# PROGRAM STRUCTURE

#### **I SEMESTER**

S. No	Course Code	Name of the Course	Employability	Skill Development	Entrepreneurship	Remarks
1	192CS1T01	Mathematical Foundations of Computer Science		<b>√</b>		Students are able to demonstrate problem solving skills by implementing mathematical logic, number theory and graph theory.
2	192CS1T02	Advanced Data Structures & Algorithms	<b>√</b>			Students are able to acquire technical skills related to demonstrate advance algorithmic problems enabling them to be employed as software developers.
3	192CS1E01	Big Data Analytics	~			Students are able to gain skills related to Big data analytics and related tool enabling them to be employed for data analytics role.
4	192CS1E02	Digital Image Processing		✓	19	Students are able to acquire technical skills related to image processing by using various tools related to computer vision.
5	192CS1E03	Advanced Operating Systems	<b>✓</b>			Students are able to understand and acquire skills related to features and functionalities of operating System and understand the utilization of Input and output and memory operations which enables them to be employed for Hardware core side job opportunities
6	192CS1E04	Advanced Computer Networks				
7	192CS1E05	Internet of Things	<b>√</b>			Students are able to acquire skills related to Internet of Things and enabling them to be employed for IoT sector.
8	192CS1E06	Object Oriented Software Engineering		<b>√</b>		Students are able to acquire technical skills to understand various O-O concepts along with their applicability contexts

9	192HS1T01	Research Methodology and IPR		<b>√</b>	Students can gain knowledge about the methods of study, observation, comparison and experiment along with different types of Intellectual property rights.
10	192CS1L01	Advanced Data Structures & Algorithms Lab	✓		Students are able to acquire technical skills related to demonstrate advance algorithmic problems enabling them to be employed as software developers.
11	192CS1L02	Advanced Computing Lab	✓		Students can get hands on experience on web services, virtual environments, use of Hadoop enabling them to work easily as big data engineers

## II SEMESTER

S. No	Course Code	Name of the Course	Employability	Skill Development	Entrepreneurship	Remarks
12	192CS2T03	Machine Learning	✓			Students are able to acquire skills related to data science algorithms,
12	172032103	Widelinie Learning				enabling them to be employed as data scientists.
			✓			Students are able to deploy and test web applications using
13	192CS2T04	MEAN Stack Technologies	·			MongoDB, Angular and Node js enabling them to be employed as
						mean stack developers
		Advanced Databases and				Students are able to get knowledge on advanced databases by learning
14	192CS2E07	Mining		<b>✓</b>		about data at logical and view levels by implementing mining
		TYTHING				technologies and statistics
		Ad Hoc & Sensor Networks	<b>✓</b>			Students are able to acquire knowledge on adhoc networks and their
15	192CS2E08		· ·			applications and knows how to use different sensors in different
	(4)	Networks	<b>2</b>			scenarios enabling them to work in IoT and Networking sectors
16	192CS2E09	Soft Computing		✓		
			9			Students are able to acquire skills related to Cloud computing and
17	192CS2E10	Cloud Computing	<b>✓</b>			distributed computing enabling them to be employed for cloud
						services sector
18	192CS2E11	Principles of computer		<b>√</b>		Students are able to acquire knowledge on principles and methods to
10	192C32E11	security		•	9	secure digital devices and networks
19	192CS2E12	High Performance	✓			Students are able to process data and perform complex calculations at
19	192C32L12	Computing				high speeds enabling them to work with different operating systems
20	192CS2L03	Machine Learning with	✓			Students are able to acquire skills related to data science algorithms,
20	192C32L03	Python lab				enabling them to be employed as data scientists.
21	192CS2L04	MEAN Stack Technologies	✓			Students are able to get hands-on experience on deploying and testing
21		Lab				web applications using MongoDB, Angular and Node js.
22	192CS2P01	Mini Ducinet with Coming	✓		147	Students will be able to demonstrate problem identification, analysis,
22	192032101	Mini Project with Seminar		3 1		design solutions or applications in electronics and communication

					domain through the acquired technical, cognitive, communication and creative skills to address societal needs.
23	192MC1A01/ 192MC2A01	English for Research Paper Writing			Students are able to demonstrate communication writing skills to express fluently in writing form of language which is very much essential for the career growth in research
24	191MC2A02/ 192MC2A02	Disaster Management			
25	192MC1A03/ 192MC2A03	Sanskrit for Technical Knowledge			
26	192MC1A04/ 192MC2A04	Value Education			
27	192MC1A05/ 192MC2A05	Constitution of India	5		_
28	192MC1A06/ 192MC2A06	Pedagogy Studies			
29	192MC1A07/ 192MC2A07	Stress Management by Yoga			
30	192MC1A08/ 192MC2A08	Personality Development through Life Enlightenment Skills			
31	192MC1A09/ 192MC2A09	Soft Skills			The students are able to demonstrate Business Communication skills to analyze the mistakes in Body language, formal written communication in the organizations.

## III SEMESTER

S. No	Course Code	Name of the Course	Employability	Skill Development	Entrepreneurship	Remarks
32	172CO3C01	Comprehensive Viva-Voce				
33	172CO3R01	Seminar - I				

#### IV SEMESTER

S. No	Course Code	Name of the Course	Employability	Skill Development	Entrepreneurship	Remarks .
34	172CO4R02	Seminar - II	<b>~</b>			Students will be able to demonstrate problem identification, analysis, design solutions or applications in petroleum technology domain through the acquired technical, cognitive, communication and creative skills to address societal needs.
35	172C04P01	Project Work Part II	~			Students will be able to demonstrate problem identification, analysis, design solutions or applications in electronics and communication domain through the acquired technical, cognitive, communication and creative skills to address societal needs.
	TOTAL	35	16	8	0	

**Program Coordinator** 

Head of the Department

Head of the Department
Department of CSE
OITYA ENGINEERING COLLEGE (A9)