

MANNAR THIRUMALAI NAICKER COLLEGE

(Autonomous)

B.Voc. Programme

Software Development

PROGRAMME SPECIFIC OUTCOMES

- PSO1: To serve as Assistant Software Publisher, System Manager in software development and the role of modeling.**
- PSO2: To analyze, identify and define the technology required to build and implement a web site.**
- PSO3: To work as Programmer, Entry level software developer, web Designer in software industry.**
- PSO4: To apply the skills to edit professionally, create digital content, design print and web-based products, develop and manage writing and editing projects.**

Mannar Thirumalai Naicker College(Autonomous)

Madurai- 4

I. Programme	:	B. Voc. in Software development
II. Sector Skill council	:	IT-ITeS Sector Skill Council
III. Selected Job roles	:	(i) DTP operator (ii) web developer
IV. Eligibility Criteria	:	12 th Pass with Mathematics, No age limit, Any gender
V. Industrial Partners List	:	(i) (ii)
VI. Teaching Methods	:	Lecture with Charts/ models/ chalkboard Role Play Demonstration cum Lecture Group Discussion Power Point presentation You tube Video Presentation
VII. Methods of Evaluation		
Theory	:	Objective Test, Class Test, Oral Presentation, Quiz, Assignment
Practical	:	Assessment, Case Note, Case Presentation, Survey Report, Training Industry Report, Assignment for Lab Internals
Internship	:	Evaluation form, Case Study/ Project work, Viva-Voce

VIII. Examination Pattern :

Internal Exam : Internal Test - 20 Marks

Practicals : Assignment / Seminar /
Oral Presentation / Practical Test /
Record - 20 Marks

Total 40 Marks

Summative Exam : Multiples Choice Question 15x1=15marks
Short Answers 3x5 =15 marks
Essay 3x10=30 marks

Total 60 marks

INTERNSHIP ASSESSMENT

(Req. Max: Formative:60 marks, Summative: 40 marks)

Formative Evaluation (Industrial Partner)

- Evaluation Form (60 marks)

Application of Knowledge	Care for Tools & Equipment	Economic use of Material	Safety Consciousness	Speed	Accuracy	Quality of Workmanship	Amount of Work	Number of Attempts	Attitude

Rating Scale: Excellent- 6; Very Good- 5; Good-4; Fair- 3; Satisfactory -2; Poor-1.

Summative Evaluation (Course Teacher)

- Case Study/ Project (20 marks)
- Viva (20 marks)

B.VOC. IN SOFTWARE DEVELOPMENT

S. No	Sem	Category	Course Code	Course Title	No. of Hours/Week		No. of Credits	
					T	P	T	P
1	I	Part – I	18VSWG11	Life Skills	4	-	4	-
2		General Education	18VENG11	Communicative English	4	-	4	-
3			18VMTG11	Discrete Mathematics	4	-	4	-
			Total			12	-	12
4		Part – II Skill component	18VSDS11	Programming in C	4	2	4	2
5			18VSDS12	Web Designing	4	2	4	2
6			18VSDS13	Desk Top Publishing Lab	2	4	2	4
	Total			10	8	10	8	
1	II	Part – I	18VSWG21	Professional Skills	4	-	4	-
2		General Education	18VENG21	Professional English	4	-	4	-
3			18VSDG21	Software Engineering	4	-	4	-
			Total			12	-	12
4		Part – II Skill component	18VSDS21	Programming in C and C++ Lab	2	4	2	4
5			18VSDS22	Web Technology Lab	2	4	2	4
6			18VSDS23	Internship	-	6	-	6
	Total			4	14	4	14	
	Grand Total				38	22	38	22

MANNAR THIRUMALAI NAICKER COLLEGE (Autonomous)
Madurai – 04

Class	: B.Voc. Programme	Part I	: GE
Semester	: I	Hours	: 04
Subject Code	:18VSWG11	Credits	: 04

LIFE SKILLS

COURSE OUTCOME

On successful completion of this course, the students will be able to

CO1: understand concepts, meaning, definitions & fundamentals of life skills.

