

<b>Indian Institute of Information Technology, Kota</b>
<b>Curriculum Scheme of B.Tech. (Electronics and Communication Engineering)</b>
<b>Batch Admitted in Academic Year 2016-17 onwards</b>

<b>Semester - I</b>						
<b>S.No</b>	<b>Subject Code</b>	<b>Subject</b>	<b>Scheme</b>			
			<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
1	CST101	Introduction to Computer System and Programming	3	0	0	3
2	ECT101	Digital Electronics	3	0	0	3
3	ECT103	Fundamentals of Electrical Engineering	3	0	0	3
4	HST101	Communication Skills in English	2	0	0	2
5	MAT101	Mathematics - I	3	0	0	3
		<b>Labs</b>				
6	CSP101	Computer Programming Lab	0	0	2	1
7	CSP111	IT Workshop - I	0	0	3	2
8	ECP101	Digital Electronics Lab	0	0	2	1
9	HSP101	English Communication Lab	0	0	2	1
10	OTP101	Creative Arts / Liberal Arts	0	0	1	1
<b>Total</b>			<b>14</b>	<b>0</b>	<b>10</b>	<b>20</b>

<b>Semester - II</b>						
<b>S.No</b>	<b>Subject Code</b>	<b>Subject</b>	<b>Scheme</b>			
			<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
1	CST102	Data Structures and Algorithms	3	0	0	3
2	CST104	Internet and Web Technologies	3	0	0	3
3	ECT102	Electronic Devices and Circuits	3	0	0	3
4	HST102	Health, Safety and Environment	1	0	0	1
5	HST104	Human Values and Effective Communication	2	0	0	2
6	MAT102	Mathematics - II	3	0	0	3
		<b>Labs</b>				
7	CSP102	Data Structures and Algorithms Lab	0	0	2	1
8	CSP112	IT Workshop - II	0	0	3	2
9	ECP102	Electronic Devices and Circuits Lab	0	0	2	1
10	HSP104	Soft Skill Development Lab	0	0	2	1
11	OTD102	Independent Project	0	0	1	1
<b>Total</b>			<b>15</b>	<b>0</b>	<b>10</b>	<b>21</b>

<b>Indian Institute of Information Technology, Kota</b>
<b>Curriculum Scheme of B.Tech. (Electronics and Communication Engineering)</b>
<b>Batch Admitted in Academic Year 2016-17 onwards</b>

<b>Semester - III</b>						
<b>S.No</b>	<b>Subject Code</b>	<b>Subject</b>	<b>Scheme</b>			
			<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
1	CST203	Object Oriented System Design	3	0	0	3
2	ECT201	Microprocessors and Microcontrollers	3	0	0	3
3	ECT203	Analog Electronics	3	0	0	3
4	ECT205	Signals and Systems	3	0	0	3
5	ECT207	Control Systems	3	0	0	3
6	MAT201	Probability and Random Processes	3	0	0	3
		<b>Labs</b>				
7	CSP203	Object Oriented System Design Lab	0	0	2	1
8	CSP211	IT Workshop - III	0	0	3	2
9	ECP201	Microprocessors and Microcontrollers Lab	0	0	2	1
10	ECP203	Analog Electronics Lab	0	0	2	1
<b>Total</b>			<b>18</b>	<b>0</b>	<b>9</b>	<b>23</b>

<b>Semester - IV</b>						
<b>S.No</b>	<b>Subject Code</b>	<b>Subject</b>	<b>Scheme</b>			
			<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
1	CST204	Computer Architecture and Organization	3	0	0	3
2	ECT202	Analog Communication	3	0	0	3
3	ECT204	Measurement and Instrumentation Technology	3	0	0	3
4	ECT206	Electromagnetic Theory	3	0	0	3
5	HST202	Technical Writing and Professional Communication	3	0	0	3
6	MAT202	Information Theory and Coding	3	0	0	3
		<b>Labs</b>				
7	CSP204	Computer Architecture and Organization Lab	0	0	2	1
8	ECP202	Analog Communication Lab	0	0	2	1
9	ECP204	Measurement and Instrumentation Technology Lab	0	0	2	1
10	HSP202	Professional Communication Lab	0	0	2	1
<b>Total</b>			<b>18</b>	<b>0</b>	<b>8</b>	<b>22</b>

<b>Indian Institute of Information Technology, Kota</b>
<b>Curriculum Scheme of B.Tech. (Electronics and Communication Engineering)</b>
<b>Batch Admitted in Academic Year 2016-17 onwards</b>

