	BECL205	B
4	27	Poynting vector	21/02/2017	BECL205	B
4	10	Numericals on Uniform plane wave	22/02/2017	BECL205	B
4	28	Reflection and refraction of uniform plane wave at normal incidence plane	23/02/2017	BECL205	B
4	29	Reflection at oblique incident angle	27/02/2017	BECL205	B
4	30	Reflection at perfect dielectric medium	28/02/2017	BECL205	B
5	11	Numericals on Waveguide	01/03/2017	BECL205	B
5	31	Introduction to Waveguides	02/03/2017	BECL205	B
5	32	Wave equation in Cartesian coordinates	06/03/2017	BECL205	B



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## Course wise Teaching Plan for Session : Summer 2017

Course : Field Theory

Faculty : Mrs. Vibha Rajesh Bora

Unit	Topic Code	Topic Covered	Date	Course	Section
5	33	Rectangular waveguide, TE waves in rectangular guides	07/03/2017	BECL205	B
5	12	Numericals on Waveguide	08/03/2017	BECL205	B
5	34	TEM waves in rectangular guides	09/03/2017	BECL205	B
5	35	Wave impedance, losses in wave guide	20/03/2017	BECL205	B
6	36	Introduction to Radiation, Electric and magnetic fields due to oscillating dipole (alternating current element)	21/03/2017	BECL205	B
6	13	Numericals on Antenna electrical parameter	22/03/2017	BECL205	B
6	37	Power radiated and radiation resistance	23/03/2017	BECL205	B
6	38	application to short monopole and dipole	27/03/2017	BECL205	B
6	14	Numericals on Antenna electrical parameter	29/03/2017	BECL205	B
6	39	Antenna Efficiency, Beam width, Radiation Intensity, Directive, Gain Power Gain & Front To Back Ratio.	30/03/2017	BECL205	B



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## Course wise Teaching Plan for Session : Summer 2017

Course : Digital System Design

Faculty : ASHVINIKUMAR P. DONGRE

Unit	Topic Code	Topic Covered	Date	Course	Section
1	1	Basic Programs in Data Flow style	05/12/2016	BECL301	C
1	1	Introduction to Subject with reference to Cos & TAE Planner	06/12/2016	BECL301	C
1	2	Unit-1 Introduction to VHDL	07/12/2016	BECL301	C
1	3	Methodologies,	08/12/2016	BECL301	C
2	2	Basic Programs in Structural style	12/12/2016	BECL301	C
1	4	Different Coding Styles in VHDL	13/12/2016	BECL301	C
1	5	Design Units,	14/12/2016	BECL301	C
1	6	Data objects, VHDL data types	15/12/2016	BECL301	C
2	3	Basic Programs in Behavioral style	19/12/2016	BECL301	C
1	7	Attributes.	20/12/2016	BECL301	C
2	8	Unit-2 VHDL Statements and concept of delays.	21/12/2016	BECL301	C
2	9	Concurrent statements,	22/12/2016	BECL301	C
2	4	Programs on Concurrent statements	26/12/2016	BECL301	C
2	10	Sequential Statements	27/12/2016	BECL301	C
2	11	Inertial and Transport delays	28/12/2016	BECL301	C
2	12	Delta delay, Signal drivers.	29/12/2016	BECL301	C
3	5	Programs on Concurrent statements	02/01/2017	BECL301	C
2	13	Practice problems on Concurrent and Sequential Statements,	03/01/2017	BECL301	C
3	14	Unit-3 Programming concepts.	04/01/2017	BECL301	C
3	15	Subprograms – Functions,	05/01/2017	BECL301	C
3	16	Procedures,	12/01/2017	BECL301	C
3	6	Programs on Sequential Statements	16/01/2017	BECL301	C



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## Course wise Teaching Plan for Session : Summer 2017

Course : Digital System Design

Faculty : ASHVINIKUMAR P. DONGRE

Unit	Topic Code	Topic Covered	Date	Course	Section
3	17	Generic and Generate Statements	17/01/2017	BECL301	C
3	18	Package, IEEE standard and logic library	18/01/2017	BECL301	C
3	19	File I/O, Test bench,	19/01/2017	BECL301	C
3	7	Programs on Sequential Statements	23/01/2017	BECL301	C
3	20	Component declaration, instantiation, configuration.	24/01/2017	BECL301	C
4	21	Unit-4 Combinational System Design	25/01/2017	BECL301	C
4	22	Combinational logic circuit design and VHDL implementation of Adder,	26/01/2017	BECL301	C
4	8	Subtractor in all three coding styles	30/01/2017	BECL301	C
4	23	Subtractor , Decoder,	31/01/2017	BECL301	C
4	24	Encoder, Multiplexer,	01/02/2017	BECL301	C
4	25	ALU, Barrel shifter,	02/02/2017	BECL301	C
4	9	Subtractor in all three coding styles	06/02/2017	BECL301	C
4	26	4X4 key Board Encoder,	07/02/2017	BECL301	C
4	27	Multiplier, Divider,	08/02/2017	BECL301	C
4	10	multiplier in all three coding styles	13/02/2017	BECL301	C
4	28	Hamming Code Encoder and Correction circuits.	14/02/2017	BECL301	C
5	29	Unit-5 Sequential System Design	15/02/2017	BECL301	C
5	30	Synchronous Sequential circuits design	16/02/2017	BECL301	C
5	11	Encoder in all three coding styles	20/02/2017	BECL301	C
5	31	Mealy State Machine	21/02/2017	BECL301	C
5	32	Revision and Practice on topics covered till date	22/02/2017	BECL301	C



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## Course wise Teaching Plan for Session : Summer 2017

Course : Digital System Design

Faculty : ASHVINIKUMAR P. DONGRE

Unit	Topic Code	Topic Covered	Date	Course	Section
5	33	Moore State Machine and State assignments,	23/02/2017	BECL301	C
5	12	Encoder in all three coding styles	27/02/2017	BECL301	C
5	34	Design and VHDL implementation of Mealy M/C	28/02/2017	BECL301	C
5	35	Design and VHDL implementation of Moore M/C	01/03/2017	BECL301	C
5	36	Revision +TAE	02/03/2017	BECL301	C
5	13	Multiplexer in all three coding styles	06/03/2017	BECL301	C
5	37	Revision +TAE	07/03/2017	BECL301	C
6	38	Unit-6 Introduction to PLDS	08/03/2017	BECL301	C
6	39	Introduction to place & route process,	09/03/2017	BECL301	C
6	14	Multiplexer in all three coding styles	13/03/2017	BECL301	C
6	15	VHDL Codes on State Machines	20/03/2017	BECL301	C
6	40	Introduction to ROM,	21/03/2017	BECL301	C
6	41	Revision +TAE	22/03/2017	BECL301	C
6	42	PLA, PAL	23/03/2017	BECL301	C
6	16	VHDL Codes on State Machines	27/03/2017	BECL301	C
6	43	Architecture of CPLD (Xilinx / Altera)	28/03/2017	BECL301	C
6	44	Advanced topics in digital system design	29/03/2017	BECL301	C
6	45	Guest Lecture	30/03/2017	BECL301	C





