

TABLE OF CONTENTS

Title	Page No.
LIST OF FIGURES	I
LIST OF TABLES	II
CHAPTER 1 INTRODUCTION	1
1.1 Introduction to the Project	1
1.2 Introduction to Technology Used	2
CHAPTER 2 LITERATURE SURVEY	4
2.1 Introduction	4
2.2 Literature Survey	4
2.3 Summary of Literature Survey	9
2.4 Comparison with Existing Systems	13
2.5 Proposed System	13
2.6 Objectives	14
CHAPTER 3 REQUIREMENT SPECIFICATION AND ANALYSIS	15
3.1 Introduction	15
3.2 Functional Requirements	15
3.2.1 Timetable Generation	15
3.2.2 Constraint Handling	15
3.2.3 Data Input & Management	15
3.3 User Interface Requirements	16
3.4 Software Requirements	16
3.5 Hardware Requirements	17
3.6 Non-Functional Requirements	17

3.6.1	Performance	17
3.6.2	User-Friendly	17
3.6.3	Reliability	18
CHAPTER 4	SYSTEM DESIGN	19
4.1	Introduction	19
4.2	System Architecture	19
4.3	User Interface	20
4.4	Scheduling Logic	21
4.5	Database	21
4.6	Flow Chart	23
4.7	Sequence Diagram	24
CHAPTER 5	SYSTEM IMPLEMENTATION	26
5.1	Introduction	26
5.2	System Workflow Overview	26
5.2.1	User Authentication	26
5.2.2	Department, Semester, Faculty, and Course Management	27
5.2.3	Course-Faculty-Semester Mapping	27
5.2.4	Faculty Preferences	27
5.2.5	Data Loading for Scheduling	27
5.2.6	Genetic Algorithm Execution	28
5.2.7	Display of Timetable	28
5.3	Formula	29
5.4	Implementation Flow	30
CHAPTER 6	SYSTEM TESTING	32
6.1	Introduction	32

6.2	Unit Testing	32
6.3	Integration Testing	33
6.4	Functional Testing	33
6.5	System Testing	33
6.6	Test Cases	34
6.7	Summary of Testing	35
CHAPTER 7 EXPERIMENTAL RESULTS AND SCREENSHOTS		36
7.1	Introduction	36
7.2	Result and Screenshots	36
CHAPTER 8 CONCLUSION AND SCOPE FOR FUTURE ENHANCEMENT		43
8.1	Conclusion	43
8.2	Scope for Future Enhancement	43
REFERENCES		44
PERSONAL PROFILE		46
CONFERENCE ATTENDED		48