

**ADHIYAMAAN COLLEGE OF ENGINEERING, (Autonomous), HOSUR**

**Department of Computer Science and Engineering**

**M.E.-Computer Science and Engineering**

**1. Curriculum for Regulation 2022 -CBCS**

(Applicable to students admitted from the Academic year 2022-2023 onwards)

**SEMESTER- 1**

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
<b>THEORY</b>										
1	FC	122MCT01	Applied Probability and Statistics	3	1	0	4	40	60	100
2	PCC	122MCT02	Advanced Data Structures and Algorithms	3	1	0	4	40	60	100
3	PCC	122MCT03	Advanced Database Management Systems	3	0	0	3	40	60	100
4	PCC	122MCT04	Software Requirement Engineering	3	0	0	3	40	60	100
5	PCC	122MCT05	Foundations of Data Science	3	0	0	3	40	60	100
6	RMC	122RMT06	Research Methodology and IPR	3	0	0	3	40	60	100
7	AC		Audit Course - I	2	0	0	0			
<b>PRACTICALS</b>										
8	PCC	122MCP07	Advanced Data Structures And Algorithms Laboratory	0	0	2	1	60	40	100
9	PCC	122MCP08	Advanced Database Management systems Laboratory	0	0	2	1	60	40	100
			<b>TOTAL MANDATORY CREDITS</b>				<b>22</b>			

**SEMESTER-II**

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
<b>THEORY</b>										
1	PCC	222MCT01	Advanced Operating System	3	0	0	3	40	60	100
2	PCC	222MCT02	Machine Learning Techniques	3	0	0	3	40	60	100
3	PCC	222MCT03	Network Technologies and Protocols	3	0	0	3	40	60	100
4	PEC	222MCExx	Professional Elective –I	3	0	0	3	40	60	100
5	PEC	222MCExx	Professional Elective –II	3	0	0	3	40	60	100
6	OEC		Open Elective	3	0	0	3	40	60	100
7	AC		Audit Course -II	2	0	0	0			
<b>PRACTICALS</b>										
8	EEC	222MCP01	Term Paper and Seminar	0	0	2	1	60	40	100
9	PCC	222MCP02	Machine Learning Techniques Laboratory	0	0	2	1	60	40	100
			<b>TOTAL MANDATORY CREDITS</b>				<b>20</b>			

**SEMESTER-III**

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
<b>THEORY</b>										
1	PCC	322MCT01	Principles of Modern Cryptography	3	0	0	3	40	60	100
2	PCC	322MCT02	Internet of Things	3	0	0	3	40	60	100
3	PEC	322MCExx	Professional Elective – III	3	0	0	3	40	60	100
4	PEC	322MCExx	Professional Elective –IV	3	0	0	3	40	60	100
<b>PRACTICALS</b>										
5	EEC	322MCP01	Project Work Phase-I	0	0	12	6	40	60	100
							<b>TOTAL MANDATORY CREDITS</b>			

**SEMESTER-IV**

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
<b>PRACTICALS</b>										
1	EEC	422MCP01	Project Work Phase -II	0	0	24	12	40	60	100
							<b>TOTAL MANDATORY CREDITS</b>			

**AUDIT COURSES (AC)**

**Registration for any of these courses is optional to students**

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C
1	AC	AXMCA01	English For Research Paper Writing	2	0	0	0
2	AC	AXMCA02	Disaster Management	2	0	0	0
3	AC	AXMCA03	Constitution Of India	2	0	0	0
4	AC	AXMCA04	நற்றமிழ் இலக்கியம்	2	0	0	0

**PROFESSIONAL ELECTIVES - DOMAIN- 1 (NETWORKS)**

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
<b>THEORY</b>										
1	PE	122MCE11	Ad-Hoc Network	3	0	0	3	40	60	100
2	PE	222MCE12	Wireless Sensor Network	3	0	0	3	40	60	100
3	PE	222MCE13	Distributed Systems	3	0	0	3	40	60	100
4	PE	322MCE14	Cloud Computing	3	0	0	3	40	60	100
5	PE	322MCE15	Cyber Physical Systems	3	0	0	3	40	60	100
6	PE	322MCE16	High Performance Computing for Big Data	3	0	0	3	40	60	100

