SAVEETHA ENGINEERING COLLEGE
AUTONOMOUS
NAAC A GRADE
Affiliated to Anna University | Approved by AICTE

REGULATIONS 2019

DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

M.E - APPLIED ELECTRONICS

CURRICULUM and SYLLABUS

S.No.	Category	Course Code	Course Title	Contact Hours per Week			Credits	Prerequisite
				L	T	P		
1	FC	19MMA01	Applied Mathematics for Electronics Engineers	4	0	0	4	-
2	PC	19MAE01	Advanced Digital System Design	3	0	0	3	-
3	PC	19MCN01	Advanced Discrete Time Signal Processing	3	1	0	4	-
4	PC	19MAE02	Embedded System Design	3	0	0	3	-
5	PC	19MAE03	Sensors, Actuators and Interface Electronics	3	0	0	3	-
6	PC	19MAE18	Electronic System Design Laboratory I	0	0	4	2	-
7	PC	19MAE04	Soft Computing and Optimization Techniques	3	0	0	3	-
8	PC	19MAE05	Advanced Microprocessor and Microcontroller Architecture	3	0	0	3	-
9	PC	19MVL10	ASIC and FPGA Design	3	0	0	3	-
10	PC	19MVL26	Hardware Software Co-Design	3	0	0	3	-
11	PC	19MCN19	Advanced Digital Image Processing	3	0	0	3	-
12	PC	19MAE19	Electronic System Design Laboratory II	0	0	4	2	-
13	EEC	19MAE20	Term Paper Writing and Seminar	0	0	2	1	-
14	EEC	19MAE21	Project Work Phase I	0	0	12	6	-
15	EEC	19MAE22	Project Work Phase II	0	0	24	12	-
16	PE	19MAE06	Digital Control Engineering	3	0	0	3	-
17	PE	19MAE07	Computer Architecture and Parallel Processing	3	0	0	3	-
18	PE	19MVL05	CAD for VLSI Circuits	3	0	0	3	-
19	PE	19MCN15	Advanced Electromagnetic Interference and Compatibility	3	0	0	3	-
20	PE	19MAE08	VLSI Design Techniques	3	0	0	3	-
21	PE	19MAE09	Nano Electronics	3	0	0	3	-
22	PE	19MCN36	Wireless Adhoc and Sensor Networks	3	0	0	3	-
23	PE	19MAE10	Advanced High Performance Networks	3	0	0	3	-
24	PE	19MCN24	DSP Processor Architecture and Programming	3	0	0	3	-
25	PE	19MAE11	RF System Design	3	0	0	3	-
26	PE	19MAE12	Speech and Audio Signal Processing	3	0	0	3	-
27	PE	19MVL11	Solid State Device Modeling and Simulation	3	0	0	3	-
28	PE	19MCS09	Internet of Things	3	0	0	3	-
29	PE	19MAE13	System on Chip Design	3	0	0	3	-
30	PE	19MAE14	Robotics	3	0	0	3	-
31	PE	19MAE15	Physical Design of VLSI Circuits	3	0	0	3	-
32	PE	19MCN12	Signal Integrity for High Speed Design	3	0	0	3	-
33	PE	19MVL07	MEMS and NEMS	3	0	0	3	-
34	PE	19MAE16	Secure Computing Systems	3	0	0	3	-
35	PE	19MAE17	Pattern Recognition	3	0	0	3	-

SEMESTER I

	S.No.	Course Code	Course Title	Contact Hours per Week			Credits
				L	T	P	

	1	19MMA01	Applied Mathematics for Electronics Engineers	4	0	0	4
	2	19MAE01	Advanced Digital System Design	3	0	0	3
	3	19MCN01	Advanced Discrete Time Signal Processing	3	1	0	4
	4	19MAE02	Embedded System Design	3	0	0	3
	5	19MAE03	Sensors, Actuators and Interface Electronics	3	0	0	3
	6		Professional Elective I	3	0	0	3
	7	19MAE18	Electronic System Design Laboratory I	0	0	4	2
			Total	**19**	**1**	**4**	**22**

SEMESTER II

				Contact Hours per Week			
	S.No.	**Course Code**	**Course Title**	**L**	**T**	**P**	**Credits**
	1	19MAE04	Soft Computing and Optimization Techniques	3	0	0	3
	2	19MVL10	ASIC and FPGA Design	3	0	0	3
	3	19MVL26	Hardware Software Co-Design	3	0	0	3
	4	19MCN19	Advanced Digital Image Processing	3	0	0	3
	5		Professional Elective II	3	0	0	3
	6		Professional Elective III	3	0	0	3
	7	19MAE19	Electronic System Design Laboratory II	0	0	4	2
	8	19MAE20	Term Paper Writing and Seminar	0	0	2	1
			Total	**18**	**0**	**6**	**21**

SEMESTER III

				Contact Hours per Week			
	S.No.	**Course Code**	**Course Title**	**L**	**T**	**P**	**Credits**
	1	19MAE05	Advanced Microprocessor and Microcontroller Architecture	3	0	0	3
	2		Professional Elective IV	3	0	0	3
	3		Professional Elective V	3	0	0	3
	4	19MAE21	Project Work Phase I	0	0	12	6
			Total	**9**	**0**	**12**	**15**

SEMESTER IV

				Contact Hours per Week			
	S.No.	**Course Code**	**Course Title**	**L**	**T**	**P**	**Credits**
	1	19MAE22	Project Work Phase II	0	0	24	12
			Total	**0**	**0**	**24**	**12**

TOTAL CREDITS: 70