

ANNA UNIVERSITY, CHENNAI
AFFILIATED INSTITUTIONS
MASTER OF COMPUTER APPLICATIONS
REGULATIONS – 2017
CHOICE BASED CREDIT SYSTEM
CURRICULA AND SYLLABI

SEMESTER I

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
THEORY								
1.	MA5161	Mathematical Foundations for Computer Applications	FC	4	4	0	0	4
2.	MC5101	Computer Organization	PC	3	3	0	0	3
3.	MC5102	Problem Solving and Programming	PC	3	3	0	0	3
4.	MC5103	Database Management Systems	PC	3	3	0	0	3
5.	MC5104	Data Structures	PC	3	3	0	0	3
PRACTICALS								
6.	MC5111	Data Structures Laboratory	PC	4	0	0	4	2
7.	MC5112	Database Management Systems Laboratory	PC	4	0	0	4	2
8.	MC5113	Communication Skills Laboratory	EEC	3	1	0	2	2
TOTAL				27	17	0	10	22

SEMESTER II

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
THEORY								
1.	MC5201	Object Oriented Programming	PC	3	3	0	0	3
2.	MC5202	Embedded Systems	PC	3	3	0	0	3
3.	MC5203	Software Engineering	PC	3	3	0	0	3
4.	MC5204	Operating Systems	PC	3	3	0	0	3
5.	MC5205	Computer Graphics and Multimedia	PC	3	3	0	0	3
PRACTICALS								
6.	MC5211	Object Oriented Programming Laboratory	PC	4	0	0	4	2
7.	MC5212	Graphics and Multimedia Laboratory	PC	4	0	0	4	2
8.	MC5213	Operating Systems and Embedded Systems Laboratory	PC	4	0	0	4	2
TOTAL				27	15	0	12	21

SEMESTER III

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
THEORY								
1.	MC5301	Advanced Data Structures and Algorithms	PC	3	3	0	0	3
2.	MC5302	Computer Networks	PC	3	3	0	0	3
3.	MC5303	Web Programming Essentials	PC	3	3	0	0	3
4.	MC5304	Programming with Java	PC	3	3	0	0	3
5.	MC5305	Object Oriented Analysis and Design	PC	5	3	2	0	4
PRACTICALS								
6.	MC5311	Data Structures and Algorithms Laboratory	PC	4	0	0	4	2
7.	MC5312	Web Programming Laboratory	PC	4	0	0	4	2
8.	MC5313	Programming with Java Laboratory	PC	4	0	0	4	2
TOTAL				29	15	2	12	22

SEMESTER IV

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
THEORY								
1.	MC5401	Resource Management Techniques	PC	3	3	0	0	3
2.	MC5402	Mobile Computing	PC	3	3	0	0	3
3.	MC5403	Advanced Databases and Datamining	PC	3	3	0	0	3
4.	MC5404	Web Application Development	PC	5	3	2	0	4
5.		Professional Elective - I	PE	3	3	0	0	3
PRACTICALS								
6.	MC5411	Mobile Application Development Laboratory	PC	4	0	0	4	2
7.	MC5412	Web Application Development Laboratory	PC	4	0	0	4	2
8.	MC5413	Technical Seminar and Report Writing	PC	2	0	0	2	1
TOTAL				27	15	2	10	21

SEMESTER V

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
THEORY								
1.	MC5501	Cloud Computing	PC	3	3	0	0	3
2.	MC5502	Big Data Analytics	PC	3	3	0	0	3
3.	MC5503	Software Testing and Quality Assurance	PC	3	3	0	0	3
4.		Professional Elective II	PE	3	3	0	0	3
5.		Professional Elective III	PE	3	3	0	0	3
PRACTICALS								
6.	MC5511	Cloud and Big Data Laboratory	PC	4	0	0	4	2
7.	MC5512	Software Testing Laboratory	PC	4	0	0	4	2
8.	MC5513	Mini Project	EEC	4	0	0	4	2
TOTAL				27	15	0	12	21

SEMESTER VI

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
PRACTICALS								
1.	MC5611	Project Work	EEC	24	0	0	24	12
TOTAL				24	0	0	24	12

TOTAL NO. OF CREDITS:119

FOUNDATION COURSES (FC)

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
1.	MA5161	Mathematical Foundations for Computer Applications	FC	4	4	0	0	4

PROFESSIONAL CORE (PC)

