

**AR18
ACADEMIC REGULATIONS,
PROGRAM STRUCTURE AND DETAILED
SYLLABUS**

FOR

**CHOICE BASED CREDIT SYSTEM (CBCS) BASED
B.TECH FOUR YEAR DEGREE PROGRAM
(Applicable for the batches admitted from the AY 2018-19)**

Computer Science and Engineering



Department of Computer Science and Engineering

(Approved by AICTE, Permanently Affiliated to JNTUH, Accredited by NBA and
Accredited by NAAC with 'A' Grade)

Geethanjali College of Engineering and Technology

(Autonomous)

Cheeryal (V), Keesara (M), Medchal Dist., Telangana – 501 301

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Geethanjali College of Engg. Tech.
Cheeryal (V), Keesara (M), R.R. Dist. (A.P.)

THIRD YEAR SEMESTER-I		
Course Code	Name of the Course	Page No.
18CS3101	Operating Systems	113
18CS3102	Computer Networks	115
18CS3103	Artificial Intelligence	117
18CS3104	Compiler Design	119
18CS3105	Advanced Computer Architecture	121
18CS3106	Computer Graphics	123
18CS3107	Scripting Languages	125
18CE3121	Global Warming and Climate Change	127
18EE3122	Industrial Safety and Hazards	129
18ME3123	Nano Materials and Technology	131
18EC3124	Electronic Measuring Instruments	133
18MB3126	Intellectual Property Rights	135
18CS31L1	Operating Systems Lab	137
18CS31L2	Computer Networks Lab	139
18CS31L3	Artificial Intelligence Lab	141
18CS3108	Internship	
18MC3102	Indian Constitution	143
THIRD YEAR SEMESTER-II		
Course Code	Name of the Course	Page No.
18CS3201	Web Technologies	145
18CS3202	Software Engineering	147
18CS3203	Information Security	149
18CS3204	Distributed Systems	151
18CS3205	Information Retrieval Systems	153
18CS3206	Distributed Databases	155
18CS3207	Neural Networks	157
18CS3208	Soft Computing	159
18CS3209	Cloud Computing	161
18CS3210	Parallel Algorithms	163
18CE3231	Building Technology	165
18EE3232	Energy Conservation and Management	167
18ME3233	Digital Fabrication	169
18EC3234	Principles of Communication Systems	171
18MB3236	Supply Chain Management	173
18CS32L1	Web Technologies Lab	175
18CS32L2	Software Engineering Lab	178
18EN32L1	Advanced English Communication Skills Lab	180
18MB3203	Professional Ethics	182



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GEETHANJALI COLLEGE OF ENGINEERING AND TECHNOLOGY

(AUTONOMOUS)

B.Tech. COMPUTER SCIENCE ENGINEERING
AR 18 STRUCTURE FOR UNDERGRADUATE PROGRAM

S.No	Category/ Semester	Credits as per AR 18	Credits as per Model Curriculum
1	Humanities and Social Sciences including Management	11.5	12
2	Basic Sciences	25	24
3	Engineering Sciences including workshop, drawing, basics of electrical/mechanical/computer etc.	18.5	29
4	Program Core Courses	63	49
5	Program Elective Courses : Subjects relevant to chosen specialization/branch	18	18
6	Open Elective Subjects: Electives from other technical and/or emerging subjects	9	12
7	Project work, seminar and internship in industry or elsewhere	15	15
8	Mandatory Courses: [Induction Program, Environmental Sciences, Indian Constitution, and Professional Ethics]	4-slots provided	
	Total	160	160

Course code and definition

S.No.	Category Abbreviation	Description
1	PCC	Professional Core Course
2	PEC	Professional Elective Course
3	PROJ	Project
4	PROJ-I	Internship
5	PROJ-M	Mini Project
6	PROJ-TS	Technical Seminar
7	BSC	Basic Science Course
8	ESC	Engineering Science Course
9	HSMC	Humanities and Social Sciences including Management Course
10	OEC	Open Elective Course
11	MC	Mandatory Course

Definition of credit

S.No.	Abbreviation	Credits	Description
1.	L	1	1 Hr. Lecture (L) per week
2.	T	1	1 Hr. Tutorial (T) per week
3.	P	0.5	1 Hr. Practical (P) per week
		1	2 Hours Practical(Lab)/week

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18MC3102– INDIAN CONSTITUTION
(MANDATORY COURSE)

III Year. B.Tech. (CSE) – I Sem

L	T	P/D	C
3	-	-/-	-

Pre-requisites: None

Course Objectives:

Develop ability to

1. Understand the need for a constitution
2. Appreciate the fundamental duties and rights of the citizens of India
3. Explain the role of constitution in a democratic society
4. Describe the Directive Principles of State Policy and their significance
5. List the key features of the constitution, Union Government, and State Governments.

Course Outcomes (COs):

At the end of the course, the student would be able to

- CO1: Create awareness about the constitutional values and objectives written in the Indian Constitution.
- CO2: List the fundamental rights and fundamental duties of Indian citizens.
- CO3: Identify the division of legislative, executive and financial powers between the union and the state governments.
- CO4: Understand the working of Indian democracy, its institutions and processes at the local, state and union levels.
- CO5: Explain the functions and responsibilities of Election commission of India and Union Public Service Commission.

UNIT I: Introduction to Indian Constitution

Meaning of the term Constitution, Preamble of the Constitution, Constituent Assembly, The Salient Features of Indian Constitution

UNIT II: Fundamental Rights of citizen

Fundamental Rights of citizen, Fundamental Duties of citizen, The Directive Principles of State Policy.

UNIT III: Union Government

Union Government, Union Legislature (Parliament), Lok Sabha and Rajya Sabha (with Powers and Functions), Union Executive, President of India (with Powers and Functions), Prime Minister of India (with Powers and Functions), Union Judiciary (Supreme Court), Jurisdiction of the Supreme Court.



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UNIT IV: State Government

State Government, State Legislature (Legislative Assembly/ Vidhan Sabha, Legislative Council / Vidhan Parishad), Powers and Functions of the State Legislature, State Executive, Governor of the State (with Powers and Functions), The Chief Minister of the State (with Powers and Functions) State Judiciary (High Courts)

UNIT V: Local Self Government

Election Commission of India (with Powers and Functions), The Union Public Service Commission (with Powers and Functions)

TEXT BOOK(S)

1. The Constitution of India, P.M. Bakshi, Universal Law Publishing Co.,
2. Introduction to the Constitution of India, Dr. Durga Das Basu, LexisNexis Publishers, NCERT, Indian Constitution at work.

REFERENCE BOOK(S)

1. Constitution of India, M. Laxmikanth, Cengage Publications.
2. The Indian Constitution, Granville Austin, Oxford India Paperback Edition.



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