

Curriculum Format
Programme Name:
Programme School:
Curriculum applicable to
Curriculum Version:
Approved by & Date

B. Tech. Computer Science and Engineering Computer Science and Engineering (SCOPE) AY 2021-22 2.0 11th Academic Council, 22-11-2023

Course Code BIC4002					Р			
	Credit Requirements> Category	Course Title	Ver.	Т		92 C	Pre/Co-Requisite	Course Discipline
DIC4002	Projects and Internships	All are compulsory courses except for choices	1	Ė		24	,,quione	Discipline
	. rojecto una internompo	Industrial Internship/ Senior Design Project	2	n		12		Engineering
CAP4001		Capstone	1	0		6		Engineering
SIT1001		Summer Internship	1			2		
							None	Engineering
ECS2002		Engineering Clinics - System Design	1				None	Engineering
ECS3001		Engineering Clinics - Real Time System	1		4	2		Engineering
MEC1002		Engineering Graphics	1	0	4	2	None	Engineering
	Engineering Foundation	All are compulsory		Ļ.		16		
CSE1012		Problem Solving using Python	1	3		4		Engineering
CSE2005		Object Oriented Programming	1	3		4	None	Engineering
CSE2001		Data Structures and Algorithms	1.1	3	2	4	None	Engineering
ECE1002		Fundamentals of Electrical and Electronics Engineering	1.1	3	2	4	None	Engineering
	Humanities and Management	All are compulsory courses except for choices				27		
TECH3001	-	Design Thinking	1	3	0	3	None	Technology
MGT2015		Entrepreneurship	1		0		None	Management
MGT1001		Ethics and Values	2			2	None	Humanities
STS1002/ISTS1004		Fundamentals of Aptitude (or) Introduction to Problem Solving	1.1	0	2		None	Humanities
STS1007/ISTS1009		Arithmetic problem solving (or) Introduction to quantitative, logical and verbal ability	1		2	3		Humanities
STS2006/ISTS2008		Getting started to skill enhancement (or) Numerical ability and cognitive intelligence	1.1		2	3	STS1007/STS1009	Humanities
STS2007/ISTS2009		Enhancing problem solving skills (or) Advanced aptitude and reasoning skills	1	0		3		Humanities
3132307,13132333		Any two English courses depending on SKEPT result	1	Ť	~	6	3132300/3132300	Transaction
ENG1001		English for Essential Communication	1.1	2	2	3	SKEPT	Humanities
ENG1002		English for Effective Communication	1.1				SKEPT/ ENG1001	Humanities
ENG2001		English for Professional Communication	1.1	2	4		ENG1002	Humanities
FB14004		Any one Foreign Language course	+-	L	_	2	AL	11
FRL1001		Basic French	1	2		2	None	Humanities
FRL1004		Basic Spanish	1			2		Humanities
FRL1005		Basic German	1			2		Humanities
FRL1006		Basic Japanese	1	2	0	2	None	Humanities
	Technology Foundation	Any one course	1			3		
ECE2001		Analog Devices and Circuits	1.1		2	4	ECE1001/ECE1002	Engineering
ECE2005		Signals and Systems	2	4	0	4	MAT1001	Engineering
ECE1008		Sensors and Control Systems	1	3	2	4	None	Engineering
MEC2002		Thermodynamics	2	4	0	4	None	Engineering
MECxxxx		Introduction to Digital Manufacturing	1	3	0	3	None	Engineering
MEC1008		Engineering Mechanics	1		0	4		Engineering
HUMxxxx		Introduction to Economics for Engineers	1		0			Humanities
CSE1006		Foundations for Data Analytics	1		2	3		Engineering
CSE1007		Introduction to Cryptography	2	3		4	None	Engineering
CSE2003		Requirements Engineering Management	1		0	3		Engineering
CSE3002		Artificial Intelligence	1	3		4		Engineering
CSE1017		Introduction to Geographical Information Systems	1				None	Engineering
ECE1003		Digital Logic Design	1.1				ECE1001/ECE1002	Engineering
2021005		Signal Eagle Seagn	1.1	j	Ĩ	Ė	2021001/2021002	Engineering
	Science Basket	All are Compulsory		Т	7	20		
MAT1001	out the basic	Calculus for Engineers	1	3		4		Science
MAT1001 MAT1002		Applications of Differential and Difference Equations	2		2		MAT1001	Science
		Applied Statistics				4		Science
				2				Science
MAT1011			2	3				Science
PHY1008		Modern Physics	2	3	4	4	None	Calanas
								Science
PHY1008		Modern Physics Chemistry and Environmental Studies	1	3			None	Science
PHY1008		Modern Physics	2	3			None	Science
PHY1008 CHY1009		Modern Physics Chemistry and Environmental Studies	1	3			None	Science
