

**GODAVARI INSTITUTE OF ENGINEERING & TECHNOLOGY (A)
CHAITANYA NAGAR, RAJAHMUNDRY**


**Programme Structure of
B.Tech. Programme in Computer Science & Engineering
GRBT-19
A.Y: 2019-20**

I Year I Semester

S. No	Course Code	Course Type	Course Title	Periods per week			C	Scheme of Examination Maximum Marks		
				L	T	P		Int.	Ext.	Total
1	19199101	BSC	Mathematics-I	3	0	0	3	30	70	100
2	19199102	HSMC	Communicative English – I	3	0	0	3	30	70	100
3	19199103	BSC	Engineering Physics	3	0	0	3	30	70	100
4	19199104	ESC	Problem Solving & Programming in C	3	0	0	3	30	70	100
5	19193175	ESC	Engineering Graphics	1	0	3	2.5	30	70	100
6	19199196a	MC	Environmental Studies	2	0	0	0	30*	---	---
7	19199111	HSMC	Communicative English Laboratory-I	0	0	3	1.5	50	50	100
8	19199112	BSC	Engineering Physics Laboratory	0	0	3	1.5	50	50	100
9	19199113	ESC	Problem Solving & Programming Laboratory using C	0	0	3	1.5	50	50	100
Total				14	1	12	19	300	500	800
BSC: 7.5		ESC: 7		HSMC: 4.5			MC: 0			

I Year II Semester

S. No	Course Code	Course Type	Course Title	Periods per week			C	Scheme of Examination Maximum Marks		
				L	T	P		Int.	Ext.	Total
1	19199201b	BSC	Probability & Statistics	3	0	0	3	30	70	100
2	19199202	HSMC	Communicative English – II	3	0	0	3	30	70	100
3	19199203	BSC	Applied Chemistry	3	0	0	3	30	70	100
4	19199204	ESC	Basic Electrical & Electronics Engineering	3	0	0	3	30	70	100
5	19199205	PCC	Python Programming	3	0	0	3	30	70	100
6	19199296b	MC	Professional Ethics & Human Values	2	0	0	0	30*	---	---
7	19199211	HSMC	Communicative English Laboratory-II	0	0	3	1.5	50	50	100
8	19192212	ESC	Basic Electrical & Electronics Engineering Laboratory	0	0	3	1.5	50	50	100
9	19195213	PCC	Python Programming Laboratory	0	0	3	1.5	50	50	100
10	19199214	BSC	Engineering Chemistry Laboratory	0	0	3	1.5	50	50	100
Total				17	0	12	21	350	550	900
BSC: 7.5		ESC: 4.5		HSMC: 4.5			MC: 0		PCC: 4.5	


University Nominee
PROFESSOR
Dept. of Computer Science & Engg
J. N. T. U. College of Engineering
KAKINADA - 533 003.


Subject Expert


Industry



BOS-Chairman
Head of the Department
Computer Science & Engineering
Godavari Institute of Engineering & Technology (A)
NH- 16, Chaitanya Knowledge City,
DARMAHENDRAVARAM, A.P. INDIA - 533 296.

II Year I Semester

S. No	Course Code	Course Type	Course Title	Periods per week			C	Scheme of Examination Maximum Marks		
				L	T	P		Int.	Ext.	Total
1	19159301	BSC	Discrete Mathematics	2	1	0	3	30	70	100
2	19150302	PCC	Object Oriented Programming Through C++	3	0	0	3	30	70	100
3	19150303	PCC	Digital Logic & Computer Organization	3	0	0	3	30	70	100
4	19150304	PCC	Data Structures	3	0	0	3	30	70	100
5	19150305	PCC	Data Base Management Systems	3	0	0	3	30	70	100
6	19150306	MC	Design Thinking & Product Innovation	2	0	0	0	30*	---	---
7	19153311	ESC	Basic Engineering Workshop	0	0	3	1.5	50	50	100
8	19150312	PCC	Object Oriented Programming Through C++ Laboratory	0	0	3	1.5	50	50	100
9	19150313	PCC	Data Structures Laboratory	0	0	3	1.5	50	50	100
10	19150314	PCC	Data Base Management Systems Laboratory	0	0	3	1.5	50	50	100
Total				16	1	12	21	350	550	900
BSC: 3		ESC: 1.5		PCC: 16.5			MC: 0			