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## Course wise Teaching Plan for Session : Summer 2017

Course : Analog Systems & Design

Faculty : Priyanka Banswani

Unit	Topic Code	Topic Covered	Date	Course	Section
1	1	Introduction to Analog System. Difference between Analog & Digital System. Introduction to Course Outcomes to students and declaration of TAE-Parameters.	06/12/2016	BECL302	C
1	1	Numericals on negative feedback amplifiers	07/12/2016	BECL302	C
1	2	UNIT I: Basic block diagram of operational amplifier,	08/12/2016	BECL302	C
1	3	Introduction to Operational Amplifier. Basic Operational amplifier configuration	09/12/2016	BECL302	C
1	4	Differential amplifier stage, Basic Op-Amp Configuration	13/12/2016	BECL302	C
1	2	Numericals on instrumentation amplifier	14/12/2016	BECL302	C
1	5	Types of Feedback, Advantages of each,	15/12/2016	BECL302	C
1	6	An Op-Amp with Negative Feedback	16/12/2016	BECL302	C
1	7	Biasing, Voltage Series Configurations	20/12/2016	BECL302	C
2	3	Numericals on unit II	22/12/2016	BECL302	C
1	8	Voltage Shunt Configurations	22/12/2016	BECL302	C
1	9	Instrumentation Amplifier, Derivation of gain. Advantages of Instrumentation amplifier with its Application.	23/12/2016	BECL302	C
1	10	Specification of an Op-Amp, Offset Voltages and Currents	27/12/2016	BECL302	C
2	4	Numericals on Unit II	28/12/2016	BECL302	C
1	11	CMRR & Slew Rate with its significance	29/12/2016	BECL302	C
2	12	UNIT II :Use of Constant Current Source and Voltage Source, Circuit and Application	30/12/2016	BECL302	C
2	13	Summing, Scaling and Averaging Amplifiers with its application	03/01/2017	BECL302	C
2	5	Numericals on Unit II	04/01/2017	BECL302	C



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## Course wise Teaching Plan for Session : Summer 2017

Course : Analog Systems & Design

Faculty : Priyanka Banswani

Unit	Topic Code	Topic Covered	Date	Course	Section
2	14	Summing, Scaling and Averaging Amplifiers with its application	05/01/2017	BECL302	C
2	15	Concept of Floating & Grounded Load,	06/01/2017	BECL302	C
2	16	Current To Voltage Converter & Voltage to Current Converter	12/01/2017	BECL302	C
2	17	Voltage To Current Converter with Floating And Grounded Load	13/01/2017	BECL302	C
2	18	Current To Voltage Converter & Voltage to Current Converter	17/01/2017	BECL302	C
3	6	Numericals on unit III	18/01/2017	BECL302	C
2	19	Basic Differentiator, Disadvantage of Basic Differentiator.	19/01/2017	BECL302	C
2	20	Practical Differentiator. Advantage and Application of Differentiator.	20/01/2017	BECL302	C
2	21	Basic Integrator, Disadvantage of Basic Integrator.	24/01/2017	BECL302	C
3	7	Numericals on unit III	25/01/2017	BECL302	C
2	22	Practical Integrator. Advantage and Application of Integrator.	27/01/2017	BECL302	C
2	23	AC & DC Analysis of Differential Amplifier	31/01/2017	BECL302	C
3	8	Numericals on unit III	01/02/2017	BECL302	C
2	24	AC & DC Analysis of Differential Amplifier	02/02/2017	BECL302	C
3	25	UNIT III: Block Diagram of Op-amp. Differential Amplifier,	03/02/2017	BECL302	C
3	26	Cascaded Differential Amplifier Stages and its drawback.	07/02/2017	BECL302	C
4	9	Numericals on unit IV.	08/02/2017	BECL302	C
3	27	Need of Level Shifting Stages. Types of Level Translator.	14/02/2017	BECL302	C
4	10	Numericals on unit IV.	15/02/2017	BECL302	C
3	28	AC and DC Analysis of Cascade Amplifier	21/02/2017	BECL302	C
5	11	Numericals on Unit V	22/02/2017	BECL302	C



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## Course wise Teaching Plan for Session : Summer 2017

Course : Analog Systems & Design

Faculty : Priyanka Banswani

Unit	Topic Code	Topic Covered	Date	Course	Section
3	29	Design of two stage direct-coupled amplifier as an output stage.	23/02/2017	BECL302	C
4	30	UNIT IV : Classification of Filters, Active Filters, First to Sixth -Order Butterworth filter, Classification of Filters, Active Filters, First to Sixth -Order Butterworth filter	24/02/2017	BECL302	C
4	31	Frequency response of various filter, Multiple-Feedback Filters (Band Pass And Band Reject Filters), IGMF configuration, All Pass Filter,	28/02/2017	BECL302	C
5	12	Practice Session	01/03/2017	BECL302	C
4	32	Cascade Design Of Filters, Classification of Oscillators, Design of Op-amp based Wein Bridge Oscillators	02/03/2017	BECL302	C
5	33	UNIT V : Comparator, Schmitt Trigger, Voltage Comparator	03/03/2017	BECL302	C
5	34	Voltage Limiters And Window Detector, Clippers And Clampers, Peak Detector,	07/03/2017	BECL302	C
5	13	Practice Session	08/03/2017	BECL302	C
5	35	Precision Rectifiers, analog switches	09/03/2017	BECL302	C
6	36	UNIT VI : The 555 Timer, Phase Locked Loops IC565, ICL8038 & XR2206 Function Generator,	10/03/2017	BECL302	C
6	37	Voltage Controlled Oscillator Basic Operation, IC based Voltage Regulator Circuits i.e 78** & 79** ICs.	16/03/2017	BECL302	C
6	38	Dual Track Voltage Regulator e.g SMPS,	17/03/2017	BECL302	C
6	39	Merits And Drawbacks Of Linear Regulators,	21/03/2017	BECL302	C
5	14	Practice Session	22/03/2017	BECL302	C
6	40	Three - Terminal Regulator (Fixed Regulator), Voltage Adjustment And Current Boosting Of Fixed Regulator,	23/03/2017	BECL302	C
6	41	Advance topics on the subject.	28/03/2017	BECL302	C



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## Course wise Teaching Plan for Session : Summer 2017

Course : Analog Systems & Design

Faculty : Priyanka Banswani

Unit	Topic Code	Topic Covered	Date	Course	Section
5	15	Practice Session	29/03/2017	BECL302	C



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## Course wise Teaching Plan for Session : Summer 2017

