

**A.S.D. GOVERNMENT DEGREE COLLEGE FOR WOMEN(A),  
KAKINADA**

**DEPARTMENT OF COMPUTER SCIENCE  
B.Sc. Computer Science**

**ACADEMIC YEAR - 2023-24**

**LIST OF COURSES OFFERED**

Semester	Paper	Subject	Hrs./ Week	Credits	CI A	ES	Total
<b>FIRST YEAR</b>							
<b>SEM-I</b>	1	Essentials and applications of Mathematical, Physical and Chemical Sciences	5	4	40	60	100
	2	Advances in Mathematical, Physical and Chemical Sciences	5	4	40	60	100
<b>SEM-II</b>	3	Problem Solving in C	3	3	40	60	100
		Problem Solving in C Lab	2	1	10	40	50
	4	Digital Logic Design	3	3	40	60	100
		Digital Logic Design Lab	2	1	10	40	50
<b>SECOND YEAR</b>							
<b>SEM-III</b>	5	Object Oriented Programming using Java	3	3	40	60	100
		Object Oriented Programming using Java Lab	2	1	10	40	50
	6	Data Structures using C	3	3	40	60	100
		Data Structures using C Lab	2	1	10	40	50
	7	Computer Organization	3	3	40	60	100
		Computer Organization Lab	2	1	10	40	50
	8	Operating Systems	3	3	40	60	100
		Operating Systems Lab using C/Java	2	1	10	40	50
<b>SEM-IV</b>	9	Database Management System	3	3	40	60	100
		Database Management System Lab	2	1	10	40	50
	10	Object Oriented Software Engineering	3	3	40	60	100
		Object Oriented Software Engineering Lab	2	1	10	40	50
	11	Data Communications and Computer Networks	3	3	40	60	100
		Data Communications and Computer Networks Lab	2	1	10	40	50

**THIRD YEAR**

<b>SEM-V</b>	12	Web Interface Designing Technologies	3	3	40	60	100	
		Web Interface Designing Technologies Lab	2	1	10	40	50	
	13	Web Applications Development using PHP& MYSQL	3	3	40	60	100	
		Web Applications Development using PHP& MYSQL Lab	2	1	10	40	50	
	14 A	Internet of Things	3	3	40	60	100	
		Internet of Things Lab	2	1	10	40	50	
	OR							
	14 B	Foundations of Data Science	3	3	40	60	100	
		Foundations of Data Science Lab	2	1	10	40	50	
	15 A	IoT Applications Development and Programming	3	3	40	60	100	
		IoT Applications Development and Programming Lab	2	1	10	40	50	
	OR							
	15 B	Application Development using Python	3	3	40	60	100	
		Application Development using Python Lab	2	1	10	40	50	
	<b>SEM-VI</b>	Apprenticeship/Internship						

**FOURTH YEAR**

<b>SEM-VII</b>	16 A	Advanced Data Structures	3	3	40	60	100	
		Advanced Data Structures Lab	2	1	10	40	50	
	OR							
	16 B	Artificial Intelligence	3	3	40	60	100	
		Artificial Intelligence Lab	2	1	10	40	50	
	17 A	Computer Graphics	3	3	40	60	100	
		Computer Graphics Lab	2	1	10	40	50	
	OR							
	17 B	Design and Analysis of Algorithms	3	3	40	60	100	
		Design and Analysis of Algorithms Lab	2	1	10	40	50	
	18 A	Principles of Machine Learning	3	3	40	60	100	
		Principles of Machine Learning Lab	2	1	10	40	50	
	OR							
	18 B	Software Testing	3	3	40	60	100	
		Software Testing Lab	2	1	10	40	50	

<b>SEM-VII (SEC)</b>	19 A	Advanced Java Programming	3	3	40	60	100	
		Advanced Java Programming Lab	2	1	10	40	50	
	OR							
	19 B	Mobile Application Development	3	3	40	60	100	
		Mobile Application Development Lab	2	1	10	40	50	
	20 A	MEAN Stack Development	3	3	40	60	100	
		MEAN Stack Development Lab	2	1	10	40	50	
	OR							
	20 B	R Programming	3	3	40	60	100	
		R Programming Lab	2	1	10	40	50	
<b>SEM-VIII</b>	21 A	Big Data Technologies	3	3	40	60	100	
		Big Data Technologies Lab	2	1	10	40	50	
	OR							
	21 B	Compiler Design	3	3	40	60	100	
		Compiler Design Lab	2	1	10	40	50	
	22 A	Data Mining Concepts & Techniques	3	3	40	60	100	
		Data Mining Concepts & Techniques Lab	2	1	10	40	50	
	OR							
	22 B	Digital Image Processing	3	3	40	60	100	
		Digital Image Processing Lab	2	1	10	40	50	
23 A	Information Security and Cryptography	3	3	40	60	100		
	Information Security and Cryptography Lab	2	1	10	40	50		
OR								
23 B	Mobile ADHOC and Sensor Networks	3	3	40	60	100		
	Mobile ADHOC and Sensor Networks Lab	2	1	10	40	50		
<b>SEM-VIII (SEC)</b>	24 A	Advanced DBMS	3	3	40	60	100	
		Advanced DBMS Lab	2	1	10	40	50	
	OR							
	24 B	Cloud Computing	3	3	40	60	100	
		Cloud Computing Lab	2	1	10	40	50	
	25 A	Computer Vision	3	3	40	60	100	
		Computer Vision Lab	2	1	10	40	50	
	OR							
	25 B	Digital Forensics	3	3	40	60	100	
		Digital Forensics Lab	2	1	10	40	50	