ALAGAPPA UNIVERSITY

(A State University Accredited with A+ Grade By NAAC(CGPA:3.64) in the Third Cycle and Graded as Category-I University By MHRD-UGC)
Karaikudi – 630003.
Tamilnadu

Directorate of Distance Education

PROGRAMME PROJECT REPORT

CERTIFICATE COURSE IN WEB DESIGNING

Submitted for seeking approval to introduce programme through Distance Education Mode

July 2020

Certificate Course in Web Designing
Credit Based Curriculum and Evaluation System

Table of contents

DIRECTORATE OF DISTANCE EDUCATION

CERTIFICATE COURSE IN WEB DESIGNING

Credit Based Curriculum and Evaluation System

(With effect from Academic Year 2020 - 2021 Onwards)

(a) PROGRAMME'S MISSION AND OBJECTIVES

Mission

Mission is to impart employability and creativity to the students and lives up to the standards of Computer science, Computer Applications and Information Technology (IT) industry.

Programme Objectives

The Web Designing course familiarizes students with the creation and management of web pages and web sites. We will focus on designing, scripting and web page creation, including discussion of HTML, CSS, multimedia embedding, and more. Students will develop clean coding practices while building websites using software. Students will strive to view the web in terms of its creative possibilities and cultural significance as well as its commercial and educational uses. Individual work, group work and presentations will be expected.

(b) PROGRAMME OUTCOME

- ✓ To widen the ability to plan, analyze, design, code, test, implement & maintain a web site for real time system.
- ✓ To knowledge the students in finding solutions and developing web-based applications for real time problems in various domains involving technical, managerial, economical & social constraints.
- ✓ To prepare the students to pursue higher studies in computing or related disciplines and to work in the fields of teaching and research.

(c) NATURE OF PROSPECTIVE TARGET GROUP OF LEARNERS

The nature of prospective target group of learners is students from schools, Housewife's and college students from various discipline like Commerce, Mathematics, Physics, Chemistry, Biology, Electronics, and Engineering etc. It also includes the learners who want to become entrepreneurs like Web Designers, Web design instructor, Website Programmer, e-commerce site developer and web master, Software Developers, BPO's, KPO's etc.,

d) APPROPRIATENESS OF PROGRAMME TO BE CONDUCTED IN DISTANCE LEARNING MODE TO ACQUIRE SPECIFIC SKILLS AND COMPETENCE;

Certificate in web designing Programme through Distance Learning mode is developed in order to give subject-specific skills including i) Principles of Information Technology ii Knowledge about various kinds of web design software's like HTML, CSS and JavaScript.

Certificate Course in Web Designing
Credit Based Curriculum and Evaluation System

(E) INSTRUCTIONAL DESIGN

e.1 Revisions of Regulation and Curriculum Design

1. The University reserves the right to amend or change the regulations, schemes of examinations and syllabi from time to time based on recent market dynamics, industrial developments, research and feedback from stakeholders and learners.
2. Each student should secure 8 credits to complete certificate programme.
3. Each theory and practical course carry 2 credits with 75 marks in the University End Semester Examination (ESE) and 25 marks in the Continuous Internal Assessment (CIA).

Programme code :

Certificate course in Web designing	224

Course of Study and Scheme of Examinations

S.No	Course Code	Name of the Course	CIA Marks Max.	ESE Marks Max.	Total Marks Max.	Credits
1	22411	Fundamentals of Information Technology	25	75	100	2
2	22412	Open source software	25	75	100	2
3	22413	Web Designing	25	75	100	2
4	22414	Web Designing Lab	25	75	100	2
		TOTAL	**100**	**300**	**400**	**8**

CIA : Continuous Internal Assessment ESE : End semester Examination

Course Code Legend:

2	2	4	S	C

224 – Programme code for Certificate Course in C Programming
S   -- Semester Number
C   – Course Number in the Semester

e.2 Detailed Syllabi

The detailed Syllabi of study and shall be as shown in Appendix.

e.3 Duration of the Programme:

The certificate programme shall consist of a period of six months (One Semester). Maximum duration to complete the course is 2 Years.

e.3.1 Medium of Instruction

The medium of instruction is only in **English**.
The course material is also in **English.**

e.4 Faculty and Support Staff Requirements:

The following faculty and support staff are required for this programme.

S.No	Staff Category	Numbers
1	Core Faculty	2
2	Lab Assistant	1
3	Clerical Assistant	1

e.5 Instructional Delivery mechanisms

The instructional delivery mechanisms of the programme includes SLM- Study materials, Lab instruction manual, Personal contact session for both theory and practical courses of the programme, e-version of the course materials in the form of e-book, e-tutorials, Power Point, Video Lecture Links, Video Lectures, Open Educational Resources(OER) and Virtual lab.

e.6 Identification of media

The printed version of SLM – study material shall be given to the learners in addition to MOOC, e-tutorial and virtual lab.

e.7 Student Support Services

The student support services will be facilitated by the Directorate of Distance Education, Alagappa University, Karaikudi and its approved learning centres located in various parts of Tamilnadu.

The pre-admission student support services like counseling about the programme including curriculum design, mode of delivery, fee structure and evaluation methods will be explained by the staff at Directorate of Distance Education or Learning centres.