Course : Communication Electronics

Faculty : Saroj P Sahu

Unit	Topic Code	Topic Covered	Date	Course	Section
1	1	Introduction of subject, Course Objectives & Outcomes	05/12/2016	BECL202	C
1	2	Block schematic of Communication System, base band signals, Bandwidth	06/12/2016	BECL202	C
1	3	Concept of Radiation and Electromagnetic waves, Mechanism of propagations, Ground wave	08/12/2016	BECL202	C
1	4	Sky wave Propagation , Tropospheric Scatter and Extraterrestrial propagation	12/12/2016	BECL202	C
1	5	Introduction of Noise, Classification of Noise, Noise figure calculations.	13/12/2016	BECL202	C
2	6	Introduction of Different Modulation Techniques and Type of Modulations.	15/12/2016	BECL202	C
2	7	Calculation of Modulation index & Power relations in AM wave.	19/12/2016	BECL202	C
2	8	AM modulators and Series plate modulated class C amplifiers.	20/12/2016	BECL202	C
2	9	Grid modulated class C amplifiers, Collector modulated class C amplifier.	22/12/2016	BECL202	C
2	10	Introduction of SSB, SSB-SC and DSB-SC, suppression of Carrier Signal. Balanced modulator using diodes and FETs.	26/12/2016	BECL202	C
2	11	Study the Suppression of unwanted sideband using different methods	27/12/2016	BECL202	C
2	12	(Filter Method, phase shift Method,	29/12/2016	BECL202	C
2	13	Third Method, Advantages, Disadvantages & Applications	02/01/2017	BECL202	C
2	14	AM demodulators using Diode Detector, Peak Detector, Envelop detector for SSB and SSB-SC Generations.	03/01/2017	BECL202	C
3	15	Introduction of Receivers ,Radio receiver and TRF Receiver,	05/01/2017	BECL202	C
3	16	Calculation of Image frequency and it's rejection and double spotting.	16/01/2017	BECL202	C
3	17	FM modulation technique. and Frequency Spectrum.	17/01/2017	BECL202	C



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## Course wise Teaching Plan for Session : Summer 2017

Course : Communication Electronics

Faculty : Saroj P Sahu

Unit	Topic Code	Topic Covered	Date	Course	Section
3	18	Frequency Modulators using FET reactance Modulator, Transistor reactance modulator.	19/01/2017	BECL202	C
3	19	Frequency stabilization methods	23/01/2017	BECL202	C
3	20	Pre -emphasis, De-emphasis, FM detectors, Slope detection Balanced slope detector.	24/01/2017	BECL202	C
4	21	Phase Locked Loop and Stereo phonic FM.	30/01/2017	BECL202	C
4	22	Foster –seeley discriminator and Ratio detector.	31/01/2017	BECL202	C
4	23	Characteristics of FM Transmitters	02/02/2017	BECL202	C
4	24	Characteristics of FM Receivers	06/02/2017	BECL202	C
4	25	Introduction of different Pulse Modulation Techniques	07/02/2017	BECL202	C
5	26	PAM, PWM, PPM and their Applications.	13/02/2017	BECL202	C
5	27	Demodulation techniques: PAM, PWM, PPM.	14/02/2017	BECL202	C
5	28	Generation and Demodulation of Pulse code modulation technique	20/02/2017	BECL202	C
5	29	Digital Multiplexing and Frequency & Time Division Multiplexing and their Applications.	21/02/2017	BECL202	C
5	30	PAM/TDM system: signaling rate, transmission.	23/02/2017	BECL202	C
5	31	Multiplexing hierarchy for digital communication.	27/02/2017	BECL202	C
5	32	SNR technique for Digital Multiplexing.	28/02/2017	BECL202	C
5	33	Digital Modulation techniques and Delta Modulation.	02/03/2017	BECL202	C
6	34	ADPCM, Modulation and Demodulation	06/03/2017	BECL202	C
6	35	Matched Filter Receiver.	07/03/2017	BECL202	C
6	36	Coherent Binary Modulation Technique	09/03/2017	BECL202	C
6	37	Coherent binary: PSK,FSK	13/03/2017	BECL202	C



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## Course wise Teaching Plan for Session : Summer 2017

Course : Communication Electronics

Faculty : Saroj P Sahu

Unit	Topic Code	Topic Covered	Date	Course	Section
6	38	QPSK, MSK, DPSK techniques.	20/03/2017	BECL202	C
6	39	Digital Modulation Formats of Math Filters.	21/03/2017	BECL202	C
6	40	ADPCM: Modulation and Demodulation.	23/03/2017	BECL202	C
6	41	Advanced Topic based on Communication	27/03/2017	BECL202	C
6	42	Revision	28/03/2017	BECL202	C



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## Course wise Teaching Plan for Session : Summer 2017

Course : Data Structures using C

Faculty : Amreen Khan

Unit	Topic Code	Topic Covered	Date	Course	Section
1	1	Subject Introduction, Course Objectives, Course Outcomes, TAE and its Rubrics, Introduction to C and Data Structures	06/12/2016	BCSL201	C
1	2	Structure of C program, The First C Program, Compilation and Execution, Sample C programs for practice.	07/12/2016	BCSL201	C
1	3	Introduction to Arrays, , Linear arrays, Arrays as ADT, Representation of linear in memory,	08/12/2016	BCSL201	C
1	1	Problems on Array and sorting	09/12/2016	BCSL201	C
1	4	Traversing Linear Arrays, Inserting & deleting of elements in Array	13/12/2016	BCSL201	C
1	5	Sorting: Bubble sort, Searching: Linear search,	14/12/2016	BCSL201	C
1	6	Binary search, Multidimensional arrays, Dynamic memory management, Representation of Polynomials using Arrays.	15/12/2016	BCSL201	C
1	2	Problem on searching	16/12/2016	BCSL201	C
1	7	Pointers, Pointer arrays, Records, Record structures, Representation of records in memory.	20/12/2016	BCSL201	C
1	8	Parallel Arrays, Matrices, Sparse Matrices.	21/12/2016	BCSL201	C
2	9	Introduction to linked list, Representation of linked Lists in Memory	22/12/2016	BCSL201	C
2	3	Problems on Linked List	23/12/2016	BCSL201	C
2	10	Traversing a Linked list, Searching a linked list. TAE 1	27/12/2016	BCSL201	C
2	11	Memory allocation, Garbage collection.	28/12/2016	BCSL201	C
2	12	Insertion in to a linked list, Deletion from a linked list.	29/12/2016	BCSL201	C
2	13	Insertion and Deletion from a Header linked list.	03/01/2017	BCSL201	C
2	14	Insertion and Deletion from a Circularly linked list.	04/01/2017	BCSL201	C





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## Course wise Teaching Plan for Session : Summer 2017

Course : Data Structures using C

Faculty : Amreen Khan

Unit	Topic Code	Topic Covered	Date	Course	Section
2	15	Two way lists or Doubly Linked List.	05/01/2017	BCSL201	C
2	4	Problems on Stacks	06/01/2017	BCSL201	C
3	16	Josephus Problem and its Solution, Buddy Systems. TAE 2	12/01/2017	BCSL201	C
3	5	Problems on Queue	13/01/2017	BCSL201	C
3	17	Introduction to Stacks, Array representation of stacks.	17/01/2017	BCSL201	C
3	18	Linked representation of stacks. Stacks as ADT.	18/01/2017	BCSL201	C
3	19	Arithmetic expression. Polish Notation.	19/01/2017	BCSL201	C
3	6	Problems on Prefix, PostFix and Infix	20/01/2017	BCSL201	C
3	20	Applications of Stacks. Recursion.	24/01/2017	BCSL201	C
3	21	Towers of Hanoi, Implementation of recursive procedures by stacks.	25/01/2017	BCSL201	C
4	7	Problems on Binary Search Tree	27/01/2017	BCSL201	C
3	22	Linked Representation of Queues, Queues as ADT.	31/01/2017	BCSL201	C
4	23	Circular of Queues	01/02/2017	BCSL201	C
4	24	Priority Queues	02/02/2017	BCSL201	C
4	8	Problems on Traversal of tree	03/02/2017	BCSL201	C
4	25	Deque. Applications of Queues	07/02/2017	BCSL201	C
4	26	Revision on concepts of Stacks and Queues	08/02/2017	BCSL201	C
4	27	Introduction to Binary Trees. TAE 3	14/02/2017	BCSL201	C
5	28	Representing Binary Tree in Memory	15/02/2017	BCSL201	C
5	29	Traversing Binary Trees, Traversal Algorithms Using Stacks	21/02/2017	BCSL201	C
5	30	Header Nodes; Threads ,Threaded Binary Trees ,Binary Search Trees	22/02/2017	BCSL201	C



