



**GEETHANJALI INSTITUTE OF SCIENCE & TECHNOLOGY: NELLORE  
(AUTONOMOUS)**

**NELLORE-524317 (A.P) INDIA**

**B. TECH IN COMPUTER SCIENCE & ENGINEERING  
(DATA SCIENCE)**

**COURSE STRUCTURE AND SYLLABI  
UNDER RG 22 REGULATIONS**



GEETHANJALI INSTITUTE OF SCIENCE AND TECHNOLOGY  
(AUTONOMOUS)  
NELLORE – 524137 (A.P) INDIA

**B. TECH Computer Science & Engineering (Data Science)**  
Course Structure (RG22)

Semester 0

Induction Program: 3 weeks  
(Common for All Branches of Engineering)

<b>S. No</b>	<b>Course No</b>	<b>Course Name</b>	<b>Category</b>	<b>L-T-P-C</b>
1		Physical Activities -- Sports, Yoga and Meditation, Plantation	MC	0-0-6-0
2		Career Counselling	MC	2-0-2-0
3		Orientation to all branches -- career options, tools, etc.	MC	3-0-0-0
4		Orientation on admitted Branch -- corresponding labs, tools and platforms	EC	2-0-3-0
5		Proficiency Units & Productivity Tools	ES	2-1-2-0
6		Assessment on basic aptitude and mathematical skills	MC	2-0-3-0
7		Remedial Training in Foundation Courses	MC	2-1-2-0
8		Human Values & Professional Ethics	MC	3-0-0-0
9		Communication Skills -- focus on Listening, Speaking, Reading, Writing skills	BS	2-1-2-0
10		Concepts of Programming	ES	2-0-2-0



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Semester - 1 (Theory-5, Lab-3)							
Sl. No.	Category	Course Code	Course Title	Hours per week			Credits
				L	T	P	C
1	BSC	22A0001T	Linear Algebra & Calculus	3	0	0	3
2	BSC	22A0005T	Applied Physics in Science and Engineering	3	0	0	3
3	HSC	22A0013T	Communicative English	3	0	0	3
4	ESC	22A0501T	Problem Solving using C	3	0	0	3
5	ESC	22A0302T	Engineering Drawing	1	0	4	3
6	BSC(LAB)	22A0010P	Applied Physics in Science and Engineering Lab	0	0	3	1.5
7	HSC(LAB)	22A0014P	Communicative English Lab	0	0	3	1.5
8	ESC(LAB)	22A0503P	Problem Solving using C Lab	0	0	3	1.5
Total credits							19.5

Category	Credits
Basic Science Course (BSC)	7.5
Engineering Science Course (ESC)	7.5
Humanities and Social Science Course (HSC)	4.5
<b>Total</b>	<b>19.5</b>



**B. TECH Computer Science & Engineering (Data Science)**  
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Semester - 2 (Theory-4, Lab-5)							
Sl. No.	Category	Course Code	Course Title	Hours per week			Credits
				L	T	P	C
1	BSC	22A0002T	Differential Equations & Vector Calculus	3	0	0	3
2	BSC	22A0006T	Chemistry	3	0	0	3
3	ESC	22A0203T	Basic Electrical & Electronics Engineering	3	0	0	3
4	ESC	22A0504T	Data Structures	3	0	0	3
5	ESC(LAB)	22A0304P	Engineering Workshop	0	0	3	1.5
6	ESC (LAB)	22A0502P	IT Workshop	0	0	3	1.5
7	BSC(LAB)	22A0011P	Chemistry Lab	0	0	3	1.5
8	ESC(LAB)	22A0204P	Basic Electrical & Electronics Engineering Lab	0	0	3	1.5
9	ESC(LAB)	22A0505P	Data Structures Lab	0	0	3	1.5
						Total credits	19.5

Category	Credits
Basic Science Course (BSC)	7.5
Engineering Science Course (ESC)	12
Total	19.5