

**ADHIYAMAAN COLLEGE OF ENGINEERING
(AUTONOMOUS)**

Affiliated to Anna University, Chennai

B.TECH. INFORMATION TECHNOLOGY

REGULATIONS 2018

CURRICULUM UNDER CHOICE BASED CREDIT SYSTEM

(Applicable to the students admitted from the
Academic year 2018-2019 onwards)

ADHIYAMAAN COLLEGE OF ENGINEERING - HOSUR

(Autonomous)

B.Tech. Information Technology

CURRICULUM –R2018

(Applicable to the students admitted from the Academic year 2018-2019 onwards)

S.No	Semester	Credits
1	I	18
2	II	21
3	III	22
4	IV	22
5	V	23
6	VI	21
7	VII	22
8	VIII	15
	TOTAL	164

SEMESTER – III

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
THEORY										
1	BS	318MAT01	Engineering Mathematics III	3	1	0	4	50	50	100
2	ES	318CIT02	Digital Electronics	3	0	0	3	50	50	100
3	ES	318ITT03	Communication Engineering	3	0	0	3	50	50	100
4	PC	318CIT04	Object Oriented Programming in C++	3	0	0	3	50	50	100
5	PC	318CIT05	Data Structures	3	0	0	3	50	50	100
6	PC	318CIT06	Computer Organization	3	0	0	3	50	50	100
PRACTICALS										
7	ES	318CIP07	Digital Electronics Laboratory	0	0	2	1	50	50	100
8	PC	318ITP08	Object Oriented Programming Laboratory	0	0	2	1	50	50	100
9	PC	318ITP09	Data Structures Laboratory	0	0	2	1	50	50	100
			TOTAL MANDATORY CREDITS				22			

SEMESTER – IV

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
THEORY										
1	BS	418DMT01	Discrete Mathematics	3	1	0	4	50	50	100
2	PC	418CIT02	Design and Analysis of Algorithms	3	0	0	3	50	50	100
3	PC	418CIT03	Java Programming	3	0	0	3	50	50	100
4	PC	418CIT04	Operating System	3	0	0	3	50	50	100
5	PC	418ITT05/ 318CST03	Database Management Systems	3	0	0	3	50	50	100
6	PC	418CIT06	Software Engineering	3	0	0	3	50	50	100
PRACTICALS										
7	PC	418CIP07	Java Programming Laboratory	0	0	2	1	50	50	100
8	PC	418CIP08	Operating System Laboratory	0	0	2	1	50	50	100
9	PC	418ITP09	Database Management System Laboratory	0	0	2	1	50	50	100
			TOTAL MANDATORY CREDITS				22			

SEMESTER – V

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
THEORY										
1	PC	518PST01	Probability and Statistics	3	1	0	4	50	50	100
2	PC	518CIT02	Micro Processor and Microcontroller	3	0	0	3	50	50	100
3	PC	518ITT03/ 418CST05	Computer Networks	3	0	0	3	50	50	100
4	ES	518ITT04	Computational Intelligence	3	0	0	3	50	50	100
5	PE	518XXX	Professional Elective –I	3	1	0	4	50	50	100
6	OE	518XXX	Open Elective -I	3	0	0	3	50	50	100
PRACTICALS										
7	PC	518CIP07	Micro Processor and Microcontroller Laboratory	0	0	2	1	50	50	100
8	ES	518ITP08	Computer Networks Laboratory	0	0	2	1	50	50	100
9	EE C	518CIP09	Employability Skills Laboratory	0	0	2	1	50	50	100
TOTAL MANDATORY CREDITS							23			

V Semester-Professional Elective - I

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
THEORY										
1	PE	518CIE01	C# and .NET Framework	3	1	0	4	50	50	100
2	PE	518ITE02 /518CST04	Theory of Computation	3	1	0	4	50	50	100
3	PE	518CIE03	Advanced Java Programming	3	1	0	4	50	50	100
4	PE	518ITE04	Real Time Systems	3	1	0	4	50	50	100
5	PE	518CIE05	Computer Graphics and Multimedia Systems	3	1	0	4	50	50	100