CO2: provide them a thorough grounding in the basics of the subject

CO3: develop and articulate respect for the diversity of talents, ways of knowing and learning

Unit I: Introduction to life Skills

Introduction to life Skills and Importance – Personality – Definition – Traits – SWOT

Unit II: Concept of Self

Concept of Self: Self Image / Identity / Self Esteem – Factors Affecting Self Esteem – High / Low Esteem – Attitude Building – Meaning – Elements – Factors Affecting Attitude

Unit III: Interpersonal Skills

Interpersonal Skills: Meaning – Elements – Factors Affecting Interpersonal Skills – Need for Interpersonal Skills

Unit IV: Thinking

Thinking: Meaning – Types – Creative – Reasoning – Techniques.

Unit V: Emotions

Emotions: Definition – Characteristics – Types – Emotional Intelligence – Etiquettes – Grooming – Making Positive Impressions.

TEXT BOOK:

1. Alphonse Xavier S.J., *We Shall Overcome – A Text Book on Life Coping Skills*, ICRDCE Publications, Chennai: March 2004.

REFERENCE BOOKS:

1. RavikanthRao. K. *Life Skills Education*, 2016
2. Anderson, J. *The Perceptions of Students, Teachers, and Parents Regarding the Value of the LIFE SKILLS and Lifelong Guidelines Program. Unpublished PhD Dissertation:* East Tennessee State University,2005.
3. Assaly, I. *A content analysis of the reading and listening activities in the EFL textbook of master class.* Education Journal ,2014.
4. Shiv Khera, *You Can Win*, Macmillan India Ltd: New Delhi: 1998.

MANNAR THIRUMALAI NAICKER COLLEGE (Autonomous)
Madurai – 04

Class	: B.Voc .Programme	Part I	: GE
Semester	: I	Hours	: 04
Subject code	: 18VENG11	Credits	: 04

COMMUNICATIVE ENGLISH

COURSE OUTCOME

On successful completion of this course, the students will be able to

CO1: acquire the basic language skills.

CO2: **speak and write** without mistake

CO3: **develop confidence in their voice**

UNIT I - LISTENING SKILL

Basic Listening Skills - Listening to Radio and Television - Listening to Talks and Presentations – Tips for Effective Listening

UNIT II - SPEAKING SKILL

Basic Speaking Skills – Steps to Speak Easy – Formal and Informal Conversation– Describing pictures and people

UNIT III - READING SKILL

Importance of Reading - Levels of Reading - Techniques of Reading – Reading Comprehension.

UNIT IV - WRITING SKILL

Sentence - Phrase, Clause - Construction of Paragraph - Linkage and Cohesion

UNIT V -GRAMMAR AND USAGE

Kinds of Sentences - Parts of Sentence - Parts of Speech - Types of Sentences

REFERENCE

Material will be supplied by the Department of English

MANNAR THIRUMALAI NAICKER COLLEGE (Autonomous)

Madurai – 04

Class	:B.Voc .Programme	Part I	: GE
Semester	: I	Hours	: 04
Subject code	:18VMTG11	Credits	: 04

DISCRETE MATHEMATICS

COURSE OUTCOMES

On successful completion of this course, the students will be able to

CO1: know the basic concepts of sets and functions

CO2: know the concepts of logic

CO3: know the relationships between the graph theory and networks

UNIT I:Set theory

Introduction – Sets – Venn - Euler diagrams – Operations on Sets –Verification of basic laws of algebra by Venn Diagram – Principle of Duality.

UNIT II:Functions

Functions and operators – One -To– One, Onto functions – Special type of functions – Invertible functions – Composition of functions

UNIT III :Logic

Introduction – TF – Statements – Connectives – The Truth table of a Formula – Tautology – Tautological implications and equivalence of formulae.

UNIT IV :Matrix Algebra

Introduction – Operations – Inverse of a Square Matrix, Elementary Operations and Rank of matrix –Simultaneous linear equations – Eigen values & Eigen vectors.

UNIT V: Graph Theory:

Introduction – Definitions and examples – Degrees – Subgraphs— Some Applications :

Introduction – Connector problem – Shortest path problem.