PHY1008 CHY1009 Programme Core Mi	n. Credit Requirements>	Modern Physics Chemistry and Environmental Studies Co/Extra Curricular [Compulsory]	2	3		2 36		
PHY1008 CHY1009 Programme Core Mi Course Code	n. Credit Requirements> Category	Modern Physics Chemistry and Environmental Studies Co/Extra Curricular [Compulsory] Course Title	2 1 2 Ver.	3 3		2 36 C	Pre-Requisite	Course Discipline
PHY1008 CHY1009 Programme Core Mi Course Code ECE1003		Modern Physics Chemistry and Environmental Studies Co/Extra Curricular [Compulsory] Course Title Digital Logic Design	2 1 2 Ver. 1.1	3 3 T 3	2	2 36 C	Pre-Requisite ECE1001/ECE1002	Course Discipline Engineering
PHY1008 CHY1009 Programme Core Mi Course Code ECE1003 MAT1003		Modern Physics Chemistry and Environmental Studies Co/Extra Curricular [Compulsory] Course Title Digital Logic Design Discrete Mathematical Structures	2 1 2 Ver. 1.1 2	3 3 T 3 4	2	2 36 C 4	Pre-Requisite ECE1001/ECE1002 None	Course Discipline Engineering Science
PHY1008 CHY1009 Programme Core Mi Course Code ECE1003 MAT1003 CSE3004		Modern Physics Chemistry and Environmental Studies Co/Extra Curricular [Compulsory] Course Title Digital Logic Design Discrete Mathematical Structures Design and Analysis of Algorithms	2 1 2 Ver. 1.1 2	3 3 T 3 4 3	0	2 36 C 4 4	Pre-Requisite ECE1001/ECE1002 None CSE2001	Course Discipline Engineering
PHY1008 CHY1009 Programme Core Mi Course Code ECE1003 MAT1003 CSE3004 CSE2008		Modern Physics Chemistry and Environmental Studies Co/Extra Curricular [Compulsory] Course Title Digital Logic Design Discrete Mathematical Structures Design and Analysis of Algorithms Operating Systems	2 1 2 Ver. 1.1 2 1 1.1	3 3 T 3 4 3 3	2 2 2	2 36 C 4 4 4	Pre-Requisite	Course Discipline Engineering Science Engineering Engineering
PHY1008 CHY1009 Programme Core Mi Course Code ECE1003 MAT1003 CSE3004		Modern Physics Chemistry and Environmental Studies Co/Extra Curricular [Compulsory] Course Title Digital Logic Design Discrete Mathematical Structures Design and Analysis of Algorithms	2 1 2 Ver. 1.1 2 1 1.1	3 3 T 3 4 3 3	2 2 2 2	2 36 C 4 4 4 4	Pre-Requisite ECE1001/ECE1002 None CSE2001 None None	Course Discipline Engineering Science Engineering
PHY1008 CHY1009 Programme Core Mi Course Code ECE1003 MAT1003 CSE3004 CSE2008		Modern Physics Chemistry and Environmental Studies Co/Extra Curricular [Compulsory] Course Title Digital Logic Design Discrete Mathematical Structures Design and Analysis of Algorithms Operating Systems	2 1 2 Ver. 1.1 2 1 1.1	3 3 T 3 4 3 3	2 2 2 2	2 36 C 4 4 4 4	Pre-Requisite	Course Discipline Engineering Science Engineering Engineering
PHY1008 CHY1009 Programme Core Mi Course Code ECE1003 MAT1003 CSE3004 CSE2008 CSE2008 CSE2008		Modern Physics Chemistry and Environmental Studies Co/Extra Curricular [Compulsory] Course Title Digital Logic Design Discrete Mathematical Structures Design and Analysis of Algorithms Operating Systems Software Engineering	2 1 2 Ver. 1.1 2 1 1.1 1 1 1	T 3 4 3 3 3 3	2 2 2 2 2 2	2 36 C 4 4 4 4 4	Pre-Requisite ECE1001/ECE1002 None CSE2001 None None CSE2001 CSE2001 CSE2005	Course Discipline Engineering Science Engineering Engineering Engineering Engineering
PHY1008 CHY1009 Programme Core Mi Course Code ECE1003 MAT1003 CSE3004 CSE2008 CSE1005 CSE2007		Modern Physics Chemistry and Environmental Studies Co/Extra Curricular [Compulsory] Course Title Digital Logic Design Discrete Mathematical Structures Design and Analysis of Algorithms Operating Systems Software Engineering Database Management Systems Computer Networks Computer Architecture and Organization	2 1 2 Ver. 1.1 2 1 1.1 1 1 1	T 3 4 3 3 3 3	2 2 2 2 2 2	2 36 C 4 4 4 4 4 4	Pre-Requisite ECE1001/ECE1002 None CSE2001 None None CSE2001	Course Discipline Engineering Science Engineering Engineering Engineering Engineering Engineering
