

DEPARTMENT OF COMPUTER SCIENCE WITH DATA ANALYTICS

**Nallamuthu Gounder Mahalingam College
(Autonomous)
(An ISO 9001:2015 Certified Institution)
Re-Accredited with 'B' Grade by NAAC
Pollachi-642001**



SYLLABUS

B.Sc. COMPUTER SCIENCE WITH DATA ANALYTICS

BATCH 2022-2025

N.G.M College - Curriculum Development Cell Scheme of Examination For 2022 - 2023 Choice Based Credit System & OBES									
Part	Course Code	Title of the Paper	Hours/ Week		Exam Hours	MAX.MARKS			Credits
			T	P			CI A	ESE	
I SEMESTER									
I	22UTL101/ 22UHN101/ 22UFR101	Tamil Paper-I/ Hindi Paper-I/ French Paper-I	6		3	50	50	100	3
II	22UEN101	English Paper-I	5		3	50	50	100	3
III	22UDA101	Core I: Programming in C	4		3	50	50	100	4
	22UDA102	Core II: Data Structures and Algorithms	4		3	50	50	100	4
	22UDA1A1	Allied-1: Mathematical Foundation for Data Science	4		3	50	50	100	4
	22UDA103	Core Lab I: Programming Lab in C		5	3	25	25	50	2
IV	22HEC101	Human Excellence: Personal Values& SKY Yoga Practice - 1		1	2	25	25	50	1
	22UHR101	Human Rights in India	1		2		50	50	2
V		Extension Activities (NSS, NCC, Sports & Games)							
Total								650	23

<u>II SEMESTER</u>									
Part	Course Code	Title of the Paper	Hours/Week		Exam Hours	MAX. MARKS			Credits
			T	P		CI A	ESE	Total	
I	22UTL202/ 22UHN202 22UFR202	Tamil Paper-II/ Hindi Paper-II/ French Paper-II	6		3	50	50	100	3
II	22UEN202	English Paper – II	5		3	50	50	100	3
III	22UDA204	Core III: Object Oriented Programming with Java	3		3	50	50	100	4
	22UDA205	Core IV: Operating System	4		3	50	50	100	4
	22UDA2A1	Allied 2 : Statistics and Probability	4		3	50	50	100	4
	22UDA206	Core Lab II: Programming Lab in Java		5	3	25	25	50	2
	22UDA207	Capstone Project - 1				25	25	50	2
IV	22HEC202	Human Excellence: Family Values & SKY Yoga Practice-2		1	2	25	25	50	1
	22EVS201	Environmental Studies	2		2		50	50	2
V		Extension Activities (NSS, NCC, Sports & Games)							
EC		Online Course (MOOC/NPTEL/SWAYAM) Optional							
	22CMM201	Manaiyiyal Mahathuvam - I	Certificate course						
	22CUB201	Uzhavu Bharatham - I	Certificate course						
Value Added Course	22VAD201	Department Specific Value-Added Course							
Total								700	25



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Programme Code:	B.Sc.	Programme Title:	Bachelor of Science (Computer Science with Data Analytics)	
Course Code:	22UDA207	Title	Batch:	2022- 2025
		Capstone Project - 1	Semester:	II

COMPUTER SCIENCE PROJECT and VIVA VOCE

Guidelines

Introduction

The title of the project work and the organization will be finalized at the end of fifth Semester. Each student will be assigned with a Faculty for guidance. The Project work and coding will be carried by using the facility of computer science lab as well as in the organization. Periodical review will be conducted to monitor the progress of the project work. Project report will be prepared and submitted at the end of the semester. External examiner appointed by the Controller of Examination will conduct the viva voce examination along with respective guide.

Area of Work

- Web Based Development
- Mobile app development
- Website development
- IoT Projects
- Big Data and Data Mining Projects
- Cloud Computing Projects
- Networking Projects
- Artificial Intelligence and Machine learning Projects
- Data Analytics Projects using Python, R, Tableau etc..
- System Software
- Web Security Projects
- Image Processing

Methodology

Arrangement of Contents

The sequence in which the project report material should be arranged and bound as follows:

10. Cover Page & Title Page

11. Bonafide Certificates
12. Declaration
13. Acknowledgement
14. Synopsis
15. Table of Contents
16. Chapters
17. Appendix
18. References

Format of Table of Contents

TABLE OF CONTENTS

Chapter No.	Title	Page No.
i	Certificates	
ii	Declaration	
iii	Acknowledgement	
iv	Synopsis	
1.	Introduction	
	1.1 Introduction	
	1.2 Objective of the Project	
	1.3 Company Profile	
	1.4 System Specification	
	1.4.1 Hardware Specification	
	1.4.2 Software Specification	
2	System Study	
	2.1 Existing System	
	2.1.2 Drawbacks	
	2.2 Proposed System	
	2.3 Planning and Scheduling	
3	System Design	
	3.2 Overview of the Project	
	3.1 Modules of the Project	
	3.2 Input Design Format	
	3.3 Output Design	
	3.4 Table Design	
	3.5 Supporting Diagrams (ER/DFD/Use Case)	
4	Implementation and Testing	
	4.1 Coding Methods	
	4.2 Testing Approach	
	4.3 Implementation and Maintenance	
5	Project Evaluation	
	5.1 Project Outcome	
	5.2 Limitation of the Project	
	5.3 Further Scope of the Project	
6	Conclusion	

7	Appendix
	7.1 Source Code
	7.2 Screenshots and Reports
8	References

Size of the Project

The Project Report contents should be maximum of not exceeding 70 pages.

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