TEXT BOOKS:

1. Venkatraman.M.,Sridharan.N.andN.Chandrasekaran, *Discrete Mathematics*, The National Publishing Company, Chennai, Reprint, 2006.
2. Arumuga.S.,Ramachandran.S., *Invitation to Graph Theory*, Scitech Publications India Pvt Ltd, Chennai, Reprint. 2006.

Unit I	: Book 1	Chapter: 1	Sections: 1.1, 1.2, 1.5, 1.6, 1.8, 1.9
Unit II	: Book 1	Chapter: 3	Sections: 3.1 to 3.4
		Chapter: 4	Sections: 4.1, 4.2
Unit III	: Book 1	Chapter: 9	Sections: 9.1 to 9.3, 9.6 to 9.8.
Unit IV	: Book 1	Chapter: 6.	Sections: 6.1 to 6.5, 6.7
Unit V	: Book 2:	Chapter: 2	Sections 2.0 to 2.3.
		Chapter: 11	Sections 11.0 to 11.2.

REFERENCE BOOKS:

1. Seymour Lipchitz, *Discrete Mathematics*, Marc Lipson(Schaum's Outline Series)-Second Edition.2007.
- 2.Arumugam.S,&Issac SciTech, *Modern Algebra* ,Publishers (for Units 1,2,4).Sci Tech Publications Pvt. Ltd,NewDelhi,2014.
- 3.VeeraRajan.T., *Discrete Mathematics with Graph Theory and Combinations*, Tata McGraw Hill Publishing Company Ltd,NewDelhi,2007.

MANNAR THIRUMALAI NAICKER COLLEGE (Autonomous)
Madurai – 04

Class	:B.Voc (Software Development)	Part II	:Skill
Semester	: I	Hours	: 06
Subject code	: 18VSDS11	Credits	: 06

PROGRAMMING IN C

COURSE OUTCOME:

On successful completion of this course, the students will be able to

CO1: Develop programming skills using the fundamentals and basics of C language.

CO2: Understand the concepts of Arrays and Strings.

CO3: Learn the basic concepts of structures and unions.

UNIT -I:OVERVIEW OF C AND DATA TYPES

History of C – Importance of C – Character set – C tokens – Keywords and identifiers – Constants – Variables – Data types – Declaration of variables – Constants- Defining symbolic constants – Operators – Managing input and output operations: Reading and writing Character.

UNIT -II:DECISION MAKING AND BRANCHING

Introduction – Simple if – Else...If – Nested if – Ladder if – Switch statement – Conditional operators – Gotostatements – While statement – Do...While statement – For statement.

UNIT-III:ARRAYS AND STRINGS

Introduction – One dimensional array – Multi dimensional array – Declaring and initializing string variables – Reading and writing strings–STRING handling Functions.

UNIT -IV:FUNCTIONS AND STRUCTURES

Introduction to functions – User defined functions – Defining a function – Function calls – Function declaration – Category of functions – Arguments and functions – Recursion.

UNIT -V:INTRODUCTION TO STRUCTURE AND UNIONS

Defining and declaring a structure variable – Accessing structure members – Arrays of structures – Structures and functions–Unions–Size of structures –Bit fields.

TEXT BOOK:

1. Balagurusamy.E., *Programming in ANSI C*, Tata McGraw Hill Education Private Limited, Sixth Edition, New Delhi, 2012.

REFERENCE BOOKS :

1. Byron Gottfried, *Programming with C*, McGraw Hill Education (India) Private Limited, New Delhi, Third Edition, 2014.
2. Yashavant Kanetkar, *Let Us C*, BPB Publications, New Delhi, Tenth Edition, 2010.
3. Brian W. Kernighan & Dennis M. Ritchie, *The C Programming Language*, AT&T Bell Laboratories Murray Hill, New Jersey, Second Edition, 1988.

LIST OF PRACTICAL:

- Program to compute the average.
- Program to compute the factorial of a given number.
- Program to generate Fibonacci series.
- Write a program to check whether a number is even or odd.
- Write a program to check whether a number is prime number or not.
- Write a program to check whether a year is leap year or not.
- Write a program to find largest of three numbers.
- Write a program to check whether a character is vowel or consonant using switch statement.
- Write a program to find sum of 'n' natural numbers.
- Program to compute Highest Common Factor (HCF).