PHY1008 CHY1009 Programme Core Mi Course Code ECE1003 MAT1003 CSE3004 CSE2008 CSE1005 CSE2007 CSE3003		Modern Physics Chemistry and Environmental Studies Co/Extra Curricular [Compulsory] Course Title Digital Logic Design Discrete Mathematical Structures Design and Analysis of Algorithms Operating Systems Software Engineering Database Management Systems Computer Networks	2 1 2 Ver. 1.1 2 1 1.1 1 1 1	T 3 4 3 3 3 3 4	2 2 2 2 2 2	2 36 C 4 4 4 4 4 4 4 4	Pre-Requisite ECE1001/ECE1002 None CSE2001 None None CSE2001 CSE2001 CSE2005	Course Discipline Engineering Science Engineering Engineering Engineering Engineering Engineering Engineering
PHY1008 CHY1009 Programme Core Mi Course Code ECE1003 MAT1003 CSE3004 CSE2008 CSE2007 CSE2007 CSE3003 ECE2002		Modern Physics Chemistry and Environmental Studies Co/Extra Curricular [Compulsory] Course Title Digital Logic Design Discrete Mathematical Structures Design and Analysis of Algorithms Operating Systems Software Engineering Database Management Systems Computer Networks Computer Architecture and Organization	2 1 2 Ver. 1.1 2 1 1.1 1 1 1 2	T 3 4 3 3 3 3 4	2 2 2 2 2 2 0	2 36 C 4 4 4 4 4 4 4 4	Pre-Requisite ECE1001/ECE1002 None CSE2001 None None CSE2001 CSE2001 CSE2005 ECE1003	Course Discipline Engineering Science Engineering Engineering Engineering Engineering Engineering Engineering Engineering Engineering
PHY1008 CHY1009 Programme Core Mi Course Code ECE1003 MAT1003 CSE3004 CSE2008 CSE1005 CSE2007 CSE3003 ECE2002 CSE1008		Modern Physics Chemistry and Environmental Studies Co/Extra Curricular [Compulsory] Course Title Digital Logic Design Discrete Mathematical Structures Design and Analysis of Algorithms Operating Systems Software Engineering Database Management Systems Computer Networks Computer Architecture and Organization Theory of Computation	2 1 2 Ver. 1.1 2 1 1.1 1 1 1 2	T 3 4 3 3 3 3 4	2 2 2 2 2 2 0	2 36 C 4 4 4 4 4 4 4 4	Pre-Requisite ECE1001/ECE1002 None CSE2001 None None CSE2001 CSE2001 CSE2005 ECE1003	Course Discipline Engineering Science Engineering Engineering Engineering Engineering Engineering Engineering Engineering Engineering
PHY1008 CHY1009 Programme Core Mi Course Code ECE1003 MAT1003 CSE3004 CSE2008 CSE1005 CSE2007 CSE3003 ECE2002 CSE1008	Category	Modern Physics Chemistry and Environmental Studies Co/Extra Curricular [Compulsory] Course Title Digital Logic Design Discrete Mathematical Structures Design and Analysis of Algorithms Operating Systems Software Engineering Database Management Systems Computer Networks Computer Architecture and Organization Theory of Computation Course Title	2 1 2 Ver. 1.1 2 1 1.1 1 1 1 2	T 3 4 3 3 3 3 4 4	2 2 2 2 2 2 0	2 36 C 4 4 4 4 4 4 4 4 4	Pre-Requisite ECE1001/ECE1002 None CSE2001 None None CSE2001 CSE2001 CSE2005 ECE1003	Course Discipline Engineering Science Engineering Engineering Engineering Engineering Engineering Engineering Engineering Engineering
PHY1008 CHY1009 Programme Core Mi Course Code ECE1003 MAT1003 CSE3004 CSE2008 CSE1005 CSE2007 CSE3003 ECE2002 CSE1008 Programme Elective Course Code	Category s Min. Credit Requirements	Modern Physics Chemistry and Environmental Studies Co/Extra Curricular [Compulsory] Course Title Digital Logic Design Discrete Mathematical Structures Design and Analysis of Algorithms Operating Systems Software Engineering Database Management Systems Computer Networks Computer Architecture and Organization Theory of Computation	2 1 2 Ver. 1.1 2 1 1.1 1 1 2 2 2	T 3 4 3 3 3 3 4 4	2 2 2 2 2 0 0	2 36 C 4 4 4 4 4 4 4 4 4 4 C	Pre-Requisite ECE1001/ECE1002 None CSE2001 None None CSE2001 CSE2005 ECE1003 None Pre-Requisite	Course Discipline Engineering Science Engineering
PHY1008 CHY1009 Programme Core Mi Course Code ECE1003 MAT1003 CSE3004 CSE2008 CSE2007 CSE2007 CSE2007 CSE3003 ECE2002 CSE1008 Programme Elective	Category s Min. Credit Requirements	Modern Physics Chemistry and Environmental Studies Co/Extra Curricular [Compulsory] Course Title Digital Logic Design Discrete Mathematical Structures Design and Analysis of Algorithms Operating Systems Software Engineering Database Management Systems Computer Networks Computer Architecture and Organization Theory of Computation Course Title	2 1 2 Ver. 1.1 2 1 1.1 1 1 2 2 2	3 3 4 3 3 3 3 4 4 4	2 2 2 2 2 0 0	2 36 C 4 4 4 4 4 4 4 4 4 7 C	Pre-Requisite ECE1001/ECE1002 None CSE2001 None None CSE2001 CSE2001 CSE2001 CSE2005 ECE1003 None	Course Discipline Engineering Science Engineering