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## Course wise Teaching Plan for Session : Summer 2017

Course : Data Structures using C

Faculty : Amreen Khan

Unit	Topic Code	Topic Covered	Date	Course	Section
5	31	Searching and Inserting in Binary Search Trees, Deleting in a Binary Search Tree.	23/02/2017	BCSL201	C
5	32	Balanced Binary Trees, AVL Search Trees, Insertion, Deletion in an AVL Search Tree	28/02/2017	BCSL201	C
5	33	m-way Search Trees, Searching TAE 5	01/03/2017	BCSL201	C
5	34	Insertion and Deletion in an m-way Search tree	02/03/2017	BCSL201	C
5	9	Problems on BFS and DFS	03/03/2017	BCSL201	C
6	35	B-Trees, Searching, Insertion and Deletion in a B-tree	07/03/2017	BCSL201	C
6	36	Insertion and Deletion in a B+-Trees	08/03/2017	BCSL201	C
6	37	Introduction, Graph Theory Terminology, Warshall's Algorithm: Shortest Paths	09/03/2017	BCSL201	C
5	10	Problems on MST	10/03/2017	BCSL201	C
6	11	Problems on merge and insertion sort	17/03/2017	BCSL201	C
6	38	Sequential Representation of Graphs, Adjacency Matrix, Path Matrix	21/03/2017	BCSL201	C
6	39	Linked Representation of a Graph, Operations on Graph	22/03/2017	BCSL201	C
6	40	Traversing a Graph, Posets; Topological Sorting, Spanning Trees	23/03/2017	BCSL201	C
6	12	Problems on hashing table	24/03/2017	BCSL201	C
6	41	Insertion and Selection Sorting, Merging- Merge-Sort	28/03/2017	BCSL201	C
6	42	Shell Sort, Radix Sort, heap sort, Hashing, Topological Sorting	29/03/2017	BCSL201	C
6	43	Advance Topic: Red Black Tree, asymptotic Notation	30/03/2017	BCSL201	C



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## Course wise Teaching Plan for Session : Summer 2017

Course : Field Theory

Faculty : Mrs. Vibha Rajesh Bora

Unit	Topic Code	Topic Covered	Date	Course	Section
1	1	Vector Calculus, Introduction to Cartesian coordinate systems	05/12/2016	BECL205	C
1	2	Introduction to Cylindrical coordinate systems	06/12/2016	BECL205	C
1	3	Spherical coordinate systems	07/12/2016	BECL205	C
1	1	Numericals on Coordinate System and Conversion	08/12/2016	BECL205	C
1	4	Conversion into different coordinate system	12/12/2016	BECL205	C
1	5	Coulomb's Law	13/12/2016	BECL205	C
1	6	Electric Field Intensity, Electric field intensity for point Charge distribution	14/12/2016	BECL205	C
1	2	Numericals on Electric field intensity	15/12/2016	BECL205	C
1	7	Electric field intensity for line & Volume charge distribution	19/12/2016	BECL205	C
1	8	Flux density	20/12/2016	BECL205	C
1	9	Gauss's law & Its Application	21/12/2016	BECL205	C
2	3	Numericals on Magnetic field intensity	22/12/2016	BECL205	C
1	10	Divergence Theory, Divergence Theorem & Its Application	02/01/2017	BECL205	C
1	11	Divergence Theory, Divergence Theorem & Its Application	03/01/2017	BECL205	C
1	12	Electric potential	04/01/2017	BECL205	C
2	4	Numericals on Ampere circuital law	05/01/2017	BECL205	C
3	5	Numericals on Maxwells field	12/01/2017	BECL205	C
1	13	Potential gradient	16/01/2017	BECL205	C
2	14	Current density, Continuity equation	17/01/2017	BECL205	C
2	15	B-S law	18/01/2017	BECL205	C
3	6	Numericals on Maxwells field	19/01/2017	BECL205	C



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## Course wise Teaching Plan for Session : Summer 2017

Course : Field Theory

Faculty : Mrs. Vibha Rajesh Bora

Unit	Topic Code	Topic Covered	Date	Course	Section
2	16	Ampere's circuital law and Applications	23/01/2017	BECL205	C
2	17	Stokes Theorem	24/01/2017	BECL205	C
2	18	Magnetic flux, Flux density	25/01/2017	BECL205	C
2	19	Scalar and Vector magnetic potentials	30/01/2017	BECL205	C
3	20	Maxwell's equations for steady fields	31/01/2017	BECL205	C
3	21	Maxwell's equations for time varying fields	01/02/2017	BECL205	C
4	7	Numericals on Uniform plane wave	02/02/2017	BECL205	C
3	22	Electric and magnetic boundary conditions	06/02/2017	BECL205	C
4	23	Electromagnetic wave equation	07/02/2017	BECL205	C
4	24	Wave propagation in free space	08/02/2017	BECL205	C
4	25	Wave propagation in a perfect dielectric	13/02/2017	BECL205	C
4	26	Wave propagation in perfect conductor	14/02/2017	BECL205	C
4	27	Skin effect	15/02/2017	BECL205	C
4	28	Poynting vector	20/02/2017	BECL205	C
4	29	Reflection and refraction of uniform plane wave at normal incidence plane	21/02/2017	BECL205	C
4	30	Reflection at oblique incident angle	22/02/2017	BECL205	C
4	8	Numericals on Uniform plane wave	23/02/2017	BECL205	C
4	31	Reflection at perfect dielectric medium	27/02/2017	BECL205	C
5	32	Introduction to Waveguides	28/02/2017	BECL205	C
5	33	Wave equation in Cartesian coordinates	01/03/2017	BECL205	C
5	9	Numericals on Waveguide	02/03/2017	BECL205	C



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## Course wise Teaching Plan for Session : Summer 2017