MANNAR THIRUMALAI NAICKER COLLEGE (Autonomous)
Madurai – 04

Class :B.Voc (Software Development)

Semester : I

Subject code : 18VSDS12

Part II:Skill

Hours: 06

Credits: 06

WEB DESIGNING

COURSE OUTCOMES

On successful completion of this course, the students will be able to

CO1: Develop the skill and knowledge of script languages.

CO2: Understand the knowledge of Web authoring tools.

CO3: Gather the knowledge of Flash and website updation.

UNIT I: SCRIPTING LANGUAGES

HTML: Basic tags– HTML basics–Document tags–Empty tags–Using lists in web sites–Nested and unordered list–Menu list–Absolute links–Relation links in web sites–Image and image maps.

UNIT II: TABLE CREATIONS

Creation of tables–Forms– Frames and their division– Use of colors–Headings – Animation.

UNIT III: WEB AUTHORIZING TOOLS

FrontPage: FrontPage express and explorer– FrontPage editor–Application of themes – Formatting of text on web page–Creation of web pages–Web sites–Hyperlinks–Images–Image borders–Formatting.

UNIT IV: WEB MULTIMEDIA TOOLS

Multimedia: Sound and video effects–Enhancing tables, rows and columns–Cells, frames and frame properties– Tasks views–Web wizards–Radio buttons and command buttons.

UNIT V: MACROMEDIA FLASH

View movie- movie properties–Grid–oval tool–Creating symbol–Gradients– rectangle tool –Pencil tool –Grouping –Layers –Renaming layer –Adding new layer –Rotate and scale –Changing the order of layers –Keyframes –Motion tween –Adding sound – Importing sound –Stopping the action- adding button- text tool.

LIST OF PRACTICAL

- Create any webpage using following HTML tags:
 - Background Colour
 - Font (Colour, Size, Face)
 - Bold/Italic/Underline
 - Big/Small
 - H1, H2, etc.
 - Marquee
 - Ordered/Unordered List
 - Data lists
- Insert an image in a Webpage.

TEXT BOOKS:

1. Learning Web Design: A Beginner's Guide to HTML, CSS, Java Script and Web Graphics, 4th Edition, [Jennifer Niederst Robbins](#), Published by O'Reilly Media, Inc., 1005 Gravenstein Highway North, Sebastopol, CA 95472.

2. Adobe Flash Professional CS6, Illustrated – 13th edition, by [Barbara M. Waxer](#), Course Technology, 2013.

REFERENCE BOOKS:

1. C.XAVIER ,*World Wide Web Design with HTML*, McGraw Hill Education , New Delhi,2016.
2. VikasGuptaComdex *Multimedia and Web Design Course Kit*, Dream Tech press, New Delhi,2013.
3. Steven.M.Schafer,*HTML, XHTML, and CSS Bible*, 5th Edition, Wiley India.

MANNAR THIRUMALAI NAICKER COLLEGE (Autonomous)
Madurai – 04

Class :B.Voc (Software Development)

Part II:Skill

Semester : I

Hours: 06

Subject code : 18VSDS13

Credits : 06

DESKTOP PUBLISHING LAB

COURSE OUTCOMES

On successful completion of this course, the students will be able to

CO1: prepare students having skills to work in the field of content designing or desk top publishing.

CO2: know the basic components of the computer.

CO3: learn the basic knowledge in Photoshop and PageMaker.

UNIT 1: BASICS OF COMPUTER

Introduction to Computer: Characteristics of Computer –Types of Computer–Memory Management – Units, Representation, Types – Components of CPU – Input, Output devices.

UNIT II: MS WORD

MS Word–Working with Documents – Formatting Documents – Setting Page style – Creating Tables– Drawing – Inserting ClipArts, Pictures/Files etc.– Tools – Word Completion, Spell Checks, Mail merge–Printing Documents – Shortcut keys.

