



**JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY HYDERABAD**  
(Established by Andhra Pradesh Act No.30 of 2008)  
Kukatpally, Hyderabad – 500 085, Andhra Pradesh (India)

**B. TECH. COMPUTER SCIENCE AND ENGINEERING**

**I YEAR**

Code	Subject	L	T/P/D	C
	English	2	-	4
	Mathematics - I	3	1	6
	Mathematical Methods	3	-	6
	Engineering Physics	3	-	6
	Engineering Chemistry	3	-	6
	Computer Programming	3	-	6
	Engineering Drawing	2	3	6
	Computer Programming Lab	-	3	4
	Engineering Physics/ Engineering Chemistry Lab	-	3	4
	English Language Communication Skills Lab	-	3	4
	IT Workshop / Engineering Workshop	-	3	4
	<b>Total</b>	<b>19</b>	<b>16</b>	<b>56</b>

**II YEAR I SEMESTER**

Code	Subject	L	T/P/D	C
	Probability and Statistics	4	-	4
	Mathematical Foundations of Computer Science	4	-	4
	Data Structures	4	-	4
	Digital Logic Design	4	-	4
	Electronic Devices and Circuits	4	-	4
	Basic Electrical Engineering	4	-	4
	Electrical and Electronics Lab	-	3	2
	Data Structures Lab	-	3	2
	<b>Total</b>	<b>24</b>	<b>6</b>	<b>28</b>

**II YEAR II SEMESTER**

Code	Subject	L	T/P/D	C
	Computer Organization	4	-	4
	Database Management Systems	4	-	4
	Java Programming	4	-	4
	Environmental studies	4	-	4
	Formal Languages and Automata Theory	4	-	4
	Design and Analysis of Algorithms	4	-	4
	Java Programming Lab	-	3	2
	Database Management Systems Lab	-	3	2
	<b>Total</b>	<b>24</b>	<b>6</b>	<b>28</b>

**III YEAR I SEMESTER**

Code	Subject	L	T/P/D	C
	Principles of Programming Languages	4	-	4
	<b>OPEN ELECTIVE</b>	4	-	4
	Human Values and Professional Ethics			
	Intellectual Property Rights			
	Disaster Management			
	Software Engineering	4	-	4
	Compiler Design	4	-	4
	Operating Systems	4	-	4
	Computer Networks	4	-	4
	Operating Systems Lab	-	3	2
	Compiler Design Lab	-	3	2
	<b>Total</b>	<b>24</b>	<b>6</b>	<b>28</b>

## III YEAR II SEMESTER

Code	Subject	L	T/P/D	C
	Distributed Systems	4	-	4
	Information Security	4	-	4
	Object Oriented Analysis and Design	4	-	4
	Software Testing Methodologies	4	-	4
	Managerial Economics and Financial Analysis	4	-	4
	Web Technologies	4	-	4
	Case Tools and Web Technologies Lab	-	3	2
	Advanced English Communication Skills Lab	-	3	2
	<b>Total</b>	<b>24</b>	<b>6</b>	<b>28</b>

## IV YEAR I SEMESTER

Code	Subject	L	T/P/D	C
	Linux Programming	4	-	4
	Design Patterns	4	-	4
	Data Warehousing and Data Mining	4	-	4
	Cloud Computing	4	-	4
	<b>ELECTIVE – I</b> Software Project Management Image processing and Pattern Recognition Mobile Computing Computer Graphics Operations Research	4	-	4
	<b>ELECTIVE – II</b> Machine Learning Soft Computing Information Retrieval Systems Artificial Intelligence Computer Forensics	4	-	4
	Linux Programming Lab	-	3	2
	Data Warehousing and Mining Lab	-	3	2
	<b>Total</b>	<b>24</b>	<b>6</b>	<b>28</b>

## IV YEAR II SEMESTER

Code	Subject	L	T/P/D	C
	Management Science	4	-	4
	<b>ELECTIVE III</b> Web Services Semantic Web and Social Networks Scripting Languages Multimedia & Rich Internet Applications	4	-	4
	<b>ELECTIVE – IV</b> Ad hoc and Sensor Networks Storage Area Networks Database Security Embedded Systems	4	-	4
	Industry Oriented Mini Project	-	-	2
	Seminar	-	6	2
	Project Work	-	15	10
	<b>Comprehensive Viva</b>	-	-	2
	<b>Total</b>	<b>12</b>	<b>21</b>	<b>28</b>

**Note:** All End Examinations (Theory and Practical) are of three hours duration.

**T-Tutorial      L – Theory      P – Practical/Drawing      C – Credits**