Faculty of Science, Technology, and Architecture
School of Computer Science and Engineering
Department of Computer and Communication Engineering
Degree: B. Tech. Computer and Communication Engineering
Total Credits: 160

	Third Semester						Fourth Semester				
Code	Subject Name	L	T	P	C	Code	Subject Name	L	T	P	C
MEE20XX	Engineering Economics	3	0	0	3	MAS20XX	Statistics & Probability	3	0	0	3
MBB21XX	Management of Technology	3	0	0	3	CCE2201	Relational Database Management Systems	3	1	0	4
CCE2101	Digital Design and Computer Architecture	3	1	0	4	CCE2202	Operating Systems	3	1	0	4
CCE2102	Data Communication and Computer Networks	3	1	0	4	CCE222X	Flexi Core 2	3	1	0	4
CCE2103	Data Structures and Algorithms	3	1	0	4	CCE22XX	Program Elective 1	3	0	0	3
CCE212X	Flexi Core 1	3	1	0	4	CCE00XX	Open Elective 1	3	0	0	3
CCE2130	Data Communication and Computer Networks Lab	0	0	2	1	CCE2230	Relational Database Management Systems Lab	0	0	2	1
CCE2131	Data Structures and Algorithms Lab	0	0	2	1	CCE2231	Operating Systems Lab	0	0	2	1
CCE2170	Project-based Learning 1	0	0	2	1	CCE2270	Project-based Learning 2	0	0	2	1
	Total Credits	25					Total Credits	24			
	Total Contact Hours (L+T+P)	28					Total Contact Hours (L+T+P)	27			

Faculty of Science, Technology, and Architecture
School of Computer Science and Engineering
Department of Computer and Communication Engineering
Degree: B. Tech. Computer and Communication Engineering
Total Credits: 160

	Fifth Semester					Sixth Semester				
Code	Subject Name	L	T	P	C	Code	Subject Name	L	T	P	C
CCE3101	Design and Analysis of Algorithms	3	1	0	4	CCE3201	Next Generation Communication Systems	3	1	0	4
CCE3102	Artificial Intelligence and Machine Learning	3	1	0	4	CCE32XX	Program Elective 4	3	0	0	3
CCE312X	Flexi Core 3	3	1	0	4	CCE32XX	Program Elective 5	3	0	0	3
CCE31XX	Program Elective 2	3	0	0	3	CCE32XX	Program Elective 6	3	0	0	3
CCE31XX	Program Elective 3	3	0	0	3	CCE00XX	Open Elective 3	3	0	0	3
CCE00XX	Open Elective 2	3	0	0	3	CCE3202	Professional Practice	1	0	0	1
CCE3130	Design and Analysis of Algorithms Lab	0	0	2	1	CCE3230	Next Generation Communication Systems Lab	0	0	2	1
CCE3131	Artificial Intelligence and Machine Learning Lab	0	0	2	1	CCE3231	Competitive Programming	0	0	2	1
CCE3170	Project-based Learning 3	0	0	2	1	CCE3270	Project-based Learning 4	0	0	6	3
	Total Credits		24				Total Credits		22		
	Total Contact Hours (L+T+P)		**27**				Total Contact Hours (L+T+P)		**26**		

Faculty of Science, Technology, and Architecture
School of Computer Science and Engineering
Department of Computer and Communication Engineering
Degree: B. Tech. Computer and Communication Engineering
Total Credits: 160

	Seventh Semester					Eighth Semester					
Code	Subject Name	L	T	P	C	Code	Subject Name	L	T	P	C
CCE41XX	Program Elective 7	3	0	0	3	CCE4270	Major Project				12
CCE41XX	Program Elective 8	3	0	0	3						
CCE00XX	Open Elective 4	3	0	0	3						
CCE00XX	Open Elective 5	3	0	0	3						
CCE4170	Internship (Industry or Research)	0	0	2	1						
	Total Credits	13					Total Credits	12			
	Total Contact Hours (L+T+P)	**14**					Total Contact Hours (L+T+P)	**12**			

Faculty of Science, Technology, and Architecture
School of Computer Science and Engineering
Department of Computer and Communication Engineering
Degree: B. Tech. Computer and Communication Engineering
Total Credits: 160

Flexi Core

Flexi Core 1	Flexi Core 2	Flexi Core 3
CCE2120: Object Oriented Programming using C++ CCE2121: Object Oriented Programming using Java	CCE2220: Software Engineering CCE2221: Automata theory	CCE3120: Digital Image Processing and Computer Vision CCE3121: Cloud and Edge Computing
Program Electives		
Sem IV – PE1	**Sem V – PE2**	**Sem V – PE3**	**Sem VI – PE4**
CCE2240: Foundation of Data Science CCE2241: Web Programming CCE2242: Cryptography and Network Security	CCE3140: Soft Computing CCE3141: Information System Security CCE3142: Information System Auditing, Control, and Assurance	CCE3143: Advanced Internet Technologies CCE3144: Deep Learning CCE3145: Foundations of Blockchain Technology	CCE3240: Principles of Web Services CCE3241: Big Data Analytics CCE3242: Foundation of Digital Forensics
Sem VI – PE5	**Sem VI – PE6**	**Sem VII – PE7**	**Sem VII – PE8**
CCE3243: DevOps Fundamentals CCE3244: Recommender Systems CCE3245: Cloud Security	CCE3246: Microservices Architecture CCE3247: Image and Video Analytics CCE3248: Network Vulnerabilities	CCE4140: Social Network Analysis CCE4141: Human-Computer Interaction CCE4142: Natural Language Processing	CCE4143: Mobile Application Development CCE4144: Information Retrieval CCE4145: Wireless Sensors & Adhoc Networks

Open Electives

Graded OE	Non-Graded OE
OE1 CCE0001: Introduction to Data Structures OE2 CCE 0002: Software Testing OE3 CCE0003: Introduction to Operating Systems	