PHY1008 CHY1009 Programme Core Mi Course Code ECE1003 MAT1003 CSE3004 CSE2008 CSE1005 CSE2007 CSE3003 ECE2002 CSE1008 Programme Elective Course Code	Category s Min. Credit Requirements	Modern Physics Chemistry and Environmental Studies Co/Extra Curricular [Compulsory] Course Title Digital Logic Design Discrete Mathematical Structures Design and Analysis of Algorithms Operating Systems Software Engineering Database Management Systems Computer Networks Computer Architecture and Organization Theory of Computation	2	3 3 4 3 3 3 3 4 4	2 2 2 2 2 2 0 0	2 36 C 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Pre-Requisite ECE1001/ECE1002 None CSE2001 None None CSE2001 CSE2005 ECE1003 None Pre-Requisite	Course Discipline Engineering Science Engineering Engineering Engineering Engineering Engineering Engineering Engineering Engineering Engineering Course Discipline
PHY1008 CHY1009 Programme Core Mi Course Code ECE1003 MA71003 CSE3004 CSE2007 CSE3003 ECE2007 CSE3003 ECE2002 CSE1008 Programme Elective Course Code MA72003 CSE4005	Category s Min. Credit Requirements	Modern Physics Chemistry and Environmental Studies Co/Extra Curricular [Compulsory] Course Title Digital Logic Design Discrete Mathematical Structures Design and Analysis of Algorithms Operating Systems Software Engineering Database Management Systems Computer Networks Computer Architecture and Organization Theory of Computation Theory of Computation Course Title Any course to fulfill the basket requirements Optimization Techniques Data Warehousing and Data Mining	2	T 3 4 3 3 3 4 4 4 T T 3 3 3	2 2 2 2 2 2 0 0	2 36 C 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Pre-Requisite ECE1001/ECE1002 None CSE2001 None CSE2001 CSE2001 CSE2005 ECE1003 None Pre-Requisite MAT1001	Course Discipline Engineering Science Engineering
PHY1008 CHY1009 Programme Core Mi Course Code ECE1003 MAT1003 CSE3004 CSE2008 CSE1005 CSE2007 CSE3003 ECE2002 CSE1008 Programme Elective Course Code MAT2003 CSE4005 CSE4005 CSE4005	Category s Min. Credit Requirements	Modern Physics Chemistry and Environmental Studies Co/Extra Curricular [Compulsory] Course Title Digital Logic Design Discrete Mathematical Structures Design and Analysis of Algorithms Operating Systems Software Engineering Database Management Systems Computer Networks Computer Architecture and Organization Theory of Computation Course Title Any course to fulfill the basket requirements Optimization Techniques Data Warehousing and Data Mining Network Programming	Ver. 1.1 1 1 1 1 1 1 1 1	3 3 4 3 3 3 3 4 4 7	2 2 2 2 2 0 0 0 P 2 2 2	2 36 C 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Pre-Requisite ECE1001/ECE1002 None CSE2001 None CSE2001 CSE2005 ECE1003 None Pre-Requisite MAT1001 CSE2007/SWE2006 CSE3003	Course Discipline Engineering Science Engineering Course Discipline Science
PHY1008 CHY1009 Programme Core Mi Course Code ECE1003 MAT1003 CSE3004 CSE2008 CSE2007 CSE3003 ECE2002 CSE1008 Programme Elective Course Code MAT2003 CSE4005 CSE4005 CSE5001	Category s Min. Credit Requirements	Modern Physics Chemistry and Environmental Studies Co/Extra Curricular [Compulsory] Course Title Digital Logic Design Discrete Mathematical Structures Design and Analysis of Algorithms Operating Systems Software Engineering Database Management Systems Computer Networks Computer Networks Computer Architecture and Organization Theory of Computation Course Title Any course to fulfill the basket requirements Optimization Techniques Data Warehousing and Data Mining Network Programming Secure Coding	Ver. 1.1 1 1 1 2 2 2 Ver. 1.1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	T 3 3 3 3 4 4 4 T T 3 3 3 3 3 3 3 3 3 3	2 2 2 2 2 0 0 0 P 2 2 2 2 2	2 36 C 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Pre-Requisite ECE1001/ECE1002 None CSE2001 None CSE2001 CSE2005 ECE1003 None Pre-Requisite MAT1001 CSE2007/SWE2006 CSE3003 CSE3003 CSE3001	Course Discipline Engineering Science Engineering
