

**ADHIYAMAAN COLLEGE OF ENGINEERING (AUTONOMOUS), HOSUR**  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**

**REGULATION 2022 – Curriculum**

**SEMESTER – III**

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
<b>THEORY</b>										
1	BS	322DMT01	Discrete Mathematics	3	1	0	4	50	50	100
2	ES	322CIT02	Digital Electronics	3	0	0	3	50	50	100
3	PC	322CST03	Foundation of Data Science	3	0	2	4	50	50	100
4	PC	322CIT04	Object Oriented Programming	3	0	0	3	50	50	100
5	PC	322CIT05	Data Structures	3	0	0	3	50	50	100
6	PC	322CIT06	Computer Organization	3	0	0	3	50	50	100
<b>PRACTICALS</b>										
7	PC	322CIP07	OOPs Laboratory	0	0	2	1	50	50	100
8	PC	322CIP08	Data Structures Laboratory	0	0	2	1	50	50	100
9	EEC	322GEV01	Professional Development	0	0	2	1			
			<b>TOTAL MANDATORY CREDITS</b>				<b>22</b>			

**SEMESTER – IV**

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
<b>THEORY</b>										
1	PC	422CST01	Object Oriented Software Engineering	3	0	0	3	50	50	100
2	PC	422CIT02	Design and Analysis of algorithm	3	0	0	3	50	50	100
3	PC	422CIT03	Database Management System	3	0	0	3	50	50	100
4	PC	422CIT04	Operating Systems	3	0	0	3	50	50	100
5	PC	422CIT05	Network Essentials	3	0	2	4	50	50	100
6	PC	422CST06	Theory of Computation	3	0	0	3	50	50	100
<b>PRACTICALS</b>										
7	PC	422CIP07	Database Management System Laboratory	0	0	2	1	50	50	100
8	PC	422CIP08	Operating Systems Laboratory	0	0	2	1	50	50	100
9	EEC	422GEV02	Maths Solver	0	0	2	1			
			<b>TOTAL MANDATORY CREDITS</b>				<b>22</b>			

## SEMESTER – V

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
<b>THEORY</b>										
1	PC	522CIT01	Artificial Intelligence and Machine Learning	3	0	0	3	50	50	100
2	PC	522CST02	Cryptography and Block Chain Technologies	3	0	2	4	50	50	100
3	PC	522CST03	Compiler Design	3	0	0	3	50	50	100
4	PC	522CIT04	Web Essentials	3	0	0	3	50	50	100
5	PE	522CSEX	<b>Professional Elective - I</b>	3	0	0	3	50	50	100
6	OE	522XXOXX	<b>Open Elective – I</b>	3	0	0	3	50	50	100
7	MC	522MCTXX	<b>Mandatory Course - I</b>	1	0	0	1	100		
<b>PRACTICALS</b>										
8	PC	522CIP07	Artificial Intelligence and Machine Learning Laboratory (MoU Lab)	0	0	2	1	50	50	100
9	PC	522CIP08	Web Essentials Laboratory	0	0	2	1	50	50	100
10	EEC	522CSP09	Internship	0	0	4	2			
			<b>TOTAL MANDATORY CREDITS</b>				<b>24</b>			

## SEMESTER – VI

S. No	CA T	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
<b>THEORY</b>										
1	PC	622CIT01	Full Stack Development	3	0	0	3	50	50	100
2	PC	622CIT02	Cloud Computing	3	0	0	3	50	50	100
3	PC	622CST03	Mobile Application Development	3	0	0	3	50	50	100
4	PC	622CST04	Digital Marketing	3	0	2	4	50	50	100
5	PE	622CSEX	<b>Professional Elective – II</b>	3	0	0	3	50	50	100
6	OE	622XXOXX	<b>Open Elective - II</b>	3	0	0	3	50	50	100
7	MC	622MCTXX	<b>Mandatory Course - II</b>	3	0	0	1	50	50	100
<b>PRACTICALS</b>										
8	PC	622CIP07	Full Stack Development Laboratory (MoU Lab)	0	0	2	1	50	50	100
9	PC	622CSP08	Mobile Application Development Laboratory	0	0	2	1	50	50	100
10	EEC	622CSVXX	Value Added Course	0	0	4	2			
			<b>TOTAL MANDATORY CREDITS</b>				<b>23</b>			

### SEMESTER – VII

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
<b>THEORY</b>										
1	PC	722CIT01	AR, VR and Metaverse	3	0	2	4	50	50	100
2	PC	722CST02	Internet of Things	3	0	0	3	50	50	100
3	HSMC	722CST03	<b>Human Values and Ethics</b>	3	0	0	3	50	50	100
4	PE	722CSEXX	<b>Professional Elective - III</b>	3	0	0	3	50	50	100
5	PE	722CSEXX	<b>Professional Elective - IV</b>	3	0	0	3	50	50	100
6	OE	722BAOXX	<b>Management Elective</b>	3	0	0	3	50	50	100
<b>PRACTICALS</b>										
7	PC	722CSP07	Internet of Things Laboratory	0	0	2	1	50	50	100
8	EEC	722CSP08	Professional	0	0	4	2	50	50	100
			<b>TOTAL MANDATORY CREDITS</b>				<b>22</b>			

### SEMESTER – VIII

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
<b>THEORY</b>										
1	PE	822CSEXX	<b>Professional Elective - V</b>	3	0	0	3	50	50	100
2	PE	822CSEXX	<b>Professional Elective - VI</b>	3	0	0	3	50	50	100
<b>PRACTICALS</b>										
3	EEC	822CSP01	Project Work & Viva Voce	0	0	16	8	50	50	100
			<b>TOTAL MANDATORY CREDITS</b>				<b>14</b>			