UNITIII: MS EXCEL

Working with Menus: MS Excel –Working with Spreadsheets–Entering & Deleting Data– Setting Formula–Formatting Spreadsheets–Working with sheets – CreatingCharts.

UNIT IV: ADOBE PHOTOSHOP

Using standard toolbox–Option bars–Palettes–Document window–View area–Use of plug ins–Brushes–Defining and customizing images–Canvas–Rotation of images–Creating new images–Mixing changing attributes–Colors–Distorting images–Applying filters to images –Web based picture designing.

UNIT V: ADOBE PAGEMAKER

Toolbox–Control palette–Colors palette–Paragraph view–Styles–Layers–Master layers–Scripts–Command reference–Opening and creation of publications–Tool box–Viewing pages–Deleting pages–Default preferences–Templates –Master pages–Guides –Grids –Text objects–Column balancing–Jump lines –Story and layout view–Composition and tracking–Grouping and ungrouping –Cropping and copying of images–Text–Indexes and table of contents using table in PageMaker–Importing and exporting links–Image setter and film preparation –Font substitution and printing of publications.

LIST OF PRACTICAL

Ms -Word

- Preparing a news Letter
- Designing your Bio-Data
- Creating and editing the table
- Create Mail Merge
- Advertisement Designing

Ms -Excel

- Operating on the sheets
- Using formulas and functions
- Perform Student's Mark Statement
- Display Score Boards using Pie Charts
- Display Sales Analysis using Bar Charts

Adobe Photoshop

- Editing of a photograph.
- Finishing of a photograph.
- Borders around photograph.
- Changing Background of a Photograph.
- Changing colors of Photograph
- Editing color combination of image
- Removing side effects from figure
- Printing a photograph.
- Creating 3-D Photographs.
- Removing red eye effects and others using photoshop

Adobe PageMaker

- Prepare any visiting card
- Make a Marriage card
- Prepare various types of greeting cards such as B'Day Card, New Year Cards, Diwali cards etc.
- Make advertisements for Newspaper
- Prepare banners,
- Making of Posters

TEXT BOOKS:

1. Rajaraman.V.,*Fundamentals of computers* - Prentice- Hall of India,New Delhi,2003
2. Taxali.R.K., *PC Software For Windows 98 Made Simple*,TataMcGrawHill Education Private Limited, New Delhi, 27th reprint, 2009.
3. Allan Wood,*The Graphic Designer's Digital Toolkit*,6th Edition,Cengage Learning, 2014

REFERENCE BOOKS:

1. Richard Petersen ,*The complete reference Linux* , Tata McGraw - Hill Edition, Noida, India,2007.
2. Adobe Page Maker 7.0 Classroom in a Book, Adobe Creative Team, Adobe Press,*October, 2001*.
3. Sanjay Saxena, *A First Course in Computers*, 2003Edition 3/e,Vikas Publishing house, Reprint 2010.

MANNAR THIRUMALAI NAICKER COLLEGE (Autonomous)
Madurai – 04

Class	: B.Voc .Programme	Part I	: GE
Semester	: II	Hours	: 04
Subject Code	:18VSWG21	Credits	: 04

PROFESSIONAL SKILLS

COURSE OUTCOMES

On successful completion of this course, the students will be able to

CO1: Acquire skills to manage time and to recognize the importance of motivation and goal setting

CO2: Understand concepts, meaning of social skills and its importance

CO3: Apply workplace etiquettes and preparing for the job.

Unit I: Goal Setting

Goal Setting: Definition – SMART Principle – Difficulties in Goal Setting – Process and Types.

Unit II: Leadership Skills

Leadership Skills: Styles of Leadership – Transactional and Transformational – Johari Window – Methods and Techniques of Developing Interpersonal Skills.

Unit: III: Time Management

Time Management: Meaning – Importance – Obstacles in Managing – Steps for Effective Time Management – Stress – Meaning – Types – Factors Causing Stress – Coping Mechanisms.

Unit IV: Management and Planning

Management and Planning: Meaning – Principles – Practices–Functions – Types of Plans – Steps in Planning

Unit V:Strategic Planning

Strategic Planning: Development Mapping – Sustainability – Commercial Viability – Market Analysis.