II Year II Semester

S. No	Course Code	Course Type	Course Title	Periods per week			C	Scheme of Examination Maximum Marks		
				L	T	P		Int.	Ext.	Total
1	19150401	PCC	Java Programming	3	0	0	3	30	70	100
2	19150402	PCC	Operating Systems	3	0	0	3	30	70	100
3	19150403	PCC	Formal Languages and Automata Theory	3	0	0	3	30	70	100
4	19150404	PCC	Number Theory & Applications	2	1	0	3	30	70	100
5	19150405	PCC	Design and Analysis of Algorithms	3	0	0	3	30	70	100
6	1915-466 a-i	OEC	Open Elective-IV	3	0	0	3	30	70	100
7	19150411	PCC	Operating Systems Laboratory	0	0	3	1.5	50	50	100
8	19150412	PCC	Java Programming Laboratory	0	0	3	1.5	50	50	100
Total				17	1	6	21	280	520	800
PCC: 18		OEC: 3								


University Nominee
PROFESSOR
Dept. of Computer Science & Engg
J. N. T. U. College of Engineering
KAKINADA - 533 003.


Subject Expert


Industry


BOS-Chairman
Head of the Department
Computer Science & Engineering
Godavari Institute of Engineering & Technology (A)
NH- 16, Chaitanya Knowledge City,
RAJAMAHENDRAVARAM, A.P., INDIA - 533 296.

III Year I Semester

S. No	Course Code	Course Type	Course Title	Periods per week			C	Scheme of Examination Maximum Marks		
				L	T	P		Int.	Ext.	Total
1	19150501	PCC	Compiler Design	3	0	0	3	30	70	100
2	19150502	PCC	Web Technologies	3	0	0	3	30	70	100
3	19150503	PCC	Software Engineering	3	0	0	3	30	70	100
4	19150504	PCC	Computer Networks	3	0	0	3	30	70	100
5	19150565 A-C	PEC	Professional Elective-I	3	0	0	3	30	70	100
6	1915-566 a-g	OEC	Open Elective-I	3	0	0	3	30	70	100
7	19150511	PCC	Compiler Design & Computer Networks Laboratory	0	0	3	1.5	50	50	100
8	19150512	PCC	Web Technologies Laboratory	0	0	3	1.5	50	50	100
9	19150581	PR	Community Service Oriented Project	0	0	1	0.5	100	---	100
10	19150522	PR	Mini Project-I/ Study Project/ Internship	---	---	---	2	100	---	100
Total				18	0	7	23.5	480	520	1000
PCC: 15		PEC: 3		PR: 2.5			OEC: 3			

III Year II Semester

S. No	Course Code	Course Type	Course Title	Periods per week			C	Scheme of Examination Maximum Marks		
				L	T	P		Int.	Ext.	Total
1	19150601	PCC	Data Mining	3	0	0	3	30	70	100
2	19150602	PCC	Artificial Intelligence	3	0	0	3	30	70	100
3	19150603	PCC	Unified Modelling Language	3	0	0	3	30	70	100
4	19150664C	PEC	Professional Elective-II	3	0	0	3	30	70	100
5	19150665b	OEC	Open Elective-II	3	0	0	3	30	70	100
6		MC	Constitution of India	2	0	0	0	30*	---	---
7	19150611	HSMC	Soft Skills	0	0	3	1.5	50	50	100
8	19150612	PCC	AI Tools & Techniques Laboratory	0	0	3	1.5	50	50	100
9	19150613	PCC	Unified Modeling Language Laboratory	0	0	3	1.5	50	50	100
Total				17	0	9	19.5	300	500	800
PCC: 12		PEC:3		OEC: 3			HSMC: 1.5		MC: 0	


University Nominee
PROFESSOR

Dept. of Computer Science & Engg
J. N. T. U. College of Engineering
RAKINADA - 533 003.


Subject Expert


Industry


BOS-Chairman

Head of the Department
Computer Science & Engineering
Godavari Institute of Engineering & Technology (A)
NH-16, Chaitanya Knowledge City,
RAJAHMENDRAVARAM, A.P., INDIA - 533 296.