Course : Field Theory

Faculty : Mrs. Vibha Rajesh Bora

Unit	Topic Code	Topic Covered	Date	Course	Section
5	34	Rectangular waveguide, TE waves in rectangular guides	06/03/2017	BECL205	C
5	35	TEM waves in rectangular guides	07/03/2017	BECL205	C
5	36	Wave impedance, losses in wave guide	08/03/2017	BECL205	C
5	10	Numericals on Waveguide	09/03/2017	BECL205	C
6	37	Introduction to Radiation, Electric and magnetic fields due to oscillating dipole (alternating current element)	20/03/2017	BECL205	C
6	38	Power radiated and radiation resistance	21/03/2017	BECL205	C
6	39	application to short monopole and dipole	22/03/2017	BECL205	C
6	11	Numericals on Antenna electrical parameter	23/03/2017	BECL205	C
6	40	Antenna Efficiency, Beam width, Radiation Intensity, Directive, Gain Power Gain & Front To Back Ratio.	27/03/2017	BECL205	C
6	41	Advance Topic	29/03/2017	BECL205	C
6	12	Numericals on Antenna electrical parameter	30/03/2017	BECL205	C



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## Course wise Teaching Plan for Session : Summer 2017

Course : Analog Systems & Design

Faculty : Kamlesh Kalbande

Unit	Topic Code	Topic Covered	Date	Course	Section
1	1	Introduction to Analog Systems. Difference between Analog & Digital Systems. Introduction to Course Outcomes to students and declaration of TAE-Parameters.	05/12/2016	BECL302	D
1	2	UNIT I: Basic block diagram of operational amplifier, Introduction to Operational Amplifier. Basic Operational amplifier configuration	05/12/2016	BECL302	D
1	3	Differential amplifier stage, Basic Op-Amp Configuration	06/12/2016	BECL302	D
1	1	Problems based on basic op amp	08/12/2016	BECL302	D
1	4	Types of Feedback, Advantages of each, An Op-Amp with Negative Feedback	12/12/2016	BECL302	D
1	5	Biasing, Voltage Series and Voltage Shunt Configurations	12/12/2016	BECL302	D
1	6	Instrumentation Amplifier, Derivation of gain. Advantages of Instrumentation amplifier with its Application.	13/12/2016	BECL302	D
1	2	Problems based on feedback	15/12/2016	BECL302	D
1	7	Specification of an Op-Amp, Offset Voltages and Currents	19/12/2016	BECL302	D
1	8	CMRR & Slew Rate with its significance	19/12/2016	BECL302	D
1	9	CMRR & Slew Rate with its significance	20/12/2016	BECL302	D
1	3	Problems on voltage series, voltage shunt amplifiers	22/12/2016	BECL302	D
2	10	UNIT II :Use of Constant Current Source and Voltage Source, Circuit and Application	02/01/2017	BECL302	D
2	11	Summing, Scaling and Averaging Amplifiers with its application	02/01/2017	BECL302	D
2	12	Concept of Floating & Grounded Load, Voltage To Current Converter with Floating And Grounded Load	03/01/2017	BECL302	D
1	4	Problems on CMRR, Slew Rate	05/01/2017	BECL302	D



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## Course wise Teaching Plan for Session : Summer 2017

Course : Analog Systems & Design

Faculty : Kamlesh Kalbande

Unit	Topic Code	Topic Covered	Date	Course	Section
2	5	Problems on Summing, Scaling & Averaging Amplifiers	12/01/2017	BECL302	D
2	13	Current To Voltage Converter & Voltage to Current Converter	16/01/2017	BECL302	D
2	14	Basic Differentiator, Disadvantage of Basic Differentiator. Practical Differentiator. Advantage and Application of Differentiator.	16/01/2017	BECL302	D
2	15	Basic Integrator, Disadvantage of Basic Integrator. Practical Integrator. Advantage and Application of Integrator.	17/01/2017	BECL302	D
2	6	Problem on Differentiator Problem on Integrator	19/01/2017	BECL302	D
2	16	Basic Integrator, Disadvantage of Basic Integrator. Practical Integrator. Advantage and Application of Integrator.	23/01/2017	BECL302	D
3	17	UNIT III :AC & DC Analysis of Differential Amplifier	23/01/2017	BECL302	D
3	18	Block Diagram of Op-amp. Differential Amplifier, Cascaded Differential Amplifier Stages and its drawback.	24/01/2017	BECL302	D
3	19	Cascaded Differential Amplifier Stages and its drawback.	30/01/2017	BECL302	D
3	20	Need of Level Shifting Stages. Types of Level Translator.	30/01/2017	BECL302	D
3	21	AC and DC Analysis of Cascade Amplifier	31/01/2017	BECL302	D
2	7	Problem on Differential Amplifier	02/02/2017	BECL302	D
3	22	Design of two stage direct-coupled amplifier as an output stage.	06/02/2017	BECL302	D
4	23	UNIT IV :Classification of Filters, Active Filters,	06/02/2017	BECL302	D
4	24	First to Sixth -Order Butterworth filter	07/02/2017	BECL302	D
4	25	Frequency response of various filter.	13/02/2017	BECL302	D
4	26	Multiple-Feedback Filters (Band Pass And Band Reject Filters)	13/02/2017	BECL302	D



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## Course wise Teaching Plan for Session : Summer 2017

Course : Analog Systems & Design

Faculty : Kamlesh Kalbande

Unit	Topic Code	Topic Covered	Date	Course	Section
4	27	IGMF configuration, All Pass Filter, Cascade Design Of Filters, Classification of Oscillators	14/02/2017	BECL302	D
4	28	Design of Various Filters upto sixth order	20/02/2017	BECL302	D
4	29	Design of Op-amp based Phase Shift And Wein Bridge Oscillators	20/02/2017	BECL302	D
4	30	Square, Triangular And Saw Tooth Wave Generators	21/02/2017	BECL302	D
3	8	Problem on Cascade Amplifier	23/02/2017	BECL302	D
4	31	Square, Triangular And Saw Tooth Wave Generators	27/02/2017	BECL302	D
4	32	Comparison of Various Filter	27/02/2017	BECL302	D
4	33	Comparison of Various Filter	28/02/2017	BECL302	D
4	9	Problem on Filter Problem on Oscillator	02/03/2017	BECL302	D
5	34	UNIT V :Comparator, Schmitt Trigger & Voltage Comparator	06/03/2017	BECL302	D
5	35	Voltage Limiters And Window Detector	06/03/2017	BECL302	D
5	36	Problems on above topics	07/03/2017	BECL302	D
5	10	Problem on Comparator, Schmitt Trigger, Voltage Comparator	09/03/2017	BECL302	D
5	37	Clippers And Clampers, Peak Detector	13/03/2017	BECL302	D
5	38	Precision Rectifiers, analog switches	13/03/2017	BECL302	D
6	39	UNIT VI :The 555 Timer, Phase Locked Loops IC565, ICL8038 & XR2206 Function Generator,	20/03/2017	BECL302	D
6	40	Voltage Controlled Oscillator Basic Operation, IC based Voltage Regulator Circuits i.e 78** & 79** ICs.	20/03/2017	BECL302	D
6	41	Dual Track Voltage Regulator e.g SMPS, Three - Terminal Regulator(Fixed Regulator) Voltage Adjustment And Current Boosting Of Fixed Regulator	21/03/2017	BECL302	D





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## Course wise Teaching Plan for Session : Summer 2017