V Semester-Open Elective-I

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
THEORY										
1	HS	518BAO03/ 518BAE03	Engineering Ethics and Human Values	3	0	0	3	50	50	100
2	HS	518BAO06/ 218BAT06	Management Information Systems	3	0	0	3	50	50	100
3	HS	518BAO02/ 118BAT02	Management Concepts and Practices	3	0	0	3	50	50	100
4	HS	518MEO10/ 818MET10	Total Quality Management	3	0	0	3	50	50	100
5	ES	518BMO04/ 718BMT04	Medical Informatics	3	0	0	3	50	50	100
6	ES	518EIO04/ 718EIE04	Robotics And Automation	3	0	0	3	50	50	100
7	HS	518CEO01 718CET01	Disaster Mitigation and Management	3	0	0	3	50	50	100

SEMESTER – VI

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
THEORY										
1	PC	618ITT01/ 518CSE02	Scripting Languages	3	0	0	3	50	50	100
2	PC	618ITT02	Compiler Engineering	3	1	0	3	50	50	100
3	PC	618CIT03	Data warehousing and Data Mining	3	0	0	3	50	50	100
4	PC	618ITT04	Object Oriented Modeling and Design	3	0	0	3	50	50	100
5	PE	618XXX	Professional Elective - II	3	0	0	3	50	50	100
6	OE	618XXX	Open Elective –II	3	0	0	3	50	50	100
PRACTICALS										
7	PC	618ITP07	Scripting Languages Laboratory	0	0	2	1	50	50	100
8	PC	618ITP08	Compiler Engineering Laboratory	0	0	2	1	50	50	100
9	PC	618ITP09	Object Oriented Modeling and Design Laboratory	0	0	2	1	50	50	100
			TOTAL MANDATORY CREDITS				21			

VI Semester – Open Elective – II

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
THEORY										
1	OE	61ECO01/ 518ECT01	Digital Signal Processing	3	0	0	3	50	50	100
2	OE	618ECO02/ 618ECE01	Digital Image Processing	3	0	0	3	50	50	100
3	OE	618ECO03/ 818ECE08	Satellite Communication	3	0	0	3	50	50	100
4	OE	618ECO04/ 318ECT02	Signals and Systems	3	0	0	3	50	50	100
5	OE	618MAO01	Applied Statistics and Numerical Methods	3	0	0	3	50	50	100
6	OE	618MAO02	Algebra and Number Theory	3	0	0	3	50	50	100
7	OE	618MAO03	Resource Management Techniques	3	0	0	3	50	50	100
8	OE	618MAO04	Graph Theory and its Application	3	0	0	3	50	50	100

VI Semester – Professional Elective – II

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
THEORY										
1	PE	618CIE01	Multi Core Architecture	3	0	0	3	50	50	100
2	PE	618ITE02	Soft Computing	3	0	0	3	50	50	100
3	PE	618ITE03	Social Network Analysis	3	0	0	3	50	50	100
4	PE	618ITE04	Mobile Communication	3	0	0	3	50	50	100
5	PE	618ITE05	Embedded Systems	3	0	0	3	50	50	100

SEMESTER – VII

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
THEORY										
1	PC	718CIT01	Cryptography and Security in Computing	3	0	0	3	50	50	100
2	PC	718ITT02	Fundamentals of Machine Learning	3	0	0	3	50	50	100
3	PC	718ITT03/ 618CST01	Mobile Application Development	3	0	0	3	50	50	100
4	PC	718ITT04/ 618CST04	Web Programming	3	0	0	3	50	50	100
5	PE	718XXX	Professional Elective- III	3	0	0	3	50	50	100
6	PE	718XXX	Professional Elective- IV	3	0	0	3	50	50	100
PRACTICALS										
7	PC	718ITP07	Mobile Application Development Laboratory	0	0	2	1	50	50	100
8	PC	718ITP08	Web Programming Laboratory	0	0	2	1	50	50	100
9	EEC	718ITP09	Mini Project	0	0	4	2	50	50	100
			TOTAL MANDATORY CREDITS				22			