IV Year I Semester

S. No	Course Code	Course Type	Course Title	Periods per week			C	Scheme of Examination Maximum Marks		
				L	T	P		Int.	Ext.	Total
1	19150701	PCC	Cryptography and Network Security	3	0	0	3	30	70	100
2	19150702	PCC	Machine Learning	3	0	0	3	30	70	100
3	19150763C	PEC	Professional Elective-III	3	0	0	3	30	70	100
4	19150764A	PEC	Professional Elective-IV	3	0	0	3	30	70	100
5	19151765a	OEC	Open Elective-III	3	0	0	3	30	70	100
6	19159796	MC	Intellectual Property Rights and Patents	2	0	0	0	30*	---	---
7	19150711	PCC	Cryptography and Network Security Laboratory	0	0	3	1.5	50	50	100
8	19150712	PCC	Machine Learning Laboratory	0	0	3	1.5	50	50	100
9	19150721	PR	Mini Project-2/ Internship	---	---	---	2	100	---	100
Total				17	0	6	20	350	450	800
PCC: 9		PEC: 6		PR: 2		OEC: 3		MC: 0		

IV Year II Semester

S. No	Course Code	Course Type	Subject Title	Periods per week			C	Scheme of Examination Maximum Marks		
				L	T	P		Int.	Ext.	Total
1	19150801	PCC	Software Testing Methodologies	3	0	0	3	30	70	100
2	19150802	PEC	Professional Elective-V	3	0	0	3	30	70	100
3	19150841	PR	Project	0	0	18	9	80	120	200
Total				6	0	12	15	140	260	400
PCC: 3		PEC: 3		PR: 9						

Professional Electives

PE-1: A-C	Advanced JAVA Programming	Principles of Computer Security	Mobile Computing
PE-2: A-C	Software Architecture, Frameworks and Patterns	Virtual Reality	Distributed Systems
PE-3: A-C	NoSQL Databases	Digital Image Processing	Cloud Computing
PE-4: A-C	Big Data Analytics	Deep Learning	Parallel Computing
PE-5: A-C	Distributed Databases	Cyber Security	Soft Computing


University Nominee
PROFESSOR

Dept. of Computer Science & Engg
J. N. T. U. College of Engineering
KAKINADA - 533 003.


Subject Expert


Industry



BOS-Chairman

Head of the Department
Computer Science & Engineering
Godavari Institute of Engineering & Technology (A)
NH- 16, Chaitanya Knowledge City,
RAJAHMUNDRAVARAM, A.P. INDIA - 533 296.

**Programme Structure of
B.Tech. Programme in Computer Science & Engineering
GRBT-19
A.Y: 2019-20**

Open Electives

S. No	Open Elective-1	Open Elective-2	Open Elective-3	Open Elective-4
a	CE- Environmental Pollution Control	CE- Solid Waste Management	CE- Global Environment: Problems & Policies	Financial Management for Engineers
b	EEE- Utilization of Electrical Energy	EEE- Energy Management	EEE- Renewable Energy Resources	Entrepreneurship qualities for Engineers
c	MECH- Robotics	ME- MEMS	ME- Nano Technology	Managerial Economics & Financial Analysis
d	ECE- Internet of Things	ECE- Digital Image Processing	ECE- Data Communication	Principles of Management
e	CSE- Fundamentals of Operating Systems	CSE- Information Security	CSE- Human Computer Interaction	Organizational Behavior
f	MM- Elements of Mining Technology	MM- Disaster Management in Mining	MM- Remote Sensing & GIS in Mining	Digital Marketing
g	AME- Basic Automobile Engineering	AME- Hybrid and Electric Vehicles	AME- Modern Vehicle Technology	Operations Management
h	---	---	---	Total Quality Management
i	---	---	---	Human Resource Management


University Nominee
PROFESSOR
Dept. of Computer Science & Engg
J. N. T. U. College of Engineering
RAKINADA - 533 003.


Subject Expert


Industry


BOS-Chairman
Head of the Department
Computer Science & Engineering
Godavari Institute of Engineering & Technology (A)
NH- 16, Chaitanya Knowledge City,
RAJAHMUNDRY, A.P., INDIA - 533 296.