Course : Analog Systems & Design

Faculty : Kamlesh Kalbande

Unit	Topic Code	Topic Covered	Date	Course	Section
6	11	Problems on IC 555	23/03/2017	BECL302	D
6	42	Merits And Drawbacks Of Linear Regulators, Advance topics on the subject.	27/03/2017	BECL302	D
6	43	Revision	27/03/2017	BECL302	D
6	44	Revision	28/03/2017	BECL302	D



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## Course wise Teaching Plan for Session : Summer 2017

Course : Communication Electronics

Faculty : AKSHITA BAIWARE

Unit	Topic Code	Topic Covered	Date	Course	Section
1	4	Tutorial based on Image frequency it's rejection.	03/01/2016	BECL202	D
1	1	Block Schematic of Communication System	05/12/2016	BECL202	D
1	1	Introduction to Communication Electronics	06/12/2016	BECL202	D
1	2	Base Band Signals and their bandwidth requirements	08/12/2016	BECL202	D
1	3	RF Bands	09/12/2016	BECL202	D
1	4	Concept of Radiation and	12/12/2016	BECL202	D
1	2	Tutorial Based on AM Modulation Technique	13/12/2016	BECL202	D
1	5	Mechanism of Propagations	15/12/2016	BECL202	D
1	6	Ground Wave	16/12/2016	BECL202	D
1	7	Sky Wave, Space Wave	19/12/2016	BECL202	D
1	3	Tutorial Based on AM Modulation Technique	20/12/2016	BECL202	D
1	8	Duct, Tropospheric Scatter	22/12/2016	BECL202	D
1	9	Extraterrestrial Propagation.	23/12/2016	BECL202	D
1	10	Concept of Fading	26/12/2016	BECL202	D
1	11	diversity reception	29/12/2016	BECL202	D
2	12	Noise Figure Calculations	30/12/2016	BECL202	D
2	13	AM Modulators series plate modulated class C amplifiers	02/01/2017	BECL202	D
2	14	efficiency & power calculations	05/01/2017	BECL202	D
2	15	SB modulation SSB-SC modulation	06/01/2017	BECL202	D
2	16	AM demodulators	12/01/2017	BECL202	D
2	17	Electromagnetic waves	13/01/2017	BECL202	D



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## Course wise Teaching Plan for Session : Summer 2017

Course : Communication Electronics

Faculty : AKSHITA BAIWARE

Unit	Topic Code	Topic Covered	Date	Course	Section
2	18	square law detector	16/01/2017	BECL202	D
2	5	Tutorial based on FM Transmitter and Receiver.	17/01/2017	BECL202	D
2	19	diode peak detector,	19/01/2017	BECL202	D
2	20	envelop detector	20/01/2017	BECL202	D
3	21	detectors for SSB and SSB-SC-AM signals, AM using transistors, Block Diagram of AM Receiver	23/01/2017	BECL202	D
2	6	Tutorial based on FM Transmitter and Receiver.	24/01/2017	BECL202	D
3	22	AM Detection : Envelope detection, Synchronous detection, Practical diode detection, AGC, SSB	27/01/2017	BECL202	D
3	23	DSB detection methods.	30/01/2017	BECL202	D
2	7	Tutorial based on Digital Modulation technique.	31/01/2017	BECL202	D
4	24	Angle modulation, frequency modulation spectrum reactance tube and FET modulators	02/02/2017	BECL202	D
4	25	Armstrong method, FM transmitters, frequency stabilization methods, FM discriminator	03/02/2017	BECL202	D
4	26	foster Seeley, PLL detectors, stereo phonic FM, Super heterodyne Receiver,	06/02/2017	BECL202	D
5	8	Tutorial based on Digital Modulation technique.	07/02/2017	BECL202	D
4	27	Performance characteristics: Sensitivity, Selectivity,	13/02/2017	BECL202	D
5	9	Tutorial based on Digital Multiplexing.	14/02/2017	BECL202	D
4	28	Fidelity, Image Frequency Rejection,	20/02/2017	BECL202	D
5	10	Tutorial based on Digital Multiplexing.	21/02/2017	BECL202	D
4	29	Introduction to Sampling, Sampling theorem, Sampling Techniques, Analog Pulse Modulation methods	23/02/2017	BECL202	D



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## Course wise Teaching Plan for Session : Summer 2017

Course : Communication Electronics

Faculty : AKSHITA BAISWARE

Unit	Topic Code	Topic Covered	Date	Course	Section
4	30	Pulse amplitude modulation (PAM) ,	24/02/2017	BECL202	D
5	31	Transmission of PAM, Drawbacks	27/02/2017	BECL202	D
5	11	Tutorial Based on Pulse Code Modulation Technique	28/02/2017	BECL202	D
5	32	Pulse width modulation (PWM), Modulation and Demodulation of PWM	02/03/2017	BECL202	D
5	33	Pulse position modulation (PPM), Modulation and Demodulation of PWM.	03/03/2017	BECL202	D
5	34	Frequency Division multiplexing, Time Division Multiplexing.	06/03/2017	BECL202	D
6	12	Tutorial Based on Pulse Code Modulation Technique	07/03/2017	BECL202	D
5	35	PAM/TDM System: Signaling rate, transmission bandwidth,	09/03/2017	BECL202	D
5	36	advantages and disadvantages.	10/03/2017	BECL202	D
5	37	Introduction to Digital multiplexers and their classification,	13/03/2017	BECL202	D
6	38	transmission bandwidth	17/03/2017	BECL202	D
6	39	PWM Demodulation	20/03/2017	BECL202	D
6	13	Tutorial Based on Noise Technique	21/03/2017	BECL202	D
6	40	Demodulation of PAM	23/03/2017	BECL202	D
6	41	IFRR, Tracking, De-emphasis, Mixers.	26/03/2017	BECL202	D



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## Course wise Teaching Plan for Session : Summer 2017

Course : Data Structures using C

Faculty : MUKTA D. KHIRWADKAR

Unit	Topic Code	Topic Covered	Date	Course	Section
1	1	Problems on Array and sorting	06/12/2016	BCSL201	D
1	1	Structure of C program, The First C Program, Compilation and Execution, Sample C programs for practice.	07/12/2016	BCSL201	D
1	2	Introduction to Arrays, , Linear arrays, Arrays as ADT, Representation of linear in memory,	07/12/2016	BCSL201	D
1	3	Traversing Linear Arrays, Inserting & deleting of elements in Array	09/12/2016	BCSL201	D
1	2	Problem on searching	13/12/2016	BCSL201	D
1	4	Sorting: Bubble sort, Searching: Linear search,	14/12/2016	BCSL201	D
1	5	Binary search, Multidimensional arrays, Dynamic memory management, Representation of Polynomials using Arrays.	14/12/2016	BCSL201	D
1	6	Pointers, Pointer arrays, Records, Record structures, Representation of records in memory.	16/12/2016	BCSL201	D
2	3	Problems on Linked List	20/12/2016	BCSL201	D
1	7	Parallel Arrays, Matrices, Sparse Matrices.	21/12/2016	BCSL201	D
1	8	Introduction to linked list, Representation of linked Lists in Memory	21/12/2016	BCSL201	D
2	9	Traversing a Linked list, Searching a linked list. TAE 1	23/12/2016	BCSL201	D
2	4	Problems on Stacks	03/01/2017	BCSL201	D
2	10	Memory allocation, Garbage collection.	04/01/2017	BCSL201	D
2	11	Insertion in to a linked list, Deletion from a linked list.	04/01/2017	BCSL201	D
2	12	Insertion and Deletion from a Header linked list.	06/01/2017	BCSL201	D
2	13	Insertion and Deletion from a Circularly linked list.	13/01/2017	BCSL201	D
3	5	Problems on Queue	17/01/2017	BCSL201	D



