

**CURRICULUM I TO IV SEMESTERS (FULL TIME)**

**M.E. AVIONICS**

**SEMESTER I**

SL. NO	COURSE CODE	COURSE TITLE	L	T	P	C
<b>THEORY</b>						
1	MA9116	<a href="#">Applied Mathematics for Avionics Engineers</a>	3	1	0	4
2	AV9111	<a href="#">Digital Avionics</a>	3	0	0	3
3	AV9112	<a href="#">Electro-optic systems</a>	3	0	0	3
4	AV9113	<a href="#">Flight Instrumentation</a>	3	0	0	3
5	AV9115  AV9115	<b>Bridge Course</b> <a href="#">Aircraft Engineering</a> (For Non-Aero students) (OR) <a href="#">Electronic Systems</a> (For Aero students)	3	0	0	3
6	E1	Elective I	3	0	0	3

<b>PRACTICAL</b>						
7	AV9118	<a href="#">Avionics Integration Lab</a>	0	0	4	2
<b>TOTAL</b>			<b>18</b>	<b>1</b>	<b>4</b>	<b>21</b>

**SEMESTER II**

<b>SL. NO</b>	<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>THEORY</b>						
1	AV9121	<a href="#">Navigation Systems</a>	3	0	0	3
2	AV9122	<a href="#">Aerospace Guidance and Control</a>	3	0	0	3
3	AV9123	<a href="#">Mathematical Modeling &amp; Simulation</a>	3	0	0	3
4	AV9124	<a href="#">Rocketry &amp; Space Mechanics</a>	3	0	0	3
5	E2	Elective II	3	0	0	3
6	E3	Elective III	3	0	0	3
<b>PRACTICAL</b>						
7	AV9127	<a href="#">Flight Control Lab</a>	0	0	4	2
<b>TOTAL</b>			<b>18</b>	<b>0</b>	<b>4</b>	<b>20</b>

### SEMESTER III

SL. NO	COURSE CODE	COURSE TITLE	L	T	P	C
<b>THEORY</b>						
1	E4	Elective IV	3	0	0	3
2	E5	Elective V	3	0	0	3
3	E6	Elective VI	3	0	0	3
<b>PRACTICAL</b>						
4	AV9134	Project Work (Phase I)	0	0	12	6
<b>TOTAL</b>			<b>9</b>	<b>0</b>	<b>12</b>	<b>15</b>

### SEMESTER IV

SL. NO	COURSE CODE	COURSE TITLE	L	T	P	C
<b>PRACTICAL</b>						
1	AV9141	Project Work (Phase II)	0	0	24	12
<b>TOTAL</b>			<b>0</b>	<b>0</b>	<b>24</b>	<b>12</b>

**Total no.of credits to be earned for the award of Degree = 68**

### LIST OF ELECTIVES

SL. NO	COURSE CODE	COURSE TITLE	L	T	P	C
1	AV9151	<a href="#">Digital Fly-By-Wire Control</a>	3	0	0	3
2	AV9152	<a href="#">Avionics System Engineering</a>	3	0	0	3
3	AV9153	<a href="#">Display Engineering</a>	3	0	0	3
4	AV9154	<a href="#">Fault Tolerant Computing</a>	3	0	0	3
5	AV9155	<a href="#">Programming in Ada</a>	3	0	0	3
6	NE9164	<a href="#">Microwaves and Radar</a>	3	0	0	3
7	AV9166	<a href="#">Electronic Warfare</a>	3	0	0	3
8	AV9164	<a href="#">Instrumentation for Flight testing</a>	3	0	0	3
9	AV9168	<a href="#">Human Engineering</a>	3	0	0	3
10	AV9169	<a href="#">UAV System Design</a>	3	0	0	3
11	AV9170	<a href="#">Aircraft Product &amp;System Engineering, Standards &amp; Certification</a>	3	0	0	3
12	AV9171	<a href="#">Active Control Technology</a>	3	0	0	3
13	AV9172	<a href="#">Airborne Fire Control</a>	3	0	0	3
14	AV9173	<a href="#">Flight Mechanics</a>	3	0	0	3
15	AV9174	<a href="#">Missile Technology</a>	3	0	0	3
16	AV9175	<a href="#">Fault Tolerant Control</a>	3	0	0	3
17	AV9176	<a href="#">Satellite Architecture and communication</a>	3	0	0	3
18	CP9167	<a href="#">Digital Image Processing</a>	3	0	0	3
19	AV9177	<a href="#">Airborne Actuators &amp; Sensors</a>	3	0	0	3
20	NE9156	<a href="#">Real Time Embedded System</a>	3	0	0	3
21	AV9178	<a href="#">Electromagnetic Interference and Compatibility</a>	3	0	0	3
22	NE9167	<a href="#">Detection and Estimation theory</a>	3	0	0	3
23	AV9183	<a href="#">Soft computing for Avionic Engineers</a>	3	0	0	3
24	AV9179	<a href="#">Avionics Network Technology</a>	3	0	0	3