SCHOOL OF PHYSICAL SCIENCES,
SOLAPUR UNIVERSITY, SOLAPUR
M.Sc – Physics (Applied Electronics)
Choice Based Credit System
w.e.f June 2018-19

Semester	Code	Title of the Paper	Semester exam			L	T	P	Credits
First		**Hard core**	**Theory**	**IA**	**Total**				
AE	**HCT1.1**	Mathematical Techniques	70	30	100	4		-	4
	HCT1.2	Condensed Matter Physics	70	30	100	4		-	4
	HCT1.3	Analog & Digital Electronics	70	30	100	4		-	4
		Soft Core (Any one)							
	SCT1.1	Classical Mechanics	70	30	100	4		-	4
	SCT1.2	Fundamentals of Nanoelectronics	70	30	100	4		-	
		Tutorial			25		1		1
		Practical							
	HCT 1.1	Practical HCP 1.1	35	15	50	-	-	2	6
	HCP1.2	Practical HCP 1.2	35	15	50	-	-	2	
	HCP1.3	Practical HCP 1.3	35	15	50	-	-	2	
		Soft core (Any one)							
	SCP1.1	Practical SCP1.1	35	15	50	-	-	2	2
	SCP1.2	Practical SCP1.2	35	15	50	-	-	2	
		Total for first semester	**420**	**180**	**625**				**25**
Second		**Hard core**							
AE	**HCT2.1**	Quantum Mechanics	70	30	100	4		-	4
	HCT2.2	Electrodynamics	70	30	100	4		-	4
	***HCT/ P 2.3**	Communicate in English Confidently	70	30	100	3		1	3
		Soft core (Any one)							
	SCT2.1	Microprocessors & Microcontrollers	55	20	75	4		-	4
	SCT2.2	Statistical Mechanics	70	30	100	4		-	
		Open elective (Any one)							
	OET2.1	Elements of Electronics	70	30	100	4		-	4
	OET2.2	Electronic Instrumentation	70	30	100	4		-	
		Tutorial			25		1		1
		Practical							
	HCP 2.1	Practical HCP 2.1	35	15	50	-	-	2	4
	HCP2.2	Practical HCP 2.2	35	15	50	-	-	2	
		Soft core (Any one)							
	SCP2.1	Practical SCP2.1	35	15	50	-	-	2	2
	SCP2.2	Practical SCP2.2	35	15	50	-	-	2	
		Open elective (Any one)							
	OEP2.1	Practical OEP2.1	35	15	50	-	-	2	2
	OEP2.2	Practical OEP2.2	35	15	50	-	-	2	
		Total for second semester	**420**	**180**	**625**				**25**

Third		**Hard core**							
AE	**HCT3.1**	Semiconductor Devices	70	30	100	4		-	4
	HCT3.2	Atomic, Molecular & Nuclear Physics	70	30	100	4		-	4
	***HCT/ P 3.3**	Technical English Communication Skills	55	20	75	3		1	3
		Soft core (Any one)							
	SCT3.1	Communication System	70	30	100	4		-	4
	SCT3.2	Biomedical Instrumentation	70	30	100	4		-	
		Tutorial			25		1		1
		Open elective (Any one)							
	OET3.1	Energy Harvesting Devices	70	30	100	4		-	4
	OET3.2	Introduction to MATLAB & LabVIEW	70	30	100	4		-	
		Practical							
	HCP 3.1	Practical HCP 3.1	35	15	50	-	-	2	2
	HCP3.2	Practical HCP 3.2	35	15	50	-	-	2	2
	SCP 3.1	Practical SCP 3.1	35	15	50	-	-	2	2
		Open elective (Any one)							
	OEP3.1	Practical OEP3.1	35	15	50	-	-	2	2
	OEP3.2	Practical OEP3.2	35	15	50	-	-	2	
		Total for third semester	**420**	**180**	**625**				**25**
Four		**Hard core**							
AE	**HCT4.1**	Microelectronics	70	30	100	4		-	4
	HCT4.2	Microwave Devices & Circuits	70	30	100	4		-	4
	HCT 4.3	Microprocessors & Interfacing	70	30	100	4		-	4
		Soft core (Any one)						-	4
	SCT4.1	Instrumentation	70	30	100	4		-	
	SCT4.2	Fiber Optic Communications	70	30	100	4		-	
		Tutorial			25		1	-	1
	MP4.3	Major Project	140	60	200	-	-	-	8
		Total for four semester	**420**	**180**	**625**				**25**
	Total								**100**

L = Lecture T = Tutorials P = Practical IA= Internal Assessment

4 Credits of Theory = 4 Hours of teaching per week

2 Credit of Practical = 4 hours per week

HCT = Hard core theory

SCT = Soft core theory

HCP = Hard core practical

SCP = Soft core practical

OET = Open elective theory

OEP = Open elective practical

MP = Major project

HCT/P = Hard Core Theory / Project

***HCT/P is mandatory for every student who seeks M.Sc. / M.A./M.C.A. degree and has to earn 3 credits in Sem.-II & Sem.-III. However these credits will not accumulated for CGPA, in case student fails in these courses he will be declared as fail.**