PHY1008 CHY1009 Programme Core Mi Course Code ECE1003 MAT1003 CSE3004 CSE2007 CSE3003 ECE2007 CSE3003 ECE2002 CSE1008 Programme Elective Course Code MAT2003 CSE4005 CSE3011 CSE2010 CSE3015	Category s Min. Credit Requirements	Modern Physics Chemistry and Environmental Studies Co/Extra Curricular [Compulsory] Course Title Digital Logic Design Discrete Mathematical Structures Design and Analysis of Algorithms Operating Systems Software Engineering Database Management Systems Computer Networks Computer Networks Computer Architecture and Organization Theory of Computation Theory of Computation Course Title Any course to fulfill the basket requirements Optimization Techniques Data Warehousing and Data Mining Network Programming Secure Coding Natural Language Processing	2	T 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	2 2 2 2 2 0 0 0 P 2 2 2 2 2 2	2 36 C 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Pre-Requisite ECE1001/ECE1002 None CSE2001 None None CSE2001 CSE2005 ECE1003 None Pre-Requisite MAT1001 CSE2007/SWE2006 CSE3003 CSE2001 None	Course Discipline Engineering Science Engineering
PHY1008 CHY1009 Programme Core Mi Course Code ECE1003 MAT1003 CSE3004 CSE2007 CSE3003 ECE2007 CSE3003 ECE2002 CSE1008 Programme Elective Course Code MAT2003 CSE4005 CSE3011 CSE3011 CSE3015 CSE3015 CSE3015	Category s Min. Credit Requirements	Modern Physics Chemistry and Environmental Studies Co/Extra Curricular [Compulsory] Course Title Digital Logic Design Discrete Mathematical Structures Design and Analysis of Algorithms Operating Systems Software Engineering Database Management Systems Computer Networks Computer Architecture and Organization Theory of Computation Course Title Any course to fulfill the basket requirements Optimization Techniques Data Warehousing and Data Mining Network Programming Secure Coding Natural Language Processing Knowledge Representation and Reasoning	2 1 2 2	T 3 4 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	2 2 2 2 2 2 0 0 0 P 2 2 2 2 2 2 2 2	2 36 C 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Pre-Requisite ECE1001/ECE1002 None CSE2001 None CSE2001 CSE2005 ECE1003 None Pre-Requisite MAT1001 MAT1001 CSE2007/SWE2006 CSE3003 CSE2001 None None	Course Discipline Engineering Science Engineering
PHY1008 CHY1009 Programme Core Mi Course Code ECE1003 MAT1003 CSE3004 CSE2008 CSE2007 CSE3003 ECE2002 CSE1008 Programme Elective Course Code MAT2003 CSE4005 C	Category s Min. Credit Requirements	Modern Physics Chemistry and Environmental Studies Co/Extra Curricular [Compulsory] Course Title Digital Logic Design Discrete Mathematical Structures Design and Analysis of Algorithms Operating Systems Software Engineering Database Management Systems Computer Networks Computer Architecture and Organization Theory of Computation Course Title Any course to fulfill the basket requirements Optimization Techniques Data Warehousing and Data Mining Network Programming Secure Coding Natural Language Processing Knowledge Representation and Reasoning Distributed Systems	Ver. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	T 3 4 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	2 2 2 2 2 2 0 0 0 0 P 2 2 2 2 2 2 2 2 2 2 2 0 0 0 0 0 0 0 0	2 36 C 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Pre-Requisite ECE1001/ECE1002 None CSE2001 None CSE2001 CSE2005 ECE1003 None Pre-Requisite MAT1001 CSE2007/SWE2006 CSE3003 CSE3003 CSE3001 None None	Course Discipline Engineering Science Engineering
