JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA

Kakinada-533003, Andhra Pradesh (India)

Comparison of Program Structure R16 with R19

Program Code	Program Name	Total No. of Courses		No of Subjects			Total Courses	Percentage %
		R16	R19	Added in (R19)	Deleted (R16)	Content revised more than 20%		
97	M.Tech – Avionics	19	20	8	1	5	14	70%

Coordinator

HOD

Comparison of Course Structure R16 with R19

Program Code: 97　　　　**Program Name:M.Tech - Avionics**　　　　**Year : 1**　　　　**Semester: 1**

R16					R19						Remarks		
Course code	Course name	L	T	P	C	Course code	Course name	L	T	P	C	New Course? (R19)	Deleted Course? (R16)	Content Revision %
1	Flight Mechanics	4			3	Core-1	Flight Mechanics	3			3			10
2	Digital Avionics Systems	4			3	Core-2	Avionics Systems	3			3			60
3	Flight Instrumentation	4			3	Elective-1	1. Flight Instrumentation 2. Advanced Image Processing 3. Missile And Space Vehicle Dynamics	3			3			30
4	Aircraft Communication Systems	4			3	Elective-2	1. Aircraft CommunicationSystems 2. Cyber Security 3. Network Centric Warfare	3			3			30
5	**Elective-1** 1.Flight Modelling & Simulation 2.Object Oriented Programming 3. Cyber Security	4			3	Core	Research Methodology and IPR	2			2	Yes		
6	**Elective-2** 1. Advanced Image Processing 2. EMI/EMC 3. Computer Vision	4			3	Lab-1	Avionics Engineering Lab			4	2	Yes		
7	Flight Instrumentation Lab			3	2	Lab-2	Flight Instrumentation and Communication Lab			4	2			40%
						Audit –1	Audit Course –1	2			0	Yes		
	TOTAL				20		**TOTAL**				18	3		4

Program Code: 97   **Program Name: M.Tech - Avionics**   **Year : 1**   **Semester: 2**

Course code	R16 Course name	L	T	P	C	Course code	R19 Course name	L	T	P	C	New Course? (R19)	Deleted Course? (R16)	Content Revision %
1	Aircraft Navigation Systems	4			3	Core-3	Flight Control Systems	3			3			20
2	Aircraft Utility Systems	4			3	Core-4	Aircraft Navigation Systems	3			3			20
3	Flight control systems	4			3	Elective-3	1. Avionics Embedded Systems 2. Avionics Network Technology 3. Multi Sensor Data Fusion	3			3			20
4	Embedded system design	4			3	Elective-4	1. Aircraft Utility Systems 2. Embedded Robotics 3. Missile and Space Vehicle Guidance And Control	3			3			30
5	**Elective-I** a) Aircraft System Engineering b) Unmanned Aircraft Systems c) Integrated Vehicle Health Monitoring	4			3	Lab-3	Control ,Guidance and Navigation Lab	2			2			20
6	**Elective-II** a) Aircraft Surveillance Systems b) Network Centric Warfare c) Multi Sensor Data Fusion	4			3	Lab-4	Avionics Embedded Systems Lab			4	2	Yes		
7	Navigation, Guidance and Control Lab			2	2	Core	Mini Project with Seminar			4	2	Yes		
						Audit – 2	Audit Course-2	2			0	Yes		
TOTAL					20	**TOTAL**					18	3		1

R16						R19						Remarks		
Course code	Course name	L	T	P	C	Course code	Course name	L	T	P	C	New Course? (R19)	Deleted Course? (R16)	Content Revision %
1	Comprehensive Viva-Voce				2	Elective-V	Program Elective V 1.ADA 95 2.Aerospace Electromagnetic Compatibility 3.Unmanned Aircraft Systems				3	Yes		
2	Seminar – I				2	Open Elective	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	Yes		
3	Project Work Part – I				16	Dissertation	Dissertation Phase-I /Industrial Project (To be continued and Evaluated next Semester)*				10			
	TOTAL				20		**TOTAL**				16	2		

Program Code: 97 **Program Name: M.Tech - Avionics** **Year : 2** **Semester: 4**

R16						R19						Remarks		
Course code	Course name	L	T	P	C	Course code	Course name	L	T	P	C	New Course? (R19)	Deleted Course? (R16)	Content Revision %
1	Seminar – II				2	Dissertation	Dissertation Phase II (Continued from III semester)				16		Yes	
2	Project Work Part – II				18									
	TOTAL				20		**TOTAL**				16		1	

Coordinator   **HOD**