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## Course wise Teaching Plan for Session : Summer 2017

Course : Data Structures using C

Faculty : MUKTA D. KHIRWADKAR

Unit	Topic Code	Topic Covered	Date	Course	Section
2	14	Two way lists or Doubly Linked List.	18/01/2017	BCSL201	D
2	15	Josephus Problem and its Solution, Buddy Systems. TAE 2	18/01/2017	BCSL201	D
3	16	Introduction to Stacks, Array representation of stacks.	20/01/2017	BCSL201	D
3	6	Problems on Prefix, PostFix and Infix	24/01/2017	BCSL201	D
3	17	Linked representation of stacks. Stacks as ADT.	25/01/2017	BCSL201	D
3	18	Arithmetic expression. Polish Notation.	25/01/2017	BCSL201	D
3	19	Applications of Stacks. Recursion.	27/01/2017	BCSL201	D
4	7	Problems on Binary Search Tree	31/01/2017	BCSL201	D
3	20	Towers of Hanoi, Implementation of recursive procedures by stacks.	01/02/2017	BCSL201	D
3	21	Linked Representation of Queues, Queues as ADT.	01/02/2017	BCSL201	D
3	22	Circular of Queues, Priority Queues	03/02/2017	BCSL201	D
4	8	Problems on Traversal of tree	07/02/2017	BCSL201	D
4	23		08/02/2017	BCSL201	D
4	24	Deque. Applications of Queues	08/02/2017	BCSL201	D
5	9	Problems on BFS and DFS	14/02/2017	BCSL201	D
4	25	Revision on concepts of Stacks and Queues	15/02/2017	BCSL201	D
4	26	Introduction to Binary Trees. TAE 3	15/02/2017	BCSL201	D
5	10	Problems on MST	21/02/2017	BCSL201	D
4	27	Representing Binary Tree in Memory	22/02/2017	BCSL201	D
5	28	Traversing Binary Trees, Traversal Algorithms Using Stacks	22/02/2017	BCSL201	D
6	11	Problems on merge and insertion sort	28/02/2017	BCSL201	D



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## Course wise Teaching Plan for Session : Summer 2017

Course : Data Structures using C

Faculty : MUKTA D. KHIRWADKAR

Unit	Topic Code	Topic Covered	Date	Course	Section
5	29	Header Nodes; Threads ,Threaded Binary Trees ,Binary Search Trees	01/03/2017	BCSL201	D
5	30	Searching and Inserting in Binary Search Trees, Deleting in a Binary Search Tree.	01/03/2017	BCSL201	D
5	31	Balanced Binary Trees, AVL Search Trees, Insertion , Deletion in an AVL Search Tree	03/03/2017	BCSL201	D
6	12	Finding the node on same height	07/03/2017	BCSL201	D
5	32	m-way Search Trees , Searching TAE 5	08/03/2017	BCSL201	D
5	33	Insertion and Deletion in an m-way Search tree	08/03/2017	BCSL201	D
5	34	B-Trees ,Searching, Insertion and Deletion in a B-tree	10/03/2017	BCSL201	D
6	35	Insertion and Deletion in a B+-Trees	17/03/2017	BCSL201	D
6	13	problem on graphs	21/03/2017	BCSL201	D
6	36	Introduction, Graph Theory Terminology, Warshall's Algorithm: Shortest Paths	22/03/2017	BCSL201	D
6	37	Sequential Representation of Graphs, Adjacency Matrix, Path Matrix	22/03/2017	BCSL201	D
6	38	Linked Representation of a Graph, Operations on Graph	24/03/2017	BCSL201	D
6	14	Problems on hashing table	28/03/2017	BCSL201	D
6	39	Traversing a Graph, Posets; Topological Sorting, Spanning Trees	29/03/2017	BCSL201	D
6	40	Insertion and Selection Sorting ,Merging- Merge-Sort	29/03/2017	BCSL201	D
6	41	Shell Sort, Hashing ,Topological Sorting, Advance Topic: Red Black Tree, asymptotic Notation	31/03/2017	BCSL201	D



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## Course wise Teaching Plan for Session : Summer 2017

Course : Digital System Design

Faculty : Dr. Milind Madhav Khanapurkar

Unit	Topic Code	Topic Covered	Date	Course	Section
1	1	Introduction to Subject with reference to Cos & TAE Planner	06/12/2016	BECL301	D
1	1	programming on data flow	07/12/2016	BECL301	D
1	2	Unit-1 Introduction toVHDL	07/12/2016	BECL301	D
1	3	Methodologies,	09/12/2016	BECL301	D
1	4	Different Coding Styles in VHDL	13/12/2016	BECL301	D
1	2	programming on data flow	14/12/2016	BECL301	D
1	5	Design Units,	14/12/2016	BECL301	D
1	6	Data objects,	16/12/2016	BECL301	D
1	7	VHDL data types,	20/12/2016	BECL301	D
2	3	programming on data flow	21/12/2016	BECL301	D
1	8	Attributes.	21/12/2016	BECL301	D
1	9	Sample Example's	23/12/2016	BECL301	D
1	10	Revision +TAE	27/12/2016	BECL301	D
2	4	programming on behavioural flow	28/12/2016	BECL301	D
1	11	Practice problems	28/12/2016	BECL301	D
2	12	Unit-2 VHDL Statements and concept of delays.	30/12/2016	BECL301	D
2	13	Concurrent statements,	03/01/2017	BECL301	D
2	5	programming on behavioural flow	04/01/2017	BECL301	D
2	14	Sequential Statements	04/01/2017	BECL301	D
2	15	Inertial and Transport delays	06/01/2017	BECL301	D
2	16	Delta delay, Signal drivers.	13/01/2017	BECL301	D
2	17	Practice problems on Concurrent and Sequential Statements,	17/01/2017	BECL301	D





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## Course wise Teaching Plan for Session : Summer 2017