PHY1008 CHY1009 Programme Core Mi Course Code ECE1003 MAT1003 CSE3004 CSE2007 CSE3003 ECE2002 CSE1008 Programme Elective Course Code MAT2003 CSE4005 CSE3011 CSE2010 CSE3015 CSE2010 CSE3015 CSE2010 CSE3015 CSE3015 CSE3015 CSE3015 CSE3015 CSE3015 CSE3005 CSE3005 CSE3005 CSE3005 CSE3005	Category s Min. Credit Requirements	Modern Physics Chemistry and Environmental Studies Co/Extra Curricular [Compulsory] Course Title Digital Logic Design Discrete Mathematical Structures Design and Analysis of Algorithms Operating Systems Software Engineering Database Management Systems Computer Networks Computer Networks Computer Architecture and Organization Theory of Computation Theory of Computation Theory of Tomputation Course Title Any course to fulfill the basket requirements Optimization Techniques Data Warehousing and Data Mining Network Programming Secure Coding Natural Language Processing Knowledge Representation and Reasoning Distributed Systems Parallel Computing	Ver. 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1.1 1	T 3 4 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	2 2 2 2 2 0 0 0 2 2 2 2 2 2 2 2 2 2 2 2	2 36 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Pre-Requisite ECE1001/ECE1002 None CSE2001 None CSE2001 CSE2001 CSE2005 ECE1003 None Pre-Requisite MAT1001 CSE2007/SWE2006 CSE3003 CSE2001 None None None CSE2001 SE2007/SWE2006 CSE2001 SE2001 SE2001 SE2001 SE2001 SE2001 SE2001 SE2003 CSE2001 SE2003 CSE2001 SE2003 CSE2003 CSE2003 CSE2008 CSE2008	Course Discipline Engineering Science Engineering
PHY1008 CHY1009 Programme Core Mi Course Code ECE1003 MAT1003 CSE3004 CSE2008 CSE2007 CSE2008 ECE2002 CSE1008 Programme Elective Course Code MAT2003 CSE3001	Category s Min. Credit Requirements	Modern Physics Chemistry and Environmental Studies Co/Extra Curricular [Compulsory] Course Title Digital Logic Design Discrete Mathematical Structures Design and Analysis of Algorithms Operating Systems Software Engineering Database Management Systems Computer Networks Computer Networks Computer Architecture and Organization Theory of Computation Course Title Any course to fulfill the basket requirements Optimization Techniques Data Warehousing and Data Mining Network Programming Secure Coding Natural Language Processing Knowledge Representation and Reasoning Distributed Systems Parallel Computing Parallel Computing Agile Development Process	2 1 2 1 1 1 1 1 1 1	T 3 4 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	2 2 2 2 2 0 0 0 2 2 2 2 2 2 2 2 2 2 2 2	2 36 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Pre-Requisite ECE1001/ECE1002 None CSE2001 None CSE2001 CSE2001 CSE2005 ECE1003 None Pre-Requisite MAT1001 CSE2007/SWE2006 CSE3003 CSE2001 None None CSE2001 CSE2001/CSE2002/SWE2001 CSE2001/CSE2003/SWE1002	Course Discipline Engineering Science Engineering
PHY1008 CHY1009 Programme Core Mi Course Code ECE1003 MAT1003 CSE3004 CSE2008 CSE2007 CSE3003 ECE2002 CSE1008 Programme Elective Course Code MAT2003 CSE4005 CSE4005 CSE2010 CSE3001 CSE3001 CSE3001 CSE3001 CSE3001 CSE3005 CSE4007 CSE3005 CSE4003 CSE4003 CSE3001 CSE3001 CSE3001 CSE3001	Category s Min. Credit Requirements	Modern Physics Chemistry and Environmental Studies Co/Extra Curricular [Compulsory] Course Title Digital Logic Design Discrete Mathematical Structures Design and Analysis of Algorithms Operating Systems Software Engineering Database Management Systems Computer Networks Computer Networks Computer Architecture and Organization Theory of Computation Course Title Any course to fulfill the basket requirements Optimization Techniques Data Warehousing and Data Mining Network Programming Secure Coding Natural Language Processing Knowledge Representation and Reasoning Distributed Systems Parallel Computing Agile Development Process Digital Image Processing	Ver. 1.1	T 3 4 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	2 2 2 0 0 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 36 C 4 4 4 4 4 4 4 4 4 4 4 4 4	Pre-Requisite ECE1001/ECE1002 None CSE2001 None CSE2001 CSE2005 ECE1003 None Pre-Requisite MAT1001 CSE2007/SWE2006 CSE3003 CSE2001 None CSE2008 CSE2003/CSE2003/SWE2001 CSE1005/CSE1003/SWE1002 None	Course Discipline Engineering Science Engineering
