



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA
Kakinada-533003, Andhra Pradesh (India)

Comparison of Program Structure R17 with R19

Program Code	Program Name	Total No. of Courses		No of Subjects			Total Courses	Percentage %
		R17	R19	Added in (R19)	Deleted (R19)	Content revised more than 20%		
D26	M. Tech – cyber security	20	20	13	10	—	13	65

Coordinator

HOD/Director

REGISTRAR
J.N.T. University Kakinada
Kakinada-533003

Head of the Department
Dept. of Computer Science & Engg
University College of Engineering
JNT University, Kakinada - 523 003



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA

Kakinada-533003, Andhra Pradesh (India)

Comparison of Course Structure R17 with R19

Program Code: D26

Program Name: M .Tech - cyber security Year: 1

Semester: 1

R17					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	ADVANCED DATA STRUCTURES	4		—	3	R19MCY1151	Program Core-1 Principles of Cyber Security					Yes		
2	COMPUTER NETWORKS	4		—	3	R19 MCY 1152	Program Core-2 Applied Cryptography							15
3	ADVANCED UNIX PROGRAMMING	4		—	3	R19 MCY 1153	Program Elective-1 1. Operating Systems Administration and Security 2. Cyber Laws and Security Policies 3. Cloud and IoT Security						Yes	
4	DATABASE MANAGEMENT SYSTEMS	4		—	3	R19 MCY 1154	Program Elective-2 1. Wireless Networks Security 2. Cyber Space Operations and Design 3. Database and Web Applications Security						Yes	
5	ADVANCED OPERATING SYSTEMS	4		—	3	R19 MCY 1155	Research Methodology and IPR					Yes		
6	DATA WAREHOUSING AND DATA MINING	4		-	3	R19 MCY 1156	Laboratory-1 Cyber Security Lab							15

7	CSE LAB 1	-	3	2	R19 MCY 1157	Laboartory-2 Cryptography Lab							30	
8						Audit Course-1 1. English for Research Paper Writing 2. Disaster Management 3. Sanskrit for Technical Knowledge Value Education								
					R19 MCY 1158	4.					Yes			
TOTAL				20	TOTAL						18	3	2	

Program Code: D26

Program Name: M. Tech - cyber security

Year : 1

Semester: 2

R17					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	ADVANCED UNIX PROGRAMMING	4	—	3	4	R19 MCY 1251	Program Core-3 Cyber Crime Investigation and Digital Forensics	3	0	0	3		Yes	
2	APPLIED CRYPTOGRAPHY	4	—	3	4	R19 MCY 1252	Program Core-4 Ethical Hacking	3	0	0	3	Yes	Yes	
3	BIG DATA ANALYTICS	4	—	3	4	R19 MCY 1253	Program Elective-3 1. Software Vulnerability Analysis 2. Malware Analysis and Reverse Engineering 3. Application Threat Detection	3	0	0	3			15
4	CLOUD COMPUTING	4	—	3	4	R19 MCY 1254	Program Elective-4 1. Biometric Security 1. Web Security 1. 3. Firewall and VPN Security	3	0	0	3			10
5	Elective – 1 ADHOC & SENSOR NETWORKS SEMANTIC WEBSERVICES PRINCIPLES OF PROGRAMMING LANGUAGES INTERNET OF THINGS	4	—	3	4	R19 MCY 1255	Laboratory-3 Cyber Crime Investigation and Digital Forensics Lab	0	0	4	2			25
6	Elective - 2	4	-	3	4	R19	Laboartory-4	0	0	4	2	Yes		

	MACHINE LEARNING INFORMATION RETRIEVAL SYSTEM IMAGE PROCESSING & PATTERN RECOGNITION SOFTWARE TESTING METHODOLOGIES		-			MCY 1256	Ethical Hacking Lab							
7	IT LAB 2	—	3	2	—	R19 MCY 1257	Mini Project with Seminar	2	0	0	2			
						R19 MCY 1258	Audit Course-2 1. Constitution of India 2. Pedagogy Studies 3. Stress Management by Yoga 4. Personality Development through Life Enlightenment Skills	2	0	0	0	Yes		
TOTAL						20	TOTAL				18	3	2	

Program Code: D26

Program Name: M.Tech - cyber security

Year : 2

Semester: 3

R17						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	—	—	2	—	R19 MCY 2351	Program Elective-5 1. Cyber Security Governance 2. Principles of Secure Coding 3. Information System Audit 4. MOOCs-1 (NPTEL/SWAYAM)	3	0	0	3	Yes		
2	SEMINAR-I	—	—	2	—	R19 MCY 2352	Open Elective 1. MOOCs (NPTEL/SWAYAM)-Any 12 Week Course on Engineering/ Management/ Mathematics offered by other than parent department 2. Course offered by other departments in the college	3	0	0	3	Yes		
3	THESIS WORK PART - I	—	—	16	—	R19 MCY 2353	Dissertation-I/Industrial Project	0	0	20	10			
TOTAL						TOTAL						16	2	

Program Code: D26

Program Name: M. Tech - cyber security

Year : 2

Semester: 4

R17					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	—	R19 MCY 2451	Dissertation-II	0	0	32	16		Yes		
2	THESIS WORK PART - II	—	—	18	—										
TOTAL					20	TOTAL							16	1	