VII Semester- Professional Elective- III

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
THEORY										
1	PE	718CIE01	Internet of Things	3	0	0	3	50	50	100
2	PE	718CIE02	Building Enterprise Application	3	0	0	3	50	50	100
3	PE	718CIE03	Business Intelligence and its Applications	3	0	0	3	50	50	100
4	PE	718CIE04	Information Storage Management	3	0	0	3	50	50	100
5	PE	718CIE05	Agile Software Development	3	0	0	3	50	50	100

VII Semester- Professional Elective- IV

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
THEORY										
1	PE	718CIE06	Cyber Security and Law	3	0	0	3	50	50	100
2	PE	718ITE07	Adhoc and Sensor Network	3	0	0	3	50	50	100
3	PE	718ITE08/ 718CST04	Cloud Computing	3	0	0	3	50	50	100
4	PE	718ITE09/ 618CSE06	Advanced Java Scripting Language	3	0	0	3	50	50	100
5	PE	718ITE10/ 518CSE04	Software Testing	3	0	0	3	50	50	100

SEMESTER – VIII

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
THEORY										
1	PC	818CIT01	Big Data Analytics	3	0	0	3	50	50	100
2	PE	818XXX	Professional Elective- V	3	0	0	3	50	50	100
3	PE	818XXX	Professional Elective- VI	3	0	0	3	50	50	100
PRACTICALS										
4	EEC	818ITP01	Project Work & Viva Voce	0	0	12	6	50	50	100
TOTAL MANDATORY CREDITS							15			

VIII Semester-Professional Elective- V

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
THEORY										
1	PE	818CIE01	Software Defined Networks	3	0	0	3	50	50	100
2	PE	818ITE02	Information Security	3	0	0	3	50	50	100
3	PE	818ITE03	Swarm Intelligence	3	0	0	3	50	50	100
4	PE	818CIE04	Green Computing	3	0	0	3	50	50	100
5	PE	818ITE05	Computer Forensics	3	0	0	3	50	50	100

VIII Semester- Professional Elective- VI

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
THEORY										
1	PE	818ITE06/ 618CSE05	Software Project Management	3	0	0	3	50	50	100
2	PE	818CIE07	Service Oriented Architecture	3	0	0	3	50	50	100
3	PE	818ITE08	Virtual and Augmented Reality	3	0	0	3	50	50	100
4	PE	818ITE09	Deep Learning	3	0	0	3	50	50	100
5	PE	818ITE10	Information Visualization	3	0	0	3	50	50	100

Courses offered by IT Department as Open Elective for Other Departments

S. No	CAT	COURSE CODE	COURSE TITLE	L	T	P	C	MARKS		
								CA	EA	TOT
THEORY										
1	OE	X18OE01	Unix Internals	3	0	0	3	50	50	100
2	OE	X18OE02	Data Structures and OOPs	3	0	0	3	50	50	100
3	OE	X18OE03	Computer organization and Architecture	3	0	0	3	50	50	100
4	OE	X18OE04	Java Programming	3	0	0	3	50	50	100
5	OE	X18OE05	Software Project Management	3	0	0	3	50	50	100
6	OE	X18OE06	Software Testing and Quality Assurance	3	0	0	3	50	50	100
7	OE	X18OE07	Block Chain Technology	3	0	0	3	50	50	100
8	OE	X18OE08	Cloud Computing	3	0	0	3	50	50	100
9	OC	X18OE09	Web Programming	3	0	0	3	50	50	100
10	OE	X18OE10	Internet of Things	3	0	0	3	50	50	100
11	OE	X18OE11	Big Data Analytics	3	0	0	3	50	50	100