PHY1008 CHY1009 Programme Core Mi Course Code ECE1003 MAT1003 CSE3004 CSE2007 CSE3003 ECE2002 CSE1008 Programme Elective Course Code MAT2003 CSE4005 CSE3011 CSE2010 CSE3015 CSE2012 CSE3015 C	Category s Min. Credit Requirements	Modern Physics Chemistry and Environmental Studies Co/Extra Curricular [Compulsory] Course Title Digital Logic Design Discrete Mathematical Structures Design and Analysis of Algorithms Operating Systems Software Engineering Database Management Systems Computer Networks Computer Networks Computer Architecture and Organization Theory of Computation Course Title Any course to fulfill the basket requirements Optimization Techniques Data Warehousing and Data Mining Network Programming Secure Coding Natural Language Processing Knowledge Representation and Reasoning Distributed Systems Parallel Computing Parallel Computing Agile Development Process	Ver. 1.1 1 1 1 1 1 1 1 1	T 3 4 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	2 2 2 0 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 36 C 4 4 4 4 4 4 4 4 4 4 4 4 4	Pre-Requisite ECE1001/ECE1002 None CSE2001 None CSE2001 CSE2005 ECE1003 None Pre-Requisite MAT1001 CSE2007/SWE2006 CSE3003 CSE2001 None None CSE2001 CSE2001 CSE2001 CSE2007/SWE2006 CSE3003 CSE2001 CSE2001 CSE2001 CSE2005 CSE2001 CSE2008 CSE2001 CSE2008 CSE2001/CSE2002/SWE2001 CSE1005/CSE1003/SWE1002 CSE1006	Course Discipline Engineering Science Engineering
PHY1008 CHY1009 Programme Core Mi Course Code ECE1003 MAT1003 CSE3004 CSE2008 CSE2007 CSE3003 ECE2002 CSE1008 Programme Elective Course Code MAT2003 CSE4005 CSE4005 CSE4005 CSE4005 CSE3001	Category s Min. Credit Requirements	Modern Physics Chemistry and Environmental Studies Co/Extra Curricular [Compulsory] Course Title Digital Logic Design Discrete Mathematical Structures Design and Analysis of Algorithms Operating Systems Software Engineering Database Management Systems Computer Networks Computer Networks Computer Architecture and Organization Theory of Computation Course Title Any course to fulfill the basket requirements Optimization Techniques Data Warehousing and Data Mining Network Programming Secure Coding Natural Language Processing Knowledge Representation and Reasoning Distributed Systems Parallel Computing Agile Development Process Digital Image Processing	Ver. 1.1 1 1 1 1 1 1 1 1	T 3 4 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	2 2 2 0 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 36 C 4 4 4 4 4 4 4 4 4 4 4 4 4	Pre-Requisite ECE1001/ECE1002 None CSE2001 None CSE2001 CSE2005 ECE1003 None Pre-Requisite MAT1001 CSE2007/SWE2006 CSE3003 CSE2001 None CSE2008 CSE2003/CSE2003/SWE2001 CSE1005/CSE1003/SWE1002 None	Course Discipline Engineering Science Engineering
PHY1008 CHY1009 Programme Core Mi Course Code ECE1003 MAT1003 CSE3004 CSE2007 CSE3003 ECE2007 CSE3003 ECE2002 CSE1008 Programme Elective Course Code MAT2003 CSE4005 CSE3011 CSE2010 CSE3015 CSE2012 CSE3015 CSE2012 CSE3005 CSE3005 CSE3005 CSE3001 CSE3005 CSE3005 CSE3005 CSE3007 CSE3005 CSE3005 CSE3005 CSE3005 CSE3005 CSE3005 CSE3005 CSE3005 CSE3005 CSE3007 CSE3007 CSE3007 CSE3007 CSE3007 CSE3007 CSE3007 CSE3007	Category s Min. Credit Requirements	Modern Physics Chemistry and Environmental Studies Co/Extra Curricular [Compulsory] Course Title Digital Logic Design Discrete Mathematical Structures Design and Analysis of Algorithms Operating Systems Software Engineering Database Management Systems Computer Networks Computer Architecture and Organization Theory of Computation Theory of Computation Course Title Any course to fulfill the basket requirements Optimization Techniques Data Warehousing and Data Mining Network Programming Secure Coding Natural Language Processing Knowledge Representation and Reasoning Distributed Systems Parallel Computing Agile Development Process Digital Image Processing Social Network Analysis	Ver. 1.1 1 1 1 1 1 1 1 1	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	2 2 2 0 0 0 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 36 C 4 4 4 4 4 4 4 4 4 4 4 4 4	Pre-Requisite ECE1001/ECE1002 None CSE2001 None CSE2001 CSE2005 ECE1003 None Pre-Requisite MAT1001 CSE2007/SWE2006 CSE3003 CSE2001 None None None SE2001/CSE2002/SWE2001 None None None None None None CSE2008 CSE2001/CSE2003/SWE1002 None CSE1005/CSE1003/SWE1002 None None CSE1006 None	Course Discipline Engineering Science Engineering Science Engineering