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
1.	MC5101	Computer Organization	PC	3	3	0	0	3
2.	MC5102	Problem Solving and Programming	PC	3	3	0	0	3
3.	MC5103	Database Management Systems	PC	3	3	0	0	3
4.	MC5104	Data Structures	PC	3	3	0	0	3
5.	MC5111	Data Structures Laboratory	PC	4	0	0	4	2
6.	MC5112	Database Management Systems Laboratory	PC	4	0	0	4	2
7.	MC5201	Object Oriented Programming	PC	3	3	0	0	3
8.	MC5202	Embedded Systems	PC	3	3	0	0	3
9.	MC5203	Software Engineering	PC	3	3	0	0	3
10.	MC5204	Operating Systems	PC	3	3	0	0	3
11.	MC5205	Computer Graphics and Multimedia	PC	3	3	0	0	3
12.	MC5211	Object Oriented Programming Laboratory	PC	4	0	0	4	2
13.	MC5212	Graphics and Multimedia Laboratory	PC	4	0	0	4	2
14.	MC5213	Operating Systems and Embedded Systems Laboratory	PC	4	0	0	4	2
15.	MC5301	Advanced Data Structures and Algorithms	PC	3	3	0	0	3
16.	MC5302	Computer Networks	PC	3	3	0	0	3
17.	MC5303	Web Programming Essentials	PC	3	3	0	0	3
18.	MC5304	Programming with Java	PC	3	3	0	0	3
19.	MC5305	Object Oriented Analysis and Design	PC	5	3	2	0	4
20.	MC5311	Data Structures and Algorithms Laboratory	PC	4	0	0	4	2
21.	MC5312	Web Programming Laboratory	PC	4	0	0	4	2

22.	MC5313	Programming with Java Laboratory	PC	4	0	0	4	2
23.	MC5401	Resource Management Techniques	PC	3	3	0	0	3
24.	MC5402	Mobile Computing	PC	3	3	0	0	3
25.	MC5403	Advanced Databases and Datamining	PC	3	3	0	0	3
26.	MC5404	Web Application Development	PC	5	3	2	0	4
27.	MC5411	Mobile Application Development Laboratory	PC	4	0	0	4	2
28.	MC5412	Web Application Development Laboratory	PC	4	0	0	4	2
29.	MC5501	Cloud Computing	PC	3	3	0	0	3
30.	MC5502	Big Data Analytics	PC	3	3	0	0	3
31.	MC5503	Software Testing and Quality Assurance	PC	3	3	0	0	3
32.	MC5511	Cloud and Big Data Laboratory	PC	4	0	0	4	2
33.	MC5512	Software Testing Laboratory	PC	4	0	0	4	2

EMPLOYABILITY ENHANCEMENT COURSE (EEC)

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
1.	MC5413	Technical Seminar and Report Writing	EEC	2	0	0	2	1
2.	MC5113	Communication Skills Laboratory	EEC	3	1	0	2	2
3.	MC5513	Mini Project	EEC	4	0	0	4	2
4.	MC5611	Project Work	EEC	24	0	0	24	12

**PROFESSIONAL ELECTIVES (PE)*
SEMESTER IV
ELECTIVE I**

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
1.	MC5001	Soft Computing	PE	3	3	0	0	3
2.	MC5002	Accounting and Financial Management	PE	3	3	0	0	3
3.	MC5003	Software Project Management	PE	3	3	0	0	3
4.	MC5004	Security in computing	PE	3	3	0	0	3
5.	MC5005	Adhoc and Sensor Network	PE	3	3	0	0	3

**SEMESTER V
ELECTIVE II**

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
1.	MC5006	Professional Ethics	PE	3	3	0	0	3
2.	MC5007	Health Care Management	PE	3	3	0	0	3
3.	MC5008	Geological Information Systems	PE	3	3	0	0	3
4.	MC5009	Human Resource Management	PE	3	3	0	0	3
5.	MC5010	Internet of Things	PE	3	3	0	0	3

**SEMESTER V
ELECTIVE III**

SL. NO	COURSE CODE	COURSE TITLE	CATEGORY	CONTACT PERIODS	L	T	P	C
1.	MC5011	Semantic Web	PE	3	3	0	0	3
2.	MC5012	Service Oriented Architecture	PE	3	3	0	0	3
3.	MC5013	Game Programming	PE	3	3	0	0	3
4.	MC5014	Computational Intelligence	PE	3	3	0	0	3
5.	MC5015	Principles of Programming Languages	PE	3	3	0	0	3