

**B.E. Electronics and Communication Engineering
Curriculum and Syllabus**

Semester I										
Course Code	Course Title	Category	Periods/Week				C	Maximum Marks		
			L	T	P	S		CIA	ESE	Total
	Theory									
GEA1101	Engineering Mathematics I	BS	3	1	0	2	4	40	60	100
GEA1102	Engineering Physics	BS	2	1	0	1	3	40	60	100
ECB1102	Circuit Analysis	PC	2	1	0	1	3	40	60	100
ECB1103	Electron Devices	PC	3	0	0	1	3	40	60	100
	Theory Cum Practical/Practical Cum Theory									
GEA1106	Technical English	HS	2	0	2	2	3	50	50	100
GEA1107	C Programming	ES	2	0	4	4	4	50	50	100
	Practical									
GEA1111	Engineering Physics Laboratory	BS	0	0	2	0	1	60	40	100
ECB1111	Electric Circuits and Electron Devices Laboratory	PC	0	0	2	0	1	60	40	100
	Mandatory/Employability Enhancement									
GEA1108	Heritage of Tamils	HS	1	0	0	0	1	40	60	100
GEA1109	Indian Constitution	HS	1	0	0	0	0	40	60	100
Total Credits							23			

Semester II										
Course Code	Course Title	Cate gory	Periods/Week				C	Maximum Marks		
			L	T	P	S		CIA	ESE	Total
	Theory									
FLC118X	Language Elective	HS	3	0	0	1	3	40	60	100
GEA1103	Engineering Chemistry	BS	2	1	0	1	3	40	60	100
ECB1121	Electronic Circuits	PC	2	1	0	1	3	40	60	100
	Theory Cum Practical/Theory Cum Project									
GEA1121	Engineering Mathematics II(TCPL)	BS	2	1	2	3	4	50	50	100
EGB1122	Python Programming (TCPR)	PC	2	0	4	4	4	50	50	100
EGB1121	Data Structures (TCPR)	PC	2	0	4	4	4	50	50	100
	Practical									
GEA1112	Engineering Chemistry Laboratory	BS	0	0	2	0	1	60	40	100
ECB1131	Electronic Circuits Laboratory	PC	0	0	2	0	1	60	40	100
	Mandatory/Employability Enhancement									
GEA1123	Career Skill Development I	HS	1	0	0	0	1	40	60	100
GEA1122	Tamils and Technology	HS	1	0	0	0	1	40	60	100
Total Credits							25			

Semester III										
Course Code	Course Title	Cate gory	Periods/Week				C	Maximum Marks		
			L	T	P	S		CI A	ES E	Tota I
	Theory									
ECB1201	Digital Electronics	PC	3	0	0	1	3	40	60	100
ECB1202	Electromagnetic Theory	PC	2	1	0	1	3	40	60	100
ECB1203	Signals and Systems	PC	2	1	0	1	3	40	60	100
GEA1202	Career Skill Development II	HS	1	0	0	0	1	40	60	100
	Theory Cum Practical / Theory Cum Project									
GEA1201	Engineering Mathematics III (TCPL)	BS	2	1	2	3	4	50	50	100
ECB1204	Analog Integrated Circuits (TCPR)	PC	3	0	2	3	4	50	50	100
EGB1201	Java Programming (TCPR)	PC	2	0	4	4	4	50	50	100
	Practical									
ECB1211	Digital Electronics Lab	PC	0	0	2	0	1	60	40	100
ECB1212	Design Thinking	PC	0	0	4	2	2	60	40	100
Total Credits							25			

Semester IV										
Course Code	Course Title	Cate gory	Periods/Week				C	Maximum Marks		
			L	T	P	S		CIA	ESE	Total
	Theory									
ECB1221	Analog and Digital Communication	PC	3	0	0	1	3	40	60	100
ECB1222	Transmission Lines and Waveguides	PC	2	1	0	1	3	40	60	100
ECC12X X	Emerging Elective I	EM	2	1	0	1	3	40	60	100
	Theory Cum Practical/Practical Cum Theory									
ECB1223	Microcontrollers and its Interfacing (TCPR)	PC	3	0	2	3	4	50	50	100
ECB1224	Digital Signal Processing (TCPL)	PC	2	1	2	3	4	50	50	100
EGB1221	Database Management System (TCPR)	PC	2	0	4	4	4	50	50	100
	Practical									
ECB1231	Analog and Digital Communication Laboratory	PC	0	0	2	0	1	60	40	100
GEA1211	Business Communication	HS	0	0	4	2	2	60	40	100
	Mandatory/Employability Enhancement									
GEA1221	Career Skill Development III	HS	1	0	0	0	1	40	60	100
Total Credits							25			