TEXT BOOK:

1. Alphonse Xavier S.J., *We Shall Overcome – A Text Book on Life Coping Skills*, ICRDCE Publications, Chennai: March 2004.

REFERENCE BOOKS:

1. Leonard S.Genry.,*Journal of Extension*,(October, 2006), **Study of life skill development of Oklahoma 4-H alumni during the years Of 4-H participation 1969-1998.**
2. Thomas A. Smith.,*Journal of Extension* ,April, 2005,**Evaluating a youth leadership life skills development program..**
3. Bhatia .H. S.,*Art of Interview*,19th Edition, 2013,

MANNAR THIRUMALAI NAICKER COLLEGE (Autonomous)
Madurai – 04

Class : B.Voc .Programme
Semester : II
Subject code :18VENG21

Part I : GE
Hours : 04
Credits : 04

PROFESSIONAL ENGLISH

COURSE OUTCOMES

On successful completion of this course, the students will be able to

CO1: Expand their vocabulary
CO2: Become effective communicators
CO3: Acquire the career skills

UNIT I : WORKING WITH WORDS

Vocabulary – Spelling and Pronunciation – Punctuation

UNIT II : SPEECH PRACTICE

Short speeches on topics of day to day - Speaking for Life and Work – Group Discussion

UNIT III : ACADEMIC CORRESPONDENCE

Academic Letter Writing - Report Writing -Proposal Writing

UNIT IV : GRAMMAR AND USAGE

Transformation of Sentences (Affirmative into Negative) – Framing Questions – Tag Questions

UNIT V : CAREER SKILLS

Applying for Job - Covering Letter - Resume and Effective Profiling – Interviews

REFERENCE

Material will be supplied by the Department of English

MANNAR THIRUMALAI NAICKER COLLEGE (Autonomous)

Madurai – 04

Class	:B.Voc (Software Development)	Part II	:GE
Semester	: II	Hours	: 04
Subject code	: 18VSDG21	Credits	: 04

SOFTWARE ENGINEERING

COURSE OUTCOMES

On successful completion of this course, the students will be able to

CO1: Understand basic concepts of software engineering.

CO2: Compare different cost estimation technique in software engineering.

CO3: Learn the design techniques in software engineering.

UNIT- IINTRODUCTION TO SOFTWARE ENGINEERING

Definitions –Some Size Factors –Quality And Productivity Factors –Managerial Issues.Planning a Software Project: Defining The Problem –Developing a Solution Strategy –Planning the Development Process –Planning an Organizational Structure –Other Planning Activities.

UNIT - IISOFTWARE COST ESTIMATION

Software Cost Factors –Software Cost Estimation Techniques –Staffing –Level Estimation – Estimating Software Maintenance Costs.

UNIT- IIISOFTWARE REQUIREMENTS

Definitions –The Software Requirements Specification –Formal SpecificationTechniques –Language and Processors for Requirements Specification.

UNIT- IVSOFTWARE DESIGN

Fundamental Design Concepts – Modules and Modularization Criteria – Design Notations – Design Techniques – Detailed Design Considerations – Real-Time and Distributed System Design – Test Plans –Implementation Issues: Structured Coding Techniques – Coding Style – Standards and Guidelines – Documentation Guidelines.

UNIT- VVERIFICATION AND VALIDATION TECHNIQUES

Quality Assurance – Walkthroughs and Inspections – Static Analysis – Symbolic Execution – Unit Testing And Debugging – System Testing – Formal Verification – Software Maintenance: Introduction – Enhancing Maintainability during Development – Managerial Aspects of Software Maintenance – Configuration Management – Source Code Metrics – Other Maintenance Tools And Techniques.

TEXT BOOK:

1. Richard E.Fairley, *Software Engineering Concepts*, Tata McGraw - Hill Education private Limited, New Delhi, 39th reprint, 2013.

REFERENCE BOOKS:

1. Roger S. Pressman, *Software Engineering Concepts*, Tata McGraw Hill Publishing Company, Seventhreprint, 2007.
2. Ian Sommer Ville, *Software Engineering*, Prentice Hall of India Private Ltd, New Delhi, Tenth Edition, 2003.
3. Stephan Schach, *Software Engineering*, Tata McGraw Hill, New Delhi, 2007.

