

# VIJAYA ENGINEERING COLLEGE

(AFFILIATED TO JNTU, HYDERABAD)

AMMAPALEM, KHAMMAM.

## COURSE STRUCTURE FOR CSE DEPARTMENT

### 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
	OPEN ELECTIVE	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>

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### 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
	Comprehensive Viva	-	-	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

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## COURSE STRUCTURE FOR CSE DEPARTMENT

### M. TECH. COMPUTER SCIENCE ENGINEERING

#### (R13) COURSE STRUCTURE AND SYLLABUS

##### I Year I Semester

Code	Group	Subject	L	T/P/D	C
		Advanced Data Structures and Algorithms	3	0	3
		Computer System Design	3	0	3
		Advanced Operating Systems	3	0	3
		Distributed Systems	3	0	3
	Elective -I	<b>ELECTIVE – I</b> Software Process and Project Management Natural Language Processing Pattern Recognition	3	0	3
	Elective -II	<b>ELECTIVE –II</b> Machine Learning Parallel and Distributed Algorithms Software Architecture and Design Patterns	3	0	3
	Lab	Advanced Data Structures and Algorithms Lab	0	3	2
		Seminar	-	-	2
		<b>Total</b>	<b>18</b>	<b>3</b>	<b>22</b>

##### I Year II Semester

Code	Group	Subject	L	T/P/D	C
		Advanced Network Programming	3	0	3
		Advanced Databases	3	0	3
		Web Services and Service Oriented Architecture	3	0	3
		Grid and Cloud Computing	3	0	3
	Elective -III	Advanced Data Mining Storage Area Networks Database Security	3	0	3
	Elective -IV	Semantic Web and Social Networks Wireless Networks and Mobile Computing Information Retrieval Systems	3	0	3
	Lab	Web Services Lab	0	3	2
		Seminar	-	-	2
		<b>Total</b>	<b>18</b>	<b>3</b>	<b>22</b>

##### II Year I Semester

Code	Group	Subject	L	T/P/D	C
		Comprehensive Viva	-	-	2
		Project Seminar	0	3	2
		Project Work	-	-	18
		<b>Total</b>	<b>-</b>	<b>3</b>	<b>22</b>

##### II Year II Semester

Code	Group	Subject	L	T/P/D	C
		Project Work and Seminar	-	-	22
		<b>Total</b>	<b>-</b>	<b>-</b>	<b>22</b>

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## COURSE STRUCTURE FOR CSE DEPARTMENT

M. TECH. (CYBER FORENSIC & INFORMATION SECURITY/CYBER SECURITY)

### COURSE STRUCTURE AND SYLLABUS

#### I Year I Semester

Code	Group	Subject	L	T/P/D	C
		Mathematical Foundation for Cyber Security	3	0	3
		Applied Cryptography	3	0	3
		Network and Wireless Security	3	0	3
		Biometric Systems and Biometric Image Processing	3	0	3
	Elective -I	Distributed and Cloud Computing Information Storage Management Information Systems Audit	3	0	3
	Elective -II	IT Security Metrics Web Security Distributed Systems	3	0	3
	Lab	Applied Cryptography Lab	0	3	2
		Seminar	-	-	2
		<b>Total</b>	<b>18</b>	<b>3</b>	<b>22</b>

#### I Year II Semester

Code	Group	Subject	L	T/P/D	C
		Software Vulnerability Analysis	3	0	3
		Intrusion Detection and Prevention Systems	3	0	3
		Cyber Crime Investigations and Digital Forensics	3	0	3
		Cyber Laws and Security Policies	3	0	3
	Elective -III	Information Theory and Coding Security Threats Digital Watermarking and Steganography	3	0	3
	Elective -IV	Network Programming Distributed Systems Security Intellectual Property Rights	3	0	3
	Lab	Ethical Hacking Lab	0	3	2
		Seminar	-	-	2
		<b>Total</b>	<b>18</b>	<b>3</b>	<b>22</b>

#### II Year I Semester

Code	Group	Subject	L	T/P/D	C
		Comprehensive Viva	-	-	2
		Project Seminar	0	3	2
		Project Work	-	-	18
		<b>Total</b>	<b>-</b>	<b>3</b>	<b>22</b>

#### II Year II Semester

Code	Group	Subject	L	T/P/D	C
		Project Work and Seminar	-	-	22
		<b>Total</b>	<b>-</b>	<b>-</b>	<b>22</b>