<b>Semester - V</b>						
S.No	Subject Code	Subject	Scheme			
			L	T	P	Credits
1	ECT301	Digital Signal Processing	3	0	0	3
2	ECT303	Digital Communication	3	0	0	3
3	ECT305	VLSI Design	3	0	0	3
4	ECT307	Transmission Lines and Antennas	3	0	0	3
5	DLT301	Discipline Elective DL - 5.1 (Pool 1)	3	0	0	3
6	OLT301	Open Elective OL - 5.1 (Pool 1 or 2)	3	0	0	3
		<b>Labs</b>				
7	ECP301	Digital Signal Processing Lab	0	0	2	1
8	ECP303	Digital Communication Lab	0	0	2	1
9	ECP305	VLSI Design Lab	0	0	2	1
10	ECP307	Transmission Lines and Antennas Lab	0	0	2	1
11	OLP301	Open Elective OL - 5.1 Lab (Pool 1 or 2)	0	0	2	1
<b>Total</b>			<b>18</b>	<b>0</b>	<b>10</b>	<b>23</b>

<b>Semester - VI</b>						
S.No	Subject Code	Subject	Scheme			
			L	T	P	Credits
1	ECT302	Embedded Systems	3	0	0	3
2	ECT304	Wireless Communication	3	0	0	3
3	ECT306	Optical Communication	3	0	0	3
4	DLT302	Discipline Elective DL - 6.1 (Pool 1)	3	0	0	3
5	OLT302	Open Elective OL - 6.1 (Pool 1 or 2)	3	0	0	3
		<b>Labs</b>				
6	ECD302	Project - I	0	0	6	6
7	ECD304	Technical Presentation - I	0	0	2	1
8	ECP302	Embedded Systems Lab	0	0	2	1
9	HSP302	Business Communication Skills Lab	0	0	2	1
10	OLP302	Open Elective OL - 6.1 Lab (Pool 1 or 2)	0	0	2	1
<b>Total</b>			<b>15</b>	<b>0</b>	<b>14</b>	<b>25</b>

<b>Indian Institute of Information Technology, Kota</b>
<b>Curriculum Scheme of B.Tech. (Electronics and Communication Engineering)</b>
<b>Batch Admitted in Academic Year 2016-17 onwards</b>

<b>Semester - VII</b>						
<b>S.No</b>	<b>Subject Code</b>	<b>Subject</b>	<b>Scheme</b>			
			<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
1	DLT401	Discipline Elective DL - 7.1 (Pool 1)	3	0	0	3
2	FLT401	Fractal Elective FL - 7.1 (Pool 3)	1	0	0	1
3	FLT403	Fractal Elective FL - 7.2 (Pool 3)	1	0	0	1
4	FLT405	Fractal Elective FL - 7.3 (Pool 3)	1	0	0	1
5	HLT401	Humanities Elective HL - 7.1 (Pool 4)	3	0	0	3
		<b>Labs</b>				
6	ECD401	Project - II	0	0	6	6
7	ECD403	Technical Presentation - II	0	0	2	1
<b>Total</b>			<b>9</b>	<b>0</b>	<b>8</b>	<b>16</b>

<b>Semester - VIII</b>						
<b>S.No</b>	<b>Subject Code</b>	<b>Subject</b>	<b>Scheme</b>			
			<b>L</b>	<b>T</b>	<b>P</b>	<b>Credits</b>
1	DLT402	Discipline Elective DL - 8.1 (Pool 1)	3	0	0	3
2	DLT404	Discipline Elective DL - 8.2 (Pool 1)	3	0	0	3
3	FLT402	Fractal Elective FL - 8.1 (Pool 3)	1	0	0	1
4	FLT404	Fractal Elective FL - 8.2 (Pool 3)	1	0	0	1
5	FLT406	Fractal Elective FL - 8.3 (Pool 3)	1	0	0	1
6	FLT408	Fractal Elective FL - 8.4 (Pool 3)	1	0	0	1
7	FLT410	Fractal Elective FL - 8.5 (Pool 3)	1	0	0	1
8	FLT412	Fractal Elective FL - 8.6 (Pool 3)	1	0	0	1
9	HLT402	Humanities Elective HL - 8.1 (Pool 4)	3	0	0	3
<b>Total</b>			<b>15</b>	<b>0</b>	<b>0</b>	<b>15</b>