MANNAR THIRUMALAI NAICKER COLLEGE (Autonomous)
Madurai – 04

Class	:B.Voc (Software Development)	Part II	:Skill
Semester	: II	Hours	: 06
Subject code	: 18VSDS21	Credits	: 06

PROGRAMMING IN C AND C++ LAB

COURSE OUTCOMES

On successful completion of this course, the students will be able to

CO1: understand the concept of procedural programming using C++.

CO2: learn the basic knowledge about pointers.

CO3: understand the concept of file handling and its operation.

UNIT I: POINTERS AND FILE HANDLING IN C

Introduction to Pointers – Pointers and arrays – Pointers and structures –Pointers to functions – Applications of pointers – File Handling.

UNIT II: INTRODUCTION TO OBJECT-ORIENTED PROGRAMMING

Introduction – Procedure vs. object oriented programming – Data types – control structures – Arrays and Strings – User defined types – Functions and Pointers.

UNIT III: OBJECT ORIENTED PROGRAMMING CONCEPTS

Classes and Objects – Operator Overloading – Inheritance – Polymorphism and Virtual Functions.

UNIT IV: TEMPLATES AND EXCEPTION HANDLING

Function templates and class templates – Namespaces – Casting – Exception Handling.

UNIT V: FILES AND ADVANCED FEATURES

C++ Stream classes – Formatted IO – File classes and File operations – Dynamic memory allocation – Standard Template Library.

LIST OF PRACTICALS

Programming in C

- Program to compute Least Common Multiple (LCM).
- Write a program to insert an element in an array.
- Write a program to delete an element from array.
- Write a program for linear searching.
- Write a program to implement bubble sorting.
- Program to find the largest and smallest element among 'n' numbers.
- Program to add and subtract two matrices.
- Program to compute the transpose of a matrix.
- Programs using Functions and Pointers in C
- Programs using Files in C

Programming in C++

- Programs using Classes and Objects
- Programs using Operator Overloading
- Programs using Inheritance, Polymorphism and its types
- Programs using Arrays and Pointers
- Programs using Dynamic memory allocation
- Programs using Templates and Exceptions
- Programs using Sequential and Random access files

TEXT BOOKS:

1. Yashavant Kanetkar, *Understanding Pointers in C*, 4th Revised & Updated Edition, BPB Publications, New Delhi, 2008.

2. HM Deitel and PJ Deitel, *C++ How to Program*, Seventh Edition, Prentice Hall, USA 2010.

REFERENCE BOOKS:

1. Brian W. Kernighan and Dennis M. Ritchie, *The C programming Language*, Prentice-Hall. New jersey, USA, 2006.
2. Balagurusamy.E., *Object oriented Programming with C++*, Third edition, Tata McGraw Hill., 2006.
3. Bjarne Stroustrup, *The C++ Programming language*, Third edition, Pearson Education, San Francisco, USA, 2013.

MANNAR THIRUMALAI NAICKER COLLEGE (Autonomous)
Madurai – 04

Class	:B.Voc (Software Development)	Part II	:Skill
Semester	: II	Hours	: 06
Subject code	: 18VSDS22	Credits	: 06

WEB TECHNOLOGY LAB

COURSE OUTCOMES

On successful completion of this course, the students will be able to

CO1: Understand basic concepts of HTML elements.

CO2: Analyse the principles of CSS and XSL.

CO3: Know the essential features of webservice.

UNIT I:WEBESSENTIALS

Clients–Servers and Communication– The Internet–Basic Internet Protocols –The World Wide Web–HTTP request message–Response message–Web Clients– Web Servers–Case Study–Markup Languages: XHTML– An Introduction to HTML–History–Versions–Basic XHTML Syntax and Semantics–Some Fundamental HTML Elements–Relative URLs–Lists–Tables–Frames–Forms–XML Creating HTML Documents ,Case Study.