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Semester V												
Course Code	Course Title	Category	Classification	Periods/Week				C	Maximum Marks			QP Pattern
				L	T	P	S		CIA	ESE	Total	
ECB1301	VLSI Design	PC	Theory	2	1	0	3	3	40	60	100	QP2
ECB1302	Computer Communication Networks	PC	TCPL	3	0	2	3	4	50	50	100	QP1
ECB1303	Embedded System and IoT Design	PC	TCPR	3	0	2	3	4	50	50	100	QP1
ECC13XX	Professional Elective I	PE	Theory	3	0	0	3	3	40	60	100	QP2
ECC13XX	Emerging Elective II	EM	PRBL	2	0	2	2	3	60	40	100	-
XXX13XX	Open Elective I	OE	Theory	3	0	0	3	3	40	60	100	QP1
ECB1311	VLSI Design Laboratory	PC	Practical	0	0	2	0	1	60	40	100	-
GEA1301	Career Skill Development IV	HS	Theory	1	0	0	1	1	40	60	100	QP1
Total Credits								22				

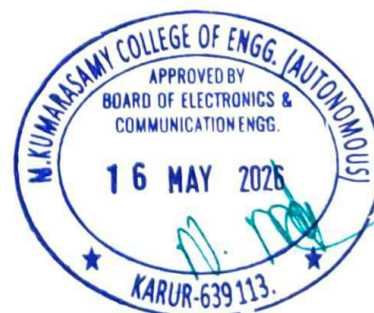
Semester VI												
Course Code	Course Title	Category	Classification	Periods/Week				C	Maximum Marks			QP Pattern
				L	T	P	S		CIA	ESE	Total	
ECB1321	Microwave and Optical Communication	PC	PMBL	2	1	0	3	3	40	60	100	QP2
ECB1322	Wireless Communication	PC	Theory	2	1	0	3	3	40	60	100	QP2
ECB1323	Antenna and Millimeter Wave Communication	PC	TCPR	3	0	2	3	4	50	50	100	QP1
ECC13XX	Professional Elective II	PE	PRBL	2	0	2	2	3	60	40	100	-
ECC13XX	Emerging Elective III	EM	Theory	3	0	0	3	3	40	60	100	QP2
			PMBL	2	1	0	3		40	60		QP2
			PRBL	2	1	2	2		60	40		-
XXX13XX	Open Elective II	OE	Theory	3	0	0	1	3	40	60	100	QP1
ECB1333	Comprehension	PC	Practical	0	0	2	0	1	60	40	100	-
ECB1331	Microwave and Optical Communication Laboratory	PC	Practical	0	0	2	0	1	60	40	100	-
ECB1332	Design Project	PC	Project	0	0	4	0	2	60	40	100	-
Total Credits								23				



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Curriculum (Batch 2024-2028 onwards)**

Semester VII												
Course Code	Course Title	Category	Classification	Periods/Week				C	Maximum Marks			QP Pattern
				L	T	P	S		CIA	ESE	Total	
GEA1104	Universal Human Values	HS	Theory	3	0	0	3	3	40	60	100	QP1
ECB1401	Adhoc and Wireless Sensor Networks	PC	Theory	2	1	0	3	3	40	60	100	QP2
GEA1401	Environmental Sciences	HS	TCPR	2	0	2	2	3	50	50	100	QP1
ECC14XX	Professional Elective III	PE	Theory	2	1	0	3	3	40	60	100	QP2
ECC14XX	Professional Elective IV	PE	Theory	2	1	0	3	3	40	60	100	QP2
ECB1411	Project Phase I	PC	Project	0	0	4	0	2	60	40	100	-
Total Credits								17				

Semester VIII												
Course Code	Course Title	Category	Classification	Periods/Week				C	Maximum Marks			QP pattern
				L	T	P	S		CIA	ESE	Total	
ECB1431	Project Phase II	PC	Project	0	0	16	15	8	60	40	100	-
Total Credits								8				



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Semester VII												
Course Code	Course Title	Category	Classification	Periods/Week				C	Maximum Marks			QP Pattern
				L	T	P	S		CIA	ESE	Total	
GEA14XX	Management Elective Course	MG	Theory	3	0	0	3	3	40	60	100	QP1
ECB1401	Adhoc and Wireless Sensor Networks	PC	Theory	3	0	0	3	3	40	60	100	QP2
GEA1401	Environmental Sciences	HS	TCPR	2	0	2	2	3	50	50	100	QP1
ECC14XX	Professional Elective III	PE	Theory	2	1	0	3	3	40	60	100	QP2
ECC14XX	Professional Elective IV	PE	Theory	2	1	0	3	3	40	60	100	QP2
ECB1411	Project Phase I	PC	Project	0	0	4	0	2	60	40	100	-
Total Credits								20				

Semester VIII												
Course Code	Course Title	Cate gory	Classification	Periods/Week				C	Maximum Marks			QP pattern
				L	T	P	S		CIA	ESE	Total	
ECB1431	Project Phase II	PC	Project	0	0	16	15	8	60	40	100	-
Total Credits								8				