Course : Digital System Design

Faculty : Dr. Milind Madhav Khanapurkar

Unit	Topic Code	Topic Covered	Date	Course	Section
3	6	programming on behavioural flow	18/01/2017	BECL301	D
3	18	Unit-3 Programming concepts.	18/01/2017	BECL301	D
3	19	Subprograms – Functions,	20/01/2017	BECL301	D
3	20	Procedures,	24/01/2017	BECL301	D
3	7	programming on behavioural flow	25/01/2017	BECL301	D
3	21	Revision +TAE	25/01/2017	BECL301	D
3	22	Generic and Generate Statements	27/01/2017	BECL301	D
3	23	Package, IEEE standard and logic library	31/01/2017	BECL301	D
3	8	programming on behavioural flow	01/02/2017	BECL301	D
3	24	File I/O, Test bench,	01/02/2017	BECL301	D
3	25	Component declaration, instantiation, configuration.	03/02/2017	BECL301	D
3	26	Revision +TAE	07/02/2017	BECL301	D
4	9	programming on structural flow	08/02/2017	BECL301	D
4	27	Unit-4 Combinational System Design	08/02/2017	BECL301	D
4	28	Combinational logic circuit design and VHDL implementation of Adder,	14/02/2017	BECL301	D
4	10	programming on structural flow	15/02/2017	BECL301	D
4	29	Subtractor , Decoder,	15/02/2017	BECL301	D
4	30	Encoder, Multiplexer,	21/02/2017	BECL301	D
4	11	programming on structural flow	22/02/2017	BECL301	D
4	31	Revision +TAE	22/02/2017	BECL301	D
4	32	ALU, Barrel shifter,	24/02/2017	BECL301	D
4	33	4X4 key Board Encoder,	28/02/2017	BECL301	D



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## Course wise Teaching Plan for Session : Summer 2017

Course : Digital System Design

Faculty : Dr. Milind Madhav Khanapurkar

Unit	Topic Code	Topic Covered	Date	Course	Section
5	12	programming on structural flow	01/03/2017	BECL301	D
4	34	Multiplier, Divider,	01/03/2017	BECL301	D
4	35	Hamming Code Encoder and Correction circuits.	03/03/2017	BECL301	D
4	36	Revision +TAE	07/03/2017	BECL301	D
6	13	programming on structural flow	08/03/2017	BECL301	D
5	37	Unit-5 Sequential System Design	08/03/2017	BECL301	D
5	38	Synchronous Sequential circuits design	10/03/2017	BECL301	D
5	39	Mealy State Machine	17/03/2017	BECL301	D
5	40	Moore State Machine and State assignments,	21/03/2017	BECL301	D
6	14	programming on FSM	22/03/2017	BECL301	D
6	41	Unit-6 Introduction to PLDS	22/03/2017	BECL301	D
6	42	Introduction to place & route process,	24/03/2017	BECL301	D
6	43	Introduction to ROM, PLA, PAL	28/03/2017	BECL301	D



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## Course wise Teaching Plan for Session : Summer 2017

Course : Field Theory

Faculty : Farhina Ansari

Unit	Topic Code	Topic Covered	Date	Course	Section
1	1	Course Objective, Syllabus, course Outcome, TAE Discussion, Subject Overview. Points to be known before starting the Syllabus.	06/12/2016	BECL205	D
1	2	Vector Calculus,	08/12/2016	BECL205	D
1	1	Vector calculus problem	09/12/2016	BECL205	D
1	3	Introduction to Cartesian coordinate systems	09/12/2016	BECL205	D
1	4	Introduction to Cylindrical coordinate systems	13/12/2016	BECL205	D
1	5	Spherical coordinate systems	15/12/2016	BECL205	D
1	2	problem based on Coordinate conversion	16/12/2016	BECL205	D
1	6	Conversion into different coordinate system	16/12/2016	BECL205	D
1	7	Coulomb's Law	20/12/2016	BECL205	D
1	8	Electric Field Intensity, Electric field intensity for point Charge distribution	22/12/2016	BECL205	D
1	3	electric field Intensity, derivation and problem	23/12/2016	BECL205	D
1	9	Electric field intensity for line & Volume charge distribution	23/12/2016	BECL205	D
1	10	Flux density	27/12/2016	BECL205	D
1	11	Gauss's law & Its Application	29/12/2016	BECL205	D
1	12	Divergence Theory, Divergence Theorem & Its Application	30/12/2016	BECL205	D
1	13	Electric potential, Potential gradient	03/01/2017	BECL205	D
2	14	Current density, Continuity equation	05/01/2017	BECL205	D
1	4	Guass law problems	06/01/2017	BECL205	D
2	15	B-S law	06/01/2017	BECL205	D
2	16	Ampere's circuital law and Applications	12/01/2017	BECL205	D



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## Course wise Teaching Plan for Session : Summer 2017

Course : Field Theory

Faculty : Farhina Ansari

Unit	Topic Code	Topic Covered	Date	Course	Section
1	5	potential gradient problems	13/01/2017	BECL205	D
2	17	Ampere's circuital law and Applications	13/01/2017	BECL205	D
2	18	Stokes Theorem	17/01/2017	BECL205	D
2	19	Magnetic flux, Flux density	19/01/2017	BECL205	D
2	6	magnetic field intensity, ampere circuital law problems	20/01/2017	BECL205	D
2	20	Scalar and Vector magnetic potentials	20/01/2017	BECL205	D
2	21	Maxwell's equations for steady fields	24/01/2017	BECL205	D
2	7	numericals based on Magnetic flux density	27/01/2017	BECL205	D
3	22	Maxwell's equations for time varying fields	27/01/2017	BECL205	D
3	23	Electric and magnetic boundary conditions	07/02/2017	BECL205	D
4	24	Electromagnetic wave equation	14/02/2017	BECL205	D
4	25	Wave propagation in free space	14/02/2017	BECL205	D
4	26	Wave propagation in a perfect dielectric	14/02/2017	BECL205	D
4	27	Wave propagation in perfect conductor	21/02/2017	BECL205	D
4	28	Skin effect	23/02/2017	BECL205	D
3	8	Numericals based on Maxwell's wave equation	24/02/2017	BECL205	D
4	29	Poynting vector	24/02/2017	BECL205	D
4	30	Reflection and refraction of uniform plane wave at normal incidence plane	28/02/2017	BECL205	D
4	31	Reflection and refraction of uniform plane wave at normal incidence plane	28/02/2017	BECL205	D
4	32	Reflection at oblique incident angle	02/03/2017	BECL205	D
3	9	Boundary condition Problems	03/03/2017	BECL205	D



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## Course wise Teaching Plan for Session : Summer 2017

Course : Field Theory

Faculty : Farhina Ansari

Unit	Topic Code	Topic Covered	Date	Course	Section
4	33	Reflection at perfect dielectric medium	03/03/2017	BECL205	D
5	34	Introduction to Waveguides	07/03/2017	BECL205	D
5	35	Wave equation in Cartesian coordinates	09/03/2017	BECL205	D
5	36	Rectangular waveguide, TE waves in rectangular guides	09/03/2017	BECL205	D
4	10	Electromagnetic wave equation and its numericals	10/03/2017	BECL205	D
4	11	different medium wave equations and related numericals	17/03/2017	BECL205	D
5	37	TEM waves in rectangular guides	21/03/2017	BECL205	D
5	38	Wave impedance, losses in wave guide	23/03/2017	BECL205	D
6	39	Introduction to Radiation, Electric and magnetic fields due to oscillating dipole (alternating current element)	23/03/2017	BECL205	D
5	12	numerical based on Rectangular waveguide	24/03/2017	BECL205	D
6	40	Power radiated and radiation resistance	24/03/2017	BECL205	D
6	41	application to short monopole and dipole	24/03/2017	BECL205	D
6	42	Antenna Efficiency, Beam width, Radiation Intensity, Directive, Gain Power Gain & Front To Back Ratio.	28/03/2017	BECL205	D