UNIT II :STYLE SHEETS

CSS–Introduction to Cascading Style Sheets–Features-Core Syntax–Style Sheets and HTML Style –Rule Cascading and Inheritance–Text Properties–Box Model Normal Flow Box Layout–Beyond the Normal Flow–Other Properties–Case Study–Client–Side Programming: The JavaScript Language–History and Versions–Introduction: JavaScript in Perspective–Syntax–Variables and Data Types–Statements–Operators– Literals–Functions–Objects–Arrays–Built-in Objects–JavaScript Debuggers.

UNIT III:HOST OBJECTS

Host Objects : Browsers and the DOM,Introduction to the Document ,Object Model DOM History and Levels–Intrinsic Event Handling–Modifying Element Style–The Document Tree–DOM Event Handling–Accommodating Noncompliant Browsers Properties of window–Case

Study– Server–Side Programming: Java Servlets– Architecture –Overview–A Servlet– Generating Dynamic Content–Life Cycle–Parameter Data–Sessions–Cookies–URL Rewriting– Other Capabilities–Data Storage Servlets and Concurrency–Case Study–Related Technologies.

UNIT IV: REPRESENTING WEB DATA

XML–Documents and Vocabularies–Versions and Declaration –Namespaces JavaScript and XML: Ajax–DOM based XML processing Event-oriented Parsing: SAX–Transforming XML Documents–Selecting XML Data: XPATH–Template based Transformations: XSLT–Displaying XML Documents in Browsers–Case Study–Related Technologies– Separating Programming and Presentation: JSP Technology Introduction–JSP and Servlets–Running JSP Applications Basic JSP–JavaBeans Classes and JSP–Tag Libraries and Files–Support for the Model–View– Controller Paradigm–Case Study–Related Technologies.

UNIT V: WEB SERVICES

JAX–RPC–Concepts–Writing a Java Web Service–Writing a Java WebService – ClientDescribing Web Services: WSDL– Representing Data Types: XMLSchema– Communicating Object Data: SOAP Related Technologies–SoftwareInstallation–Storing Java Objects as Files–Databases and Java Servlets.

LIST OF PRACTICALS

- Insert a table and perform table handling in web page Create Employee Table and apply various operations on it using HTML. Also put Border around the table.
- Create a simple webpage using HTML.
- Use frames to include images and videos.
- Add a Cascading Style sheet for designing the web page.
- Design a dynamic web page with validation using JavaScript.
- Design a catalogue in JSP.
- Design Login page using JSP.
- Create Internal and External Hyperlinks in a Webpage.
- Implement the concept of Frames in a Webpage.
- Design Home page of your Institute
- Design Web page for tourism spots in your area
- Prepare your CV and link on the web page
- Use animation of image in a web page

TEXT BOOK:

1. Jeffrey C.Jackson, *WebTechnologies-A Computer Science Perspective*, Pearson education, San Francisco, USA, 2006.

REFERENCE BOOKS:

1. Robert. W. Sebesta, *Programming the World Wide Web*, Fourth Edition, Pearson Education, San Francisco, USA, 2007.
2. Deitel, Deitel, Goldberg, *Internet & World Wide Web How To Program*, Third Edition, Pearson Education, San Francisco, USA, 2006.

MANNAR THIRUMALAI NAICKER COLLEGE (Autonomous)

Madurai – 04

Class : B.Voc(Software Development)

Part II : Skill

Semester :II

Hours : 06

Subject code : 18VSDS23

Credits : 06

INTERNSHIP

INTERNSHIP ASSESSMENT

(Req. Max: Formative:60 marks, Summative: 40 marks)

Formative Evaluation (Industrial Partner)

- Evaluation Form (60 marks)

Applicat ion of Knowle dge	Care for Tools& Equipm ent	Econo mic use of Materi al	Safety Conscious ness	Spe ed	Accur acy	Quality of Workman ship	Amo unt of Work	Numb er of Attem pts	Attitu de

Rating Scale: Excellent- 6; Very Good- 5; Good- 4; Fair- 3; Satisfactory -2;Poor.1.

Summative Evaluation (Course Teacher)

- Case Study/ Project (20 marks)
- Viva (20 marks)