

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM**  
**CHOICE BASED CREDIT SYSTEM (CBCS)**  
**SCHEME OF TEACHING AND EXAMINATION 2015-2016**  
**B.E. Telecommunication Engineering**

**REVISED SCHEME OF SYLLABUS UPDATED 18.7.2017**

**V SEMESTER**

Sl. No	Subject Code	Title	Teaching Hours /Week		Examination				Credits
			Theory	Practical /Drawing	Duration	Theory/ Practical Marks	I.A. Marks	Total Marks	
1	15EC51	Management and Entrepreneurship	04		03	80	20	100	4
2	15EC52	Digital Signal Processing	04		03	80	20	100	4
3	15EC53	Verilog HDL	04		03	80	20	100	4
4	15EC54	Information Theory and Coding	04		03	80	20	100	4
5	15XX55X	Professional Elective-1	03		03	80	20	100	3
6	15XX56X	Open Elective-1	03		03	80	20	100	3
7	15ECL57	DSP Lab		1I+2P	03	80	20	100	2
8	15ECL58	HDL Lab		1I+2P	03	80	20	100	2
<b>TOTAL</b>			<b>22</b>	<b>06</b>	<b>24</b>	<b>640</b>	<b>160</b>	<b>800</b>	<b>26</b>

<b>Professional Elective-1</b>	
15EC551	Nanoelectronics
15EC552	Switching & Finite Automata Theory
15EC553	Operating System
15EC554	Electrical Engineering Materials
15TE555	Transmission Lines and Wave Guides

**1. Professional Elective:** Elective relevant to chosen specialization/ branch

**2. Open Elective (5<sup>th</sup> & 6<sup>th</sup> Sem):** **OPEN ELECTIVE LIST AND SYLLABUS WILL BE UPDATED SHORTLY**

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**VI SEMESTER**

Sl. No	Subject Code	Title	Teaching Hours /Week		Examination				Credits
			Theory	Practical/Drawing	Duration	Theory/Practical Marks	I.A. Marks	Total Marks	
1	15EC61	Digital Communication	04		03	80	20	100	4
2	15EC62	ARM Microcontroller & Embedded Systems	04		03	80	20	100	4
3	15TE63	Microwave Theory and Antennas	04		03	80	20	100	4
4	15EC64	Computer Communication Networks	04		03	80	20	100	4
5	15XX65X	Professional Elective-2	03		03	80	20	100	3
6	15XX66X	Open Elective-2	03		03	80	20	100	3
7	15ECL67	Embedded Controller Lab		1I+2P	03	80	20	100	2
8	15TEL68	Microwave and Antennas Lab		1I+2P	03	80	20	100	2
<b>TOTAL</b>			<b>22</b>	<b>6</b>	<b>24</b>	<b>640</b>	<b>160</b>	<b>800</b>	<b>26</b>

<b>Professional Elective-2</b>	
15EC651	Cellular Mobile Communication
15EC652	Adaptive Signal Processing
15EC653	Artificial Neural Networks
15EC654	Digital Switching Systems
15TE655	Image Processing

**1. Open Elective (5<sup>th</sup> & 6<sup>th</sup> Sem): OPEN ELECTIVE LIST AND SYLLABUS WILL BE UPDATED SHORTLY**

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**VII SEMESTER**

Sl. No	Subject Code	Title	Teaching Hours /Week		Examination				
			Theory	Practical /Drawing	Duration	I.A. Marks	Theory/ Practical Marks	Total Marks	
1	15TE71	Cryptography and Network Security	04		03	20	80	100	4
2	15TE72	Satellite Communication and Remote sensing	04		03	20	80	100	4
3	15TE73	CMOS VLSI Design	04		03	20	80	100	4
4	15XX74X	Professional Elective-3	03		03	20	80	100	3
5	15XX75X	Professional Elective-4	03		03	20	80	100	3
6	15TEL76	Digital Communication Lab		1I+2P	03	20	80	100	2
7	15TEL77	Computer Communication Networks Lab		1I+2P	03	20	80	100	2
8	15ECP78	Project Work Phase – I + Seminar		-		100	-	100	2
<b>TOTAL</b>			<b>18</b>	<b>6</b>	<b>21</b>	<b>240</b>	<b>560</b>	<b>800</b>	<b>24</b>

Professional Elective-3		Professional Elective-4	
15EC741	Multimedia Communication	15EC751	DSP Algorithms and Architecture
15EC742	Biomedical Signal Processing	15EC752	IOT and Wireless Sensor Networks
15EC743	Real Time Systems	15EC753	Pattern Recognition
15TE744	Modelling and Analysis of Communication Networks	15EC754	Advanced Computer Architecture
15TE745	Radio Frequency ICs	15TE755	High Performance Computing Networks

1. **Project Phase –I + Seminar:** Literature Survey, Problem Identification, Objectives and Methodology. Submission of Synopsis and Seminar.

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**VIII SEMESTER**

Sl. No	Subject Code	Title	Teaching Hours /Week		Examination				Credit
			Theory	Practical/ Drawing	Duration	I.A. Marks	Theory/ Practical Marks	Total Marks	
1	15EC81	Wireless Cellular and LTE 4G Broadband	4	-	3	20	80	100	4
2	15EC82	Fiber Optics and Networks	4	-	3	20	80	100	4
3	15XX83X	Professional Elective-5	3	-	3	20	80	100	3
4	15EC84	Internship/Professional Practice	Industry Oriented		3	50	50	100	2
5	15ECP85	Project Work	-	6	3	100	100	200	6
6	15ECS86	Seminar	-	4	-	100	-	100	1
<b>TOTAL</b>			<b>11</b>	<b>10</b>	<b>15</b>	<b>310</b>	<b>390</b>	<b>700</b>	<b>20</b>

<b>Professional Elective -5</b>	
15EC831	MEMS
15EC832	Speech Processing
15EC833	Radar Engineering
15EC834	Machine Learning
15TE835	ADHOC Wireless Networks

**1. Internship / Professional Practice:** To be carried between the (6<sup>th</sup> and 7<sup>th</sup> Semester) or (7<sup>th</sup> and 8<sup>th</sup> Semester) Vacation period.