

# **ACADEMIC REGULATIONS & COURSE STRUCTURE**

**For**

## **EMBEDDED SYSTEMS**

*(Applicable for batches admitted from 2016-2017)*



**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY: KAKINADA**  
**KAKINADA - 533 003, Andhra Pradesh, India**

## I Semester

S. No.	Name of the Subject	L	P	C
1	Digital System Design	4	-	3
2	Embedded System Design	4	-	3
3	Embedded Real Time Operating Systems	4	-	3
4	Embedded - C	4	-	3
5	<b>Elective I</b> 1. Sensors and Actuators 2. Network Security & Cryptography 3. Advanced Computer Architecture	4	-	3
6	<b>Elective II</b> 1. Embedded Computing 2. Soft Computing Techniques 3. Advanced Operating Systems 4. Cyber Security	4	-	3
7	Embedded C-Laboratory	-	3	2
<b>Total Credits</b>				<b>20</b>

## II Semester

S. No.	Name of the Subject	L	P	C
1	Hardware Software Co-Design	4	-	3
2	Digital Signal Processors and Architecture	4	-	3
3	Embedded Networking	4	-	3
4	CPLD and FPGA Architectures and Applications	4	-	3
5	<b>Elective III</b> 1. CMOS Mixed Signal Circuit Design 2. Micro Electro Mechanical System Design 3. Internet Protocols	4	-	3
6	<b>Elective IV</b> 1. System on Chip Design 2. Wireless LANs and PANs 3. Multimedia and Signal Coding	4	-	3
7	Embedded System Design Laboratory	-	3	2
<b>Total Credits</b>				<b>20</b>

### III Semester

S. No.	Subject	L	P	Credits
1	Comprehensive Viva-Voce	--	--	2
2	Seminar – I	--	--	2
3	Project Work Part – I	--	--	16
Total Credits				20

### IV Semester

S. No.	Subject	L	P	Credits
1	Seminar – II	--	--	2
2	Project Work Part - II	--	--	18
Total Credits				20