PHY1008 CHY1009 Programme Core Mi Course Code ECE1003 MAT1003 CSE3004 CSE2008 CSE2007 CSE2008 CSE20003 ECE2002 CSE1008 Programme Elective Course Code MAT2003 CSE3001	Category s Min. Credit Requirements	Modern Physics Chemistry and Environmental Studies Co/Extra Curricular [Compulsory] Course Title Digital Logic Design Discrete Mathematical Structures Design and Analysis of Algorithms Operating Systems Software Engineering Database Management Systems Computer Networks Computer Networks Computer Architecture and Organization Theory of Computation Course Title Any course to fulfill the basket requirements Optimization Techniques Data Warehousing and Data Mining Network Programming Secure Coding Natural Language Processing Knowledge Representation and Reasoning Distributed Systems Parallel Computing Agile Development Process Digital Image Processing Social Network Analysis Soft Computing Social Network Analysis Soft Computing Social Network Analysis Soft Computing Social Network Analysis	Ver. 1.1	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	2 36 C 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	Pre-Requisite ECE1001/ECE1002 None CSE2001 None CSE2001 CSE2001 CSE2005 ECE1003 None Pre-Requisite MAT1001 CSE2007/SWE2006 CSE3003 CSE2001 None CSE2001 None	Course Discipline Engineering Science Engineering

CSE4010	Wireless and Mobile Security	1 3 0 3 CSE3012 Engineering
CSE4009	Wireless and Mobile Computing	1 3 0 3 CSE3003/SWE3001 Engineering
CSE3010	Network Design and Performance Evaluation	1 3 2 4 CSE3003 Engineering
CSE3014	Web Application Security	1 3 2 4 CSE3012 Engineering
CSE4006	Deep Learning	1 3 2 4 CSE3008 Engineering
ECE4003	Embedded Programming	1 3 2 4 ECE2004 Engineering
CSE4016	Database Administration	1 3 2 4 CSE2007/SWE2006 Engineering
CSE3013	Secure Group Communications	1 3 2 4 CSE1007/SWE3003 Engineering
CSE3018	Software Configuration Management	1 3 0 3 CSE1005/SWE1002/CSE1003 Engineering
CSE3019	Software Quality and Reliability	1 3 0 3 CSE1005/SWE1002/CSE1003 Engineering
CSE3020	Product Definition and Validation	1 3 0 3 CSE1005/SWE1002/CSE1003 Engineering
CSE4011	Internet of Things	1 3 2 4 None Engineering
CSE4012	UI UX User Experience Design	1 3 2 4 None Engineering
CSE4013	Reverse Engineering	1 3 0 3 CSE1005/SWE1002/CSE1003 Engineering
CSE4014	Team Software Process	1 3 0 3 CSE1005/SWE1002/CSE1003 Engineering
CSE4015	Network Administration	1 3 2 4 CSE3003/SWE3001 Engineering
CSE4017	Health Care Analytics	1 3 2 4 CSE1006 Engineering
CSE4018	Computer Vision and Robotics	1 3 2 4 CSE4007 Engineering
CSE4019	Applications of Artificial Intelligence	1 3 0 3 CSE3002 Engineering
CSE4020	Agent Based Intelligent Systems	1 3 2 4 CSE3002 Engineering
CSE4021	Introduction to Cognitive Modelling	1 3 2 4 CSE3002 Engineering
ECExxxx	Microprocessors and Microcontrollers	1 3 2 4 ECE1003 Engineering
CSE4001	Cloud Computing	1 3 0 3 CSE3003 Engineering
CSE3009	No SQL Databases	1 3 2 4 CSE2007/SWE2006 Engineering
CSE3008	Introduction to Machine Learning	1 3 2 4 MAT2003/MAT2004 Engineering
CSE3012	Network Security	1 3 2 4 CSE1007/SWE3003 Engineering
CSE2013	Information Theory and Coding	1 3 2 4 None Engineering
CSE4022	Modelling and Simulation	1 3 0 3 None Engineering
CSE4023	Introduction to Blockchain Technology	1 3 0 3 CSE1007/SWE3003 Engineering

University Electives Min. Credit Requirements ------>

Course Code | Course Title | T | P | C | Pre-Requisite |

Any Course after fulfilling Programme Core & University Core requirements and without duplicity can be taken as University Elective

Credit Summary		Credits
University Core		92
Programme Core		36
Programme/Specialization Electives		20
University Electives		12
Total Credits for Graduation		160