



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 : DIGITAL COMMUNICATION

Faculty : mmingle - Manisha M. Ingle

Unit	Topic Code	Topic Covered	Date	Course	Section
1	1	Introduction to the syllabus, Unit 1: Bandwidth of digital Data, Base band system	02/05/2017	BECL403	A
1	2	Formatting textual Data, Messages, characters, and symbols, Sources of Corruption	02/05/2017	BECL403	A
1	3	Uniform and non uniform quantization, Base band Modulation	03/05/2017	BECL403	A
1	4	Correlative Coding	03/05/2017	BECL403	A
1	5	Unit 2: Digital Communication system	07/05/2017	BECL403	A
2	6	Line coding	07/05/2017	BECL403	A
2	7	Pulse shaping, Scrambling	08/05/2017	BECL403	A
2	8	Regenerative repeater, Detection-Error Probability	08/05/2017	BECL403	A
2	9	M-ary communication, Digital carrier systems	09/05/2017	BECL403	A
2	10	Digital multiplexing, Transmission media	09/05/2017	BECL403	A
2	11	Inter symbol Interference	10/05/2017	BECL403	A
2	12	Unit 3: Digital Band pass Modulation techniques	10/05/2017	BECL403	A
3	13	Detection of signals in Gaussian noise	14/05/2017	BECL403	A
3	14	Coherent detection, Non coherent detection	14/05/2017	BECL403	A
3	15	Complex envelop	15/05/2017	BECL403	A
3	16	Error performance for Binary system	15/05/2017	BECL403	A
3	17	M-Ary signaling and performance	16/05/2017	BECL403	A
3	18	Symbol error performance for M-ary Systems	16/05/2017	BECL403	A
3	19	Bit error Rate calculations	17/05/2017	BECL403	A
3	19	Bit error Rate calculations	17/05/2017	BECL403	A



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 : DIGITAL COMMUNICATION

Faculty : mmingle - Manisha M. Ingle

Unit	Topic Code	Topic Covered	Date	Course	Section
3	20	Unit 4: Gram – Schmitt procedure	21/05/2017	BECL403	A
4	21	Gram – Schmitt procedure	21/05/2017	BECL403	A
4	22	Signal space representation of modulated signals	22/05/2017	BECL403	A
4	23	Nonlinear modulation methods with memory	22/05/2017	BECL403	A
4	24	Error probability	23/05/2017	BECL403	A
4	25	Optimum receivers for AWGN channels, The signal space concept	23/05/2017	BECL403	A
5	26	Unit 5: Linear block codes	24/05/2017	BECL403	A
5	27	Generator matrix and parity check matrix	24/05/2017	BECL403	A
5	28	Some specific linear block codes, Cyclic codes	28/05/2017	BECL403	A
5	29	Some specific linear block codes, Cyclic codes	28/05/2017	BECL403	A
5	30	Transfer function of a convolution code	29/05/2017	BECL403	A
5	31	Convolutional Codes	29/05/2017	BECL403	A
5	32	Convolutional Codes	30/05/2017	BECL403	A
5	33	Optimum decoding of Convolutional codes- Viterbi algorithm distance	30/05/2017	BECL403	A
5	34	Optimum decoding of Convolutional codes- Viterbi algorithm distance	31/05/2017	BECL403	A
5	35	Properties of binary Convolutional codes	31/05/2017	BECL403	A
6	36	Unit 6: Spread Spectrum Overview, Pseudo noise Sequences	04/06/2017	BECL403	A
6	37	Direct- Sequence Spread Spectrum systems	04/06/2017	BECL403	A
6	38	Frequency hopping systems	05/06/2017	BECL403	A
6	39	Synchronization, Jamming consideration	05/06/2017	BECL403	A
6	40	Orthogonality between signals	06/06/2017	BECL403	A



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 : DIGITAL COMMUNICATION

Faculty : mmingle - Manisha M. Ingle

Unit	Topic Code	Topic Covered	Date	Course	Section
6	41	Codes Multiple access techniques, Commercial Applications	06/06/2017	BECL403	A
6	42	Cellular Systems	07/06/2017	BECL403	A
6	43	Advanced topics on digital communication	07/06/2017	BECL403	A