**PROFESSIONAL ELECTIVES - DOMAIN -II (SECURITY)**

S.No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
<b>THEORY</b>										
1	PEC	122MCE21	Cyber Security	3	0	0	3	40	60	100
2	PEC	222MCE22	Crypto Currency & Blockchain Technologies	3	0	0	3	40	60	100
3	PEC	222MCE23	Ethical Hacking	3	0	0	3	40	60	100
4	PEC	322MCE24	Security and Privacy in Cloud	3	0	0	3	40	60	100
5	PEC	322MCE25	Computer Forensics	3	0	0	3	40	60	100
6	PEC	322MCE26	BioInformatics	3	0	0	3	40	60	100

**PROFESSIONAL ELECTIVES - DOMAIN- 1II (ARTIFICIAL INTELLIGENCE)**

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
<b>THEORY</b>										
1	PEC	122MCE31	Artificial Intelligence Principles And Techniques	3	0	0	3	40	60	100
2	PEC	222MCE32	Soft Computing Techniques	3	0	0	3	40	60	100
3	PEC	222MCE33	Knowledge Engineering And Expert Systems	3	0	0	3	40	60	100
4	PEC	322MCE34	Cognitive Computing	3	0	0	3	40	60	100
5	PEC	322MCE35	Natural Language Processing	3	0	0	3	40	60	100
6	PEC	322MCE36	Speech Processing	3	0	0	3	40	60	100

**PROFESSIONAL ELECTIVES - DOMAIN- 1V (BIG DATA)**

S.No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
<b>THEORY</b>										
1	PEC	122MCE41	Data Mining Technologies	3	0	0	3	40	60	100
2	PEC	222MCE42	Big Data Analytics	3	0	0	3	40	60	100
3	PEC	222MCE43	Deep Learning	3	0	0	3	40	60	100
4	PEC	322MCE44	Social Network Analysis	3	0	0	3	40	60	100
5	PEC	322MCE45	Reinforcement Learning	3	0	0	3	40	60	100
6	PEC	322MCE46	Data Visualization	3	0	0	3	40	60	100

**PROFESSIONAL ELECTIVES - DOMAIN- V (IMAGE PROCESSING)**

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
<b>THEORY</b>										
1	PEC	122MCE51	Digital Image Processing	3	0	0	3	40	60	100
2	PEC	222MCE52	Multimedia Coding Techniques	3	0	0	3	40	60	100
3	PEC	222MCE53	Computer Vision	3	0	0	3	40	60	100
4	PEC	322MCE54	Pattern Recognition	3	0	0	3	40	60	100
5	PEC	322MCE55	Video Analytics	3	0	0	3	40	60	100
6	PEC	322MCE56	Principles of Sensors	3	0	0	3	40	60	100

**PROFESSIONAL ELECTIVES - DOMAIN- VI (SOFTWARE ENGINEERING)**

S.No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
<b>THEORY</b>										
1	PEC	122MCE61	Advanced Software Engineering	3	0	0	3	40	60	100
2	PEC	222MCE62	Software Test Automation	3	0	0	3	40	60	100
3	PEC	222MCE63	Software Security	3	0	0	3	40	60	100
4	PEC	322MCE64	Integrated Software Project Management	3	0	0	3	40	60	100
5	PEC	322MCE65	Software Reliability Metrics & Modelling	3	0	0	3	40	60	100
6	PEC	322MCE66	Software Verification And Validation	3	0	0	3	40	60	100

### Summary of Credit Distribution

<b>S.NO</b>	<b>SEMESTER</b>	<b>CREDITS</b>
1	I	22
2	II	20
3	III	18
4	IV	12
<b>TOTAL</b>		<b>72</b>