**ECE Electives (Pool 1) :**

<b>Code</b>	<b>Subject</b>
ECT501	Advanced CMOS and Beyond CMOS
ECT502	Advanced Digital Signal Processing
ECT503	Advanced Microprocessors and Microcontrollers
ECT504	Advanced Microwave Engineering
ECT505	Advanced Mobile Communication
ECT506	Advanced Process Control
ECT507	Advanced Communication Systems
ECT508	Analog CMOS IC Design
ECT509	Antennas
ECT510	Biomedical Measurement and Instrumentation
ECT511	Cognitive Radio Networks
ECT512	Computational Electromagnetic
ECT513	Digital CMOS IC Design
ECT514	Digital Image Processing
ECT515	Digital System Synthesis
ECT516	Discrete Spectral Estimation
ECT517	Error Correcting Codes
ECT518	Evolutionary Computation
ECT519	Fuzzy Logic
ECT520	Internet of Things
ECT521	MEMS and NEMS
ECT522	Microwave Engineering
ECT523	Mobile Communication
ECT524	Nanoelectronic Devices Modeling and Simulation
ECT525	Neural Networks
ECT526	Pattern Recognition
ECT527	Phased Array Antenna Design
ECT528	Plasmonics and Photonics
ECT529	Power Electronics
ECT530	Process Control
ECT531	RF Communication
ECT532	RF Microelectronics
ECT533	Radar Engineering
ECT534	Real Time Systems
ECT535	Satellite Communication
ECT536	Semiconductor Optoelectronic Devices
ECT537	Simulation of Circuits and Devices
ECT538	Soft Computing

ECT539	Spread Spectrum Technology
ECT540	System Identification
ECT541	Telecom Switching Circuits and Networks
ECT542	VLSI Devices and Process Simulation
ECP508	Analog CMOS IC Design Lab
ECP513	Digital CMOS IC Design Lab
ECP514	Digital Image Processing Lab
ECP515	Digital System Synthesis Lab
ECP520	Internet of Things Lab
ECP522	Microwave Engineering Lab
ECP529	Power Electronics Lab
ECP530	Process Control Lab
ECP538	Soft Computing Lab

**CSE electives (Pool 2)**

<b>Code</b>	<b>Subject</b>
CST201	Database Management Systems
CST202	Software Engineering
CST206	Design and Analysis of Algorithms
CST208	Operating Systems
CST301	Theory of Computation
CST302	Compiler Design
CST303	Computer Networks
CST305	Information Systems and Security
CST307	Computer Graphics
CSP201	Database Management Systems Lab
CSP202	Software Engineering Lab
CSP203	Design and Analysis of Algorithms Lab
CSP204	Operating Systems Lab
CSP205	Theory of Computation Lab
CSP206	Compiler Design Lab
CSP207	Computer Networks Lab
CSP208	Information Systems and Security Lab
CSP209	Computer Graphics Lab

**Fractal Electives (Pool 3) :**

<b>Code</b>	<b>Subject</b>
ECT501	Topics on Advanced CMOS and Beyond CMOS
ECT502	Topics on Advanced Digital Signal Processing
ECT503	Topics on Advanced Microprocessors and Microcontrollers
ECT504	Topics on Advanced Microwave Engineering
ECT505	Topics on Advanced Mobile Communication
ECT506	Topics on Advanced Process Control
ECT507	Topics on Advanced Communication Systems
ECT508	Topics on Analog CMOS IC Design
ECT509	Topics on Antennas
ECT510	Topics on Biomedical Measurement and Instrumentation
ECT511	Topics on Cognitive Radio Networks
ECT512	Topics on Computational Electromagnetic
ECT513	Topics on Digital CMOS IC Design
ECT514	Topics on Digital Image Processing
ECT515	Topics on Digital System Synthesis
ECT516	Topics on Discrete Spectral Estimation
ECT517	Topics on Error Correcting Codes
ECT518	Topics on Evolutionary Computation
ECT519	Topics on Fuzzy Logic
ECT520	Topics on Internet of Things
ECT521	Topics on MEMS and NEMS
ECT522	Topics on Microwave Engineering
ECT523	Topics on Mobile Communication
ECT524	Topics on Nanoelectronic Devices Modeling and Simulation
ECT525	Topics on Neural Networks
ECT526	Topics on Pattern Recognition
ECT527	Topics on Phased Array Antenna Design
ECT528	Topics on Plasmonics and Photonics
ECT529	Topics on Power Electronics
ECT530	Topics on Process Control
ECT531	Topics on RF Communication
ECT532	Topics on RF Microelectronics
ECT533	Topics on Radar Engineering
ECT534	Topics on Real Time Systems
ECT535	Topics on Satellite Communication
ECT536	Topics on Semiconductor Optoelectronic Devices
ECT537	Topics on Simulation of Circuits and Devices
ECT538	Topics on Soft Computing



ECT539	Topics on Spread Spectrum Technology
ECT540	Topics on System Identification
ECT541	Topics on Telecom Switching Circuits and Networks
ECT542	Topics on VLSI Devices and Process Simulation

**Humanities electives (Pool 4) :**

<b>Code</b>	<b>Subject</b>
BMT501	Business Economics
BMT502	Industrial Management
BMT503	Intellectual Property Rights and IT Laws
BMT504	Introduction to Globalization
BMT505	Financial Management
BMT506	Marketing Research
BMT507	Operations Management
BMT508	Supply Chain Management
BMT509	Total Quality Management
DET501	Product Design - Planning and Management
HST501	Contemporary India
HST502	Gandhian Thoughts
HST503	Human Resource Development
HST504	Professional Ethics