

**ACADEMIC REGULATIONS
&
COURSE STRUCTURE**

For

M.Tech (Avionics)

(Applicable for batches admitted from 2019 - 2020)



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY:KAKINADA

KAKINADA – 533003, Andhra Pradesh, India

Semester I

S.No	Course No	Course Name	P.Os	Category	L	T	P	Credits
1		Program Core I Flight Mechanics			3	0	0	3
2		Program Core II Avionics Systems			3	0	0	3
3		Program Elective I 1. Flight Instrumentation 2. Advanced Digital Image Processing 3. Missile And Space Vehicle Mechanics			3	0	0	3
4		Program Elective II 1. Aircraft Communication Systems 2. Cyber Security 3. Multi Sensor Data Fusion			3	0	0	3
5		Research Methodology and IPR			2	0	0	2
6		Audit Course I			2	0	0	0
7		Laboratory 1 (Based on Core) Avionics Lab			0	0	4	2
8		Laboratory 2 Based on Elective I / II			0	0	4	2
Total					16	0	8	18

M. Sailaja
Dr. M. Sailaja
Professor of ECE
JNTUK

V. Parkash Naidu
Dr. VPS Naidu
Principal Scientist, MSDF Lab
CSIR-NAL

P. Lovaraju
31/8/2019
Dr. P. Lovaraju
Dept. of AE, Prof & Head
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Sri. M. V. Srinagesh
31/08/2019
Sri. M. V. Srinagesh
AGM (Design)
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M. Srinivasa Prabhakar
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Program Director,
School of Avionics, ISL,
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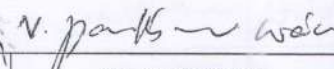
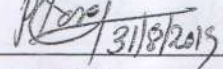
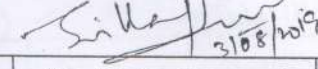
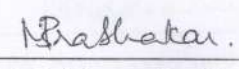
Semester II

S.No	Course No	Subject	P.Os	Category	L	T	P	Credits
1		Program Core III Flight Control Systems			3	0	0	3
2		Program Core IV Aircraft Navigation Systems			3	0	0	3
3		Program Elective III 1. Avionics Embedded Systems 2. Avionics Network Technology 3. Missile And Space Vehicle Guidance And Control			3	0	0	3
4		Program Elective IV 1. Aircraft Utility Systems 2. Flying Robotics 3. Network Centric Warfare			3	0	0	3
5		Audit Course II			2	0	0	0
6		Laboratory 3 (Based on Core) Guidance, Navigation and control Lab			0	0	4	2
7		Laboratory 4 Based on Electives III / IV			0	0	4	2
8		Mini Project with Seminar			0	0	4	2
Total					14	0	12	18

NOTE: Students be encouraged to go to Industrial Training/Internship for at least 2-3 Weeks during semester break.

Audit course 1 & 2

1. English for Research Paper Writing
2. Disaster Management
3. Sanskrit for Technical Knowledge

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4. Value Education
5. Constitution of India
6. Pedagogy Studies
7. Stress Management by Yoga
8. Personality Development through Life Enlightenment Skills.


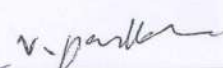
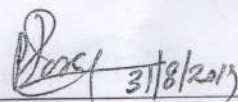
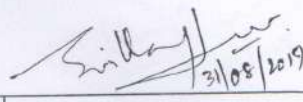
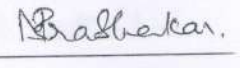
Semester III

S.No	Course No	Subject	P.Os	Category	L	T	P	Credits
1		Program Elective V 1. Aerospace Electromagnetic Compatibility 2. Artificial Intelligence and Machine Learning 3. Unmanned Aircraft Systems 4. Data Science			3	0	0	3 ^s
2		Open Elective 1. Business Analytics 2. Industrial Safety 3. Operations Research 4. Cost Management of Engineering Projects 5. Composite Materials 6. Waste to Energy			3	0	0	3
3		Dissertation-I /Industrial Project			0	0	20	10 [#]
Total								16

NOTE:

[#] Evaluated and Displayed in IV Sem Marks list.

^s Students going for Industrial Project/Thesis will complete these courses through MOOCs

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Semester IV

S.No	Course No	Course Name	P.Os	Category	L	T	P	Credits
1		Project/ Dissertation Phase-II (continued from III semester)			0	0	32	16
Total					0	0	32	16

COURSE STRUCTURE

Focus

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<p><i>M. Sailaja</i> Dr. M. Sailaja Professor of ECE JNTUK</p>	<p><i>V. parthasarathi</i> Dr. VPS Naidu Principal Scientist, MSDF Lab CSIR-NAL</p>	<p><i>P. Lovaraju</i> Dr. P. Lovaraju Dept. of AE, Prof & Head Lakireddy Balireddy College of Engg</p>	<p><i>Sri M. V. Srinagesh</i> Sri. M. V. Srinagesh AGM (Design) SLRDC, HAL-Hyderabad</p>	<p><i>M. Srinivasa Prabhakar</i> M. Srinivasa Prabhakar Program Director. School of Avionics, IS JNTUK</p>
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