**PROFESSIONAL ELECTIVE COURSES: VERTICALS**

**VERTICAL 1: ARTIFICIAL INTELLIGENCE and DATA SCIENCE**

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
<b>THEORY</b>										
1	PEC	X22CIE01	Big Data Analytics	3	0	0	3	50	50	100
2	PEC	X22CIE02	Exploratory Data Analysis	3	0	0	3	50	50	100
3	PEC	X22CIE03	Neural Networks and Deep Learning	3	0	0	3	50	50	100
4	PEC	X22CIE04	Text and Speech Analysis	3	0	0	3	50	50	100
5	PEC	X22CIE05	Image and Video Analytics	3	0	0	3	50	50	100
6	PEC	X22CIE06	Business Analytics	3	0	0	3	50	50	100
7	PEC	X22CIE07	Cognitive Science	3	0	0	3	50	50	100

**VERTICAL 2: FULL STACK DEVELOPMENT**

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
<b>THEORY</b>										
1	PEC	X22CIE08	C# & .NET Framework	3	0	0	3	50	50	100
2	PEC	X22CIE09	Advanced Scripting	3	0	0	3	50	50	100
3	PEC	X22CIE10	UI and UX Design	3	0	0	3	50	50	100
4	PEC	X22CIE11	DevOps	3	0	0	3	50	50	100
5	PEC	X22CIE12	Cloud Services Management	3	0	0	3	50	50	100
6	PEC	X22CIE13	Web Application Security	3	0	0	3	50	50	100
7	PEC	X22CIE14	Software Testing and Automation	3	0	0	3	50	50	100

**VERTICAL 3: CLOUD COMPUTING AND DATA CENTER TECHNOLOGIES**

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
<b>THEORY</b>										
1	PEC	X22CIE15	Network Engineering	3	0	0	3	50	50	100
2	PEC	X22CIE16	Virtualization	3	0	0	3	50	50	100
3	PEC	X22CIE17	Cloud Services Management	3	0	0	3	50	50	100
4	PEC	X22CIE18	Storage Technologies	3	0	0	3	50	50	100
5	PEC	X22CIE19	Software Defined Networks	3	0	0	3	50	50	100
6	PEC	X22CIE20	Stream Processing	3	0	0	3	50	50	100
7	PEC	X22CIE21	Security and Privacy in Cloud	3	0	0	3	50	50	100

**VERTICAL 4: CYBER SECURITY AND DATA PRIVACY**

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
<b>THEORY</b>										
1	PEC	X22CIE22	Ethical Hacking	3	0	0	3	50	50	100
2	PEC	X22CIE23	Digital and Mobile Forensics	3	0	0	3	50	50	100
3	PEC	X22CIE24	Cyber Security and Law	3	0	0	3	50	50	100
4	PEC	X22CIE25	Security and Privacy in Cloud	3	0	0	3	50	50	100
5	PEC	X22CIE26	Social Network Security	3	0	0	3	50	50	100
6	PEC	X22CIE27	Modern Cryptography	3	0	0	3	50	50	100
7	PEC	X22CIE28	Network Security	3	0	0	3	50	50	100

### VERTICAL 5: CREATIVE MEDIA

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
<b>THEORY</b>										
1	PEC	X22CIE29	Multimedia and Animation	3	0	0	3	50	50	100
2	PEC	X22CIE30	Multimedia Data Compression and Storage	3	0	0	3	50	50	100
3	PEC	X22CIE31	UI and UX Design	3	0	0	3	50	50	100
4	PEC	X22CIE32	Visual Effects	3	0	0	3	50	50	100
5	PEC	X22CIE33	Game Development	3	0	0	3	50	50	100
6	PEC	X22CIE34	Video Creation and Editing	3	0	0	3	50	50	100
7	PEC	X22CIE35	Mixed Reality	3	0	0	3	50	50	100

### VERTICAL 6: EMERGING TECHNOLOGIES

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
<b>THEORY</b>										
1	PEC	X22CIE36	Robotic Process Automation	3	0	0	3	50	50	100
2	PEC	X22CIE37	Neural Networks and Deep Learning	3	0	0	3	50	50	100
3	PEC	X22CIE38	Cyber security	3	0	0	3	50	50	100
4	PEC	X22CIE39	Big Data Analytics	3	0	0	3	50	50	100
5	PEC	X22CIE40	Game Development	3	0	0	3	50	50	100
6	PEC	X22CIE41	Design Thinking	3	0	0	3	50	50	100
7	PEC	X22CSE42	Cyber Physical Systems	3	0	0	3	50	50	100

Semester	I	II	III	IV	V	VI	VII	VIII	Total
Credits	19	22	22	21	22	21	22	15	164

### List of Open Electives – CSE Department

<b>S. No.</b>	<b>COURSE CODE</b>	<b>COURSE NAME</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
1	X22CSO01	Robotic Process Automation	3	0	0	3
2	X22CSO02	Neural Networks and Deep Learning	3	0	0	3
3	X22CSO03	Cyber security	3	0	0	3
4	X22CSO04	Foundation of Data Science	3	0	0	3
5	X22CSO05	Object Oriented Programming	3	0	0	3
6	X22CSO06	Cloud Computing	3	0	0	3
7	X22CSO07	Network Essentials	3	0	0	3
8	X22CSO08	Web Essentials	3	0	0	3
9	X22CSO09	Big Data Analytics	3	0	0	3
10	X22CSO10	Artificial Intelligence and Machine Learning	3	0	0	3
11	X22CSO11	Cryptography and Block Chain Technologies	3	0	0	3
12	X22CSO12	Design Thinking	3	0	0	3
13	X22CSO13	Augmented Reality & Virtual Reality	3	0	0	3
14	X22CSO14	Cyber Physical Systems	3	0	0	3