

**UNIVERSITY INSTITUTE OF ENGINEERING & TECHNOLOGY**  
**KURUKSHETRA UNIVERSITY, KURUKSHETRA**

('A+' Grade, NAAC Accredited)

**SCHEME OF EXAMINATIONS FOR**  
**MASTER OF TECHNOLOGY IN**  
**ELECTRONICS & COMMUNICATION ENGINEERING**

**(W. E. F. SESSION: 2018-19)**

**SEMESTER- I**

S. No.	Course Code	SUBJECT	L	T	P	Total	Minor Test	Major Test	Cr.	Duration of Exam (Hrs.)
1	MTEC-101	RF and Microwave Circuit Design	3	-	-	3	40	60	3	3
2	MTEC-103	Wireless & Mobile Communications	3	-	-	3	40	60	3	3
3	*	Program Elective –I	3	-	-	3	40	60	3	3
4	**	Program Elective-II	3	-	-	3	40	60	3	3
5	MTEC-117	RF and Microwave Circuit Design(Lab.)	-	-	4	4	40	60	2	3
6	MTEC-119	Wireless & Mobile Communications (Lab.)	-	-	4	4	40	60	2	3
7	MTRM-111	Research Methodology and IPR	2	-	-	2	40	60	2	3
8	***	Audit Course-I	2	-	-	2	100	-	0	3
<b>TOTAL</b>			<b>16</b>	<b>0</b>	<b>8</b>	<b>24</b>	<b>280</b>	<b>420</b>	<b>18</b>	
							<b>700</b>			

<b>*Program Elective - I</b>		<b>**Program Elective- II</b>	
MTEC-105	Advanced Communication Networks	MTEC-111	Cognitive Radio
MTEC-107	Pattern Recognition and Machine Learning	MTEC-113	Wireless Sensor Networks
MTEC-109	Statistical Information Processing	MTEC-115	High Performance Networks

<b>*** Audit Course-I</b>	
MTAD-101	English for Research Paper Writing
MTAD-103	Disaster Management
MTAD-105	Sanskrit for Technical Knowledge
MTAD-107	Value Education

**Note1:** The course of program elective will be offered at 1/3<sup>rd</sup> or 6 numbers of students (whichever is smaller) strength of the class.

**\*\*\* Note2:** Along with the credit course, a student may normally be permitted to take audit course, however for auditing a course; prior consent of the course coordinator of the course is required. These courses shall not be mentioned for any award/calculation of SGPA/CGPA in the DMC. A certificate of successful completion of the audit course will be issued by the Director/Head of institution.

## SEMESTER-II

S. No.	Course code	Subject	L	T	P	Total	Minor Test	Major Test	Cr.	Duration of Exam (Hrs.)
1	MTEC-102	Antennas and Radiating Systems	3	-	-	3	40	60	3	3
2	MTEC-104	Advanced Digital Signal Processing	3	-	-	3	40	60	3	3
3	*	Program Elective-III	3	-	-	3	40	60	3	3
4	**	Program Elective-IV	3	-	-	3	40	60	3	3
5	MTEC-118	Antennas and Radiating Systems Lab		-	4	4	40	60	2	3
6	MTEC-120	Advanced Digital Signal Processing Lab	-	-	4	4	40	60	2	3
7	# MTEC-122	Mini Project	-	-	4	4	100	-	2	3
8	***	Audit Course-II	2			2	100	-	0	3
<b>TOTAL</b>			<b>14</b>		<b>12</b>	<b>26</b>	<b>340</b>	<b>360</b>	<b>18</b>	
							<b>700</b>			

<b>*Program Elective - III</b>		<b>**Program Elective - IV</b>	
MTEC-106	Satellite Communication	MTEC-112	Optimization Techniques
MTEC-108	Internet of Things	MTEC-114	MIMO System
MTEC-110	Voice and Data networks	MTEC-116	Programmable Networks – SDN, NFV

<b>*** Audit Course - II</b>	
MTAD-102	Constitution of India
MTAD-104	Pedagogy Studies
MTAD-106	Stress Management by Yoga
MTAD-108	Personality Development through Life Enlightenment Skills.

**Note1:** The course of program elective will be offered at 1/3<sup>rd</sup> or 6 numbers of students (whichever is smaller) strength of the class.

**\*\*\*Note2:** Along with the credit course, a student may normally be permitted to take audit course, however for auditing a course; prior consent of the course coordinator of the course is required. These courses shall not be mentioned for any award/calculation of SGPA/CGPA in the DMC. A certificate of successful completion of the audit course will be issued by the Director/Head of institution.

**#Note3: Mini project:** During this course the student will be able to understand the contemporary/emerging technologies for various processes and systems. During the semester, the students are required to search/gather the material/information on a specific topic, comprehend it and present/discuss the same in the class. He/she will be acquainted to share knowledge effectively in oral (seminar) and written form (formulate documents) in the form of report. The student will be evaluated on the basis of viva/ seminar (40 marks) and report (60 marks).

### SEMESTER-III

S. No.	Course Code	Subject	L	T	P	Total	Minor Test	Major Test	Cr.	Duration of Exam (Hrs.)
1	*	Program Elective-V	3	-	-	3	40	60	3	3
2	**	Open Elective	3	-	-	3	40	60	3	3
3	MTEC-207	Dissertation Phase-I	-	-	20	20	100	-	10	3
		<b>TOTAL</b>	<b>6</b>		<b>20</b>	<b>26</b>	<b>180</b>	<b>120</b>	<b>16</b>	
							<b>300</b>			

#### \*Program Elective - V

MTEC-201	Adaptive Filter Theory
MTEC-203	Optical Networks
MTEC-205	Remote Sensing

#### \*\*Open Elective

1.	MTOE-201	Business Analytics
2.	MTOE-203	Industrial Safety
3.	MTOE-205	Operations Research
4.	MTOE-207	Cost Management of Engineering Projects
5.	MTOE-209	Composite Materials
6.	MTOE-211	Waste to Energy

### SEMESTER-IV

S. No.	Course Code		L	T	P	Total	Minor Test	Major Test	Cr.	Duration of Exam (Hrs.)
1	MTEC-202	Dissertation Phase-II	-	-	32	32	100	200	16	3
		<b>TOTAL</b>					<b>300</b>		<b>16</b>	

#### Total credits of all four semesters – 68

**Note 1:** At the end of the second semester each student is required to do his/her Dissertation work in the identified area in consent of the Guide/Supervisor. Synopsis for the Dissertation Part-I is to be submitted within three weeks of the beginning of the Third Semester.

**Note 2:** Each admitted student is required to submit the report of his/her Dissertation Part-I as per the schedule mentioned in Academic calendar for the corresponding academic session otherwise the Dissertation Part-II cannot be continued at any level.

**Note 3:** Each admitted student is required to submit his/her final Dissertation Part-II as per the schedule mentioned in Academic calendar for the corresponding academic session only after the publication of two papers in a

journal/International/National conference of repute like IEEE, Springer, Elsevier, ACM etc.

**Note 4:** The course of program/open elective will be offered at 1/3<sup>rd</sup> or 6 numbers of students (whichever is smaller) strength of the class.