

**KRISHNA UNIVERSITY**  
**COLLEGE OF ENGINEERING & TECHNOLOGY**  
**ACADEMIC REGULATIONS**  
**COURSE STRUCTURE**  
**AND**  
**DETAILED SYLLABUS**



For

COMPUTER SCIENCE AND ENGINEERING FOUR YEAR DEGREE COURSE

(Applicable for batches admitted from 2017-18)

## COURSE STRUCTURE

(Common to both C.S.E & E.C.E)

### I Year – I Semester

S.No	Code	Subject	Internal Marks	External Marks	Total	T	P	No. of Credits
1.	HS10117	English and Professional Communication Skills	30	70	100	3	--	3
2.	MA10117	Engineering Mathematics – I	30	70	100	3+1	--	3
3.	CY10117	Engineering Chemistry	30	70	100	3+1	--	3
4.	EE10117	Basic Electrical Engineering	30	70	100	3+1	--	3
5.	CS10117	Problem Solving & Computer Programming	30	70	100	3+1	--	3
6.	EC10117	Basic Electronics	30	70	100	3+1	--	3
7.	CY10217	Engineering Chemistry Lab	30	70	100	--	3	2
8.	CS10217	Programming Lab	30	70	100	--	3	2
9.	HS10217	Communication Skills Lab	30	70	100	--	3	2
<b>Total Credits</b>								<b>24</b>

### I Year – II Semester

S.No	Code	Subject	Internal Marks	External Marks	Total	T	P	Credits
1.	CE20117	Environmental Studies	30	70	100	3	--	3
2.	MA20117	Engineering Mathematics – II	30	70	100	3+1	--	3
3.	PH20117	Engineering Physics	30	70	100	3+1	--	3
4.	EC20117	Circuit Theory	30	70	100	3+1	--	3
5.	CS20117	Data Structures and Algorithms	30	70	100	3+1	--	3
6.	EC20217	Digital Electronics	30	70	100	3+1	--	3
7.	PH20217	Engineering Physics Lab	30	70	100	--	3	2
8.	CS20217	Data Structures Lab	30	70	100	--	3	2
9.	EC20317	Digital & Basic Electronics Lab	30	70	100	--	3	2
<b>Total Credits</b>								<b>24</b>

## C.S.E

### II Year – I Semester

S.No	Code	Subject	Internal Marks	External Marks	Total	T	P	No. of Credits
1.		Human Values and Professional Ethics	30	70	100	3	--	3
2.		Discrete Mathematical Structures	30	70	100	3+1	--	3
3.		Computer Organization	30	70	100	3+1	--	3
4.		Computer Networks	30	70	100	3+1	--	3
5.		Object Oriented Analysis & Design	30	70	100	3+1	--	3
6.		Design and Analysis of Algorithms	30	70	100	3+1	--	3
7.		Computer Networks Lab	30	70	100	--	3	2
8.		Object Oriented Analysis & Design Lab	30	70	100	--	3	2
9.		Python Programming Lab	30	70	100	--	3	2
		<b>Total Credits</b>						<b>24</b>

### II Year – II Semester

S.No	Code	Subject	Internal Marks	External Marks	Total	T	P	Credits
1.	Sc Kapoor and Gupta	Probability & Statistics	30	70	100	3	--	3
2.		Formal Languages and Automata Theory	30	70	100	3+1	--	3
3.		Microprocessors & Interfacing	30	70	100	3+1	--	3
4.		Operating Systems	30	70	100	3+1	--	3
5.		Object Oriented Programming	30	70	100	3+1	--	3
6.		Engineering Drawing	30	70	100	3+1	--	3
7.		Object Oriented Programming Lab(JAVA)	30	70	100	--	3	2
8.		Microprocessors & Interfacing Lab	30	70	100	--	3	2
9.		UNIX & Operating Systems Lab	30	70	100	--	3	2
		<b>Total Credits</b>						<b>24</b>

### III Year – I Semester

S.No	Code	Subject	Internal Marks	External Marks	Total	T	P	No. of Credits
1.		Object Oriented Software Engineering	30	70	100	3	--	3
2.		Advanced Data Structures	30	70	100	3+1	--	3
3.		Principles of Programming Languages	30	70	100	3+1	--	3
4.		Artificial Intelligence	30	70	100	3+1	--	3
5.		Database Management Systems	30	70	100	3+1	--	3
6.		Scripting Languages & Web Design	30	70	100	3+1	--	3
7.		Web Technologies Lab	30	70	100	--	3	2
8.		Database Management Systems LAB	30	70	100	--	3	2
9.		Software Engineering Lab	30	70	100	--	3	2
		<b>Total Credits</b>						<b>24</b>

### III Year – II Semester

S.No	Code	Subject	Internal Marks	External Marks	Total	T	P	Credits
1.		Accounting & Financial Management	30	70	100	3	--	3
2.		Internet of Things	30	70	100	3+1	--	3
3.		Architectures of Operating Systems	30	70	100	3+1	--	3
4.		Data Sciences	30	70	100	3+1	--	3
5.		<b>Elective- 1</b>	30	70	100	3+1	--	3
6.		Cloud Computing	30	70	100	3+1	--	3
7.		MOOCS	30	70	100	--	3	2
8.		Data Analytics Lab	30	70	100	--	3	2
9.		R Programming Lab	30	70	100	--	3	2
		<b>Total Credits</b>						<b>24</b>

## IV Year – I Semester

S.No	Code	Subject	Internal Marks	External Marks	Total	T	P	No. of Credits
1.		Data Mining & Warehousing	30	70	100	3	--	3
2.		Mobile Computing	30	70	100	3+1	--	3
3.		Compiler Design	30	70	100	3+1	--	3
4.		Network Security	30	70	100	3+1	--	3
5.		Scientific & Technical Writing	30	70	100	3+1	--	3
6.		TCP/IP	30	70	100	3+1	--	3
7.		Compiler Design Lab	30	70	100	--	3	2
8.		Mini Project	30	70	100	--	3	2
9		TCP / IP Lab	30	70	100	--	3	2
<b>Total Credits</b>								<b>22</b>

## IV Year – II Semester

S.No	Code	Subject	Internal Marks	External Marks	Total	T	P	Credits
1.		<b>Elective – II</b>	30	70	100	3	--	3
2.		<b>Elective – III</b>	30	70	100	3+1	--	3
3.		Software Testing	30	70	100	3+1	--	3
4.		Project Work A. Problem Selection B. Requirement Analysis C. Project Design D. Coding E. Testing & Analysis	100	100	200			20
<b>Total Credits</b>								<b>29</b>

## Electives

<b>Elective – I</b>	Computer Graphics Concurrent & Parallel Computing Soft Computing
<b>Elective – II</b>	Image Processing Advanced DBMS API Programming & Social Network Design
<b>Elective – III</b>	Mobile Applications Computer Vision Next Generation Networks

