

**GURU NANAK DEV ENGINEERING COLLEGE, LUDHIANA**

Syllabus Scheme (3rd and 4th Semester) for Undergraduate degree course in Electronics and Communication Engineering.

<b>Semester-3<sup>rd</sup></b>											
S. No.	Course Type	Course Code	Course Title	Subject Type (Theory/ Practical)	Hours per week			Marks Distribution		Total Marks	Credits
					L	T	P	Internal	External		
1	Basic Science Course	BSEC-101	Engineering Mathematics - III	Theory	3	0	0	40	60	100	3
2	Professional Core Course	PCEC-101	Electronic Devices	Theory	3	0	0	40	60	100	3
3	Professional Core Course	PCEC-102	Network Analysis and Synthesis	Theory	3	1	0	40	60	100	4
4	Professional Core Course	PCEC-103	Signals and Systems	Theory	3	1	0	40	60	100	4
5	Professional Core Course	PCEC-104	Digital Electronics	Theory	3	1	0	40	60	100	4
6	Professional Core Course	PCEC-105	Computer Architecture	Theory	3	0	0	40	60	100	3
7	Mandatory Course	MCEC-101	Environmental Science	Theory	2	0	0	50	-	50	0
8	Professional Core Course	LPCEC-101	Electronic Devices - Laboratory	Practical	0	0	2	30	20	50	1
9	Professional Core Course	LPCEC-102	Digital Electronics - Laboratory	Practical	0	0	2	30	20	50	1
10	Project work and internship in institution/ industry*	TR-101	Training - I	Practical	-	-	-	60	40	100	1
<b>TOTAL</b>					<b>20</b>	<b>3</b>	<b>4</b>	<b>410</b>	<b>440</b>	<b>850</b>	<b>24</b>

**Contact Hours 27+1\*\***

\* Industrial/ Institutional Training will be imparted at the end of 2nd semester in the institute or student can go to industry for 4-weeks

\*\* There will be 1 period per week for Mentoring and Professional Development. The Final evaluation of this course will be done based on the combined assessment of odd and even semester of respective year of study

Semester-4 <sup>th</sup>											
S. No.	Course Type	Course Code	Course Title	Subject Type (Theory/ Practical)	Hours per week			Marks Distribution		Total Marks	Credits
					L	T	P	Internal	External		
1	Professional Core Course	PCEC-106	Analog Circuits	Theory	3	1	0	40	60	100	4
2	Professional Core Course	PCEC-107	Object Oriented Programming using C++ and Data Structures	Theory	3	0	0	40	60	100	3
3	Professional Core Course	PCEC-108	Electromagnetic Field Theory	Theory	3	0	0	40	60	100	3
4	Professional Core Course	PCEC-109	Linear Control Systems	Theory	3	1	0	40	60	100	4
5	Humanities and Social Sciences including Management Course	HSMEC-101	Information Management and Data Analytics	Theory	3	0	0	40	60	100	3
6	Professional Core Course	LPCEC-103	Analog Circuits - Lab	Practical	0	0	2	30	20	50	1
7	Professional Core Course	LPCEC-104	Measurement and Control - Lab	Practical	0	0	2	30	20	50	1
8	Professional Core Course	LPCEC-105	Object Oriented Programming using C++ and Data Structures - Lab	Practical	0	0	2	30	20	50	1
9	Professional Core Course	LPCEC-106	Intelligent Signal Processing - Lab	Practical	0	0	2	30	20	50	1
10	Project work, seminar and internship in institution industry*	PREC-101	Seminar and Technical Report Writing for Engineers	Practical	0	0	2	50	-	50	1
<b>TOTAL</b>					<b>15</b>	<b>2</b>	<b>10</b>	<b>370</b>	<b>380</b>	<b>750</b>	<b>22</b>

**Contact Hours      27+1\***

\* There will be 1 period per week for Mentoring and Professional Development. The Final evaluation of this course will be done based on the combined assessment of odd and even semester of respective year of study

