

BE (Computer Science and Engineering (Cyber Security)) Curriculum

Minimum Credits to be Earned: 165

Semester I								
S. No.	Course Code	Course Title	Category	Contact Hours	Instruction Hours/Week			C
					L	T	P	
THEORY								
1	23SEN101	Heritage of Tamils	HS	1	1	0	0	1
2	23SEN103	Technical English – I	HS	4	3	1	0	4
3	23SMA101	Matrices and Calculus	BS	4	3	1	0	4
4	23SCH101	Environmental Science for Engineers	BS	3	3	0	0	3
5	23CSR101	Computer Fundamentals and Communication	ES	4	3	1	0	4
6	23CSR102	C Programming	ES	3	3	0	0	3
LABORATORY								
7	23CSR104	C Programming Laboratory	ES	2	0	0	2	1
TOTAL				21	16	3	2	20

Semester II								
S. No.	Course Code	Course Title	Category	Contact Hours	Instruction Hours/Week			C
					L	T	P	
THEORY								
1	23SEN202	Tamils and Technology	HS	1	1	0	0	1
2	23SEN205	Technical English - II	HS	3	3	0	0	3
3	23SMA202	Graph Theory	BS	4	3	1	0	4
4	23SPH214	Physics for Computing Sciences	BS	3	3	0	0	3
5	23CSR203	Data Structures and Algorithms	ES	3	3	0	0	3
6	23ITR201	Fundamentals of Web Design	ES	3	3	0	0	3
LABORATORY								
7	23SEN217	Communication Skills Laboratory	HS	2	0	0	2	1
8	23SPH121	Physical Sciences Laboratory	BS	2	0	0	2	1
9	23ITR203	Web Design Laboratory	ES	2	0	0	2	1
10	23CSR205	Data Structures and Algorithms Laboratory	ES	2	0	0	2	1
TOTAL				25	16	1	8	21

Semester III								
S. No.	Course Code	Course Title	Category	Contact Hours	Instruction Hours/Week			C
					L	T	P	
THEORY								
1	23SMA305	Discrete Mathematics	BS	4	3	1	0	4
2	23CSR301	Java Programming	PC	3	3	0	0	3
3	23CSR302	Design and Analysis of Algorithms	PC	3	3	0	0	3
4	23CSR303	Database Management Systems	PC	3	3	0	0	3
5	23CSR304	Computer Architecture	PC	4	3	1	0	4
6	23MXC301	Indian Constitution	MC	1	1	0	0	-
LABORATORY								
7	23CSR308	Java Programming Laboratory	PC	2	0	0	2	1
8	23CSR309	Design and Analysis of Algorithms Laboratory	PC	2	0	0	2	1
9	23CSR310	Database Management Systems Laboratory	PC	2	0	0	2	1
10	23EX301	Life Skills – I	EEC	2	0	0	2	1
TOTAL				26	16	2	8	21

Semester IV								
S. No.	Course Code	Course Title	Category	Contact Hours	Instruction Hours/Week			C
					L	T	P	
THEORY								
1	23MA401	Statistics and Optimization Techniques	BS	4	3	1	0	4
2	23CYR401	Operating Systems Security	PC	3	3	0	0	3
3	23ITR402	Web Application Development	PC	3	3	0	0	3
4	23ECR403	Digital Electronics and Microprocessors	ES	3	3	0	0	3
5	23XXPXXX	Professional Elective – I	PE	3	3	0	0	3
6	23EXC411	Design Thinking	EEC	1	1	0	0	1
7	23MXC401	Essence of Indian Traditional Knowledge	MC	1	1	0	0	-
LABORATORY								
8	23ECR405	Digital Electronics and Microprocessors Laboratory	ES	2	0	0	2	1
9	23CYR409	Operating Systems Security Laboratory	PC	2	0	0	2	1
10	23ITR409	Web Application Development Laboratory	PC	2	0	0	2	1
11	23EXC402	Life Skills – II	EEC	2	0	0	2	1
TOTAL				26	17	1	8	21

Semester V								
S. No.	Course Code	Course Title	Category	Contact Hours	Instruction Hours/Week			C
					L	T	P	
THEORY								
1	23CYR502	Network Architecture and Security	PC	3	3	0	0	3
2	23CYR503	Vulnerability Assessment and Penetration Testing	PC	3	3	0	0	3
3	23ITR505	Automata Theory and Compiler Design	PC	4	3	1	0	4
4	23CYR505	Secure Software Engineering and Risk Management	PC	4	3	1	0	4
5	23XXPXXX	Professional Elective – II	PE	3	3	0	0	3
6	23XXPXXX	Professional Elective – III	PE	3	3	0	0	3
7	23XXOXXX	Open Elective - I	OE	3	3	0	0	3
LABORATORY								
8	23CYR511	Network Architecture and Security Laboratory	PC	2	0	0	2	1
9	23CYR510	Vulnerability Assessment and Penetration Testing Laboratory	PC	2	0	0	2	1
10	23EXCXXX	Internship – I/Mini Project - I	EEC	2	0	0	2	1
11	23EXC503	Life Skills – III	EEC	2	0	0	2	1
TOTAL				31	21	2	8	27

Semester VI								
S. No.	Course Code	Course Title	Category	Contact Hours	Instruction Hours/Week			C
					L	T	P	
THEORY								
1	23CYR606	Ethical Hacking	PC	3	3	0	0	3
2	23CYR607	Digital and Mobile Forensics	PC	3	3	0	0	3
3	23CYR504	Hardware Security	PC	4	3	1	0	4
4	23XXPXXX	Professional Elective – IV	PE	3	3	0	0	3
5	23CYOXXX	Open Elective - II	OE	3	3	0	0	3
6	23CYOXXX	Open Elective – III	OE	3	3	0	0	3
LABORATORY								
8	23CYR612	Ethical Hacking Laboratory	PC	2	0	0	2	1
9	23EXCXXX	Internship – II/Mini Project - II	EEC	2	0	0	2	1
TOTAL				23	18	1	4	21

Semester VII								
S. No.	Course Code	Course Title	Category	Contact Hours	Instruction Hours/Week			C
					L	T	P	
THEORY								
1	23SGE713	Principles of Management and Engineering Ethics	HS	3	3	0	0	3
2	23CYR708	Secure Coding	PC	3	3	0	0	3
3	23XXPXXX	Professional Elective – V	PE	3	3	0	0	3
4	23XXPXXX	Professional Elective – VI	PE	3	3	0	0	3
5	23XXOXXX	Open Elective - IV	OE	3	3	0	0	3
6	23XXOXXX	Open Elective - V	OE	3	3	0	0	3
7	23XXOXXX	Open Elective - VI	OE	3	3	0	0	3
LABORATORY								
8	23CYR713	Secure Coding Laboratory	PC	2	0	0	2	1
9	23EXC709	Project Work - Phase I	EEC	4	0	0	4	2
TOTAL				27	21	0	6	24

Semester VIII								
S. No.	Course Code	Course Title	Category	Contact Hours	Instruction Hours/Week			C
					L	T	P	
LABORATORY								
1	23EXC810	Project Work - Phase II	EEC	20	0	0	20	10
TOTAL				20	6	0	20	10

Total Credits	165
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