The post-admission student support services like issuing Identity card, study materials will be provided thru Directorate or Learning centres. The face to face contact sessions of the programme for both theory and practical's will be held at the Directorate or Learning centres.

The student support regarding the conduct of examinations, evaluations, publication of results and certificates are done by Office of the Controller of Examinations, Alagappa University, Karaikudi.

F. PROCEDURE FOR ADMISSION:

f.1 Minimum qualification for admission

Candidates for admission to the certificate programme shall be required to have passed HSc or (10+2/10+3) of any Recognized institution or authority accepted by the Syndicate of the Alagappa University as equivalent thereto shall be eligible.

Certificate Course in Web Designing
Credit Based Curriculum and Evaluation System

f.2 Curriculum transaction

- The face to face contact sessions in class room teaching with the support of SLM, Power Point Presentations, web-based tools, audio and animated videos.
- The practical classes are based on the respective subject study materials containing requirement for the laboratory experiments.
- Face to face contact sessions will be conducted for both theory and practical courses in the following manner.

Course Type	PCP (in Hours)
Theory courses (3 Courses – 6 Hrs/course)	18
Practical course (1 Course – 60 Hrs/course	60
Total	**78**

f.3 Evaluation

There shall be two types of evaluation systems; internal assessment and end semester examination will be conducted by the University according to the following scheme. The maximum marks for the internal assessment for both theory and practical's is 25 marks. The maximum marks for end semester examination is 75 marks for each course. The candidate failing in any course(s) will be permitted to appear for each failed course(s) in the subsequent examination. Candidates who have passed the examination in all prescribed courses as per the above regulations shall be eligible for the award of the programme.

Internal assessment

- Internal assessment of theory courses is through home assignment with workbook, case studies, review questions, quiz, multiple choice questions etc., for 25 marks.
- The internal assessment for the practical courses shall be through home assignment which includes workbook designing algorithm, preparing source code, PL/SQL coding etc., for 25 marks.
- Student should submit assignment for theory and practical courses of every course.

Division of Internal Marks (Assignment)

Theory		Practical	
Assignment	**Marks**	**Assignment**	**Marks**
Class test/Review questions Workbook, case studies, quiz, multiple choice questions	25	Model practical, Web Design Workbook for preparing source code, results	25

End Semester Examination (ESE)

The university end Semester Examinations shall be of three hours duration with maximum of 75 Marks for both theory and practical courses.

Certificate Course in Web Designing
Credit Based Curriculum and Evaluation System

f.3.1 Minimum for a pass:

To pass in each course, a candidate is required to secure 40% marks in the End Semester Examination and 40% marks in the aggregate (marks in End Semester Examination + marks in Internal Assessment).

The student who does not secure required minimum marks for pass in a course(s) shall be required to reappear and pass the same in the subsequent examination.

f.3.2 Question Paper Pattern - Theory

The end semester examination will be conducted in the duration of 3 Hours and maximum of 75 Marks.

All the units Should be covered in each Part

Part – A (10 x 2 Marks: 20 Marks) Answer all questions

Part – B (5 x 5 Marks: 25 Marks) Answer all questions choosing either (a) or (b)

Part – C (3 x 10 Marks: 30 Marks) (Answer any 3 out of 5 questions)

End Semester Examination (ESE) - Practical

Students are required to prepare a separate lab record for each lab course. The practical counsellor should duly sign this lab record after each session.

Students shall prepare practical record note book which includes aim, algorithm, source code, input, expected output and result of the experiment and submit during end semester practical examination.

Division of marks in ESE – Practical (Maximum 75 marks)

The end semester practical examination will be conducted in the duration of 3 Hours and maximum of 75 Marks.

Practical details	Max. Marks
Algorithm / Flowchart	10
Source Code	20
Debugging	10
Execution	10
Results	10
Viva-Voce	5
Record	10
Total	75

f.3.3 Procedure for Completing the Course:

The candidate will qualify for the certificate programme only if he/she passes all the (including arrears) courses with in a period of TWO years from the date of admission.

f.3.4 Results:

Results will be declared at the end of each semester of the University examination and the marks/grade obtained by the candidate will be forwarded to them by the Controller of Examinations, Alagappa University.

f.4 Fees Structure:

Fee Particulars	Rs.
Admission Processing Fees	100
Course Fees	2700
ICT fees	150
Total Fees	**2950**

The above-mentioned fees structure is exclusive of examination fees.

G. REQUIREMENT OF THE LABORATORY SUPPORT AND LIBRARY RESOURCES

g.1 Laboratory Support

A well- equipment Computer Laboratory was established in the Alagappa University, Karaikudi with necessary software's as per the practical's syllabi for conducting face to face contact sessions for practical courses of this programme. Model Practical Questions is available to the learners in the university website.

g.2 Library Resources

The Directorate of Distance Education, Alagappa University provides library facility with number of books and Self Learning materials for Computer Science Programmes. The Central library of Alagappa University provides the collection of volumes of Self Learning Materials, Printed books, Subscriptions to printed periodicals and Non-book materials in print form for the learner's references. All these library resources are meant for learner's reference purpose only.

h)Cost estimate of the programme and the provisions:

Expense details	Amount in (Rs.) Approx.
Programme development (Single time Investment)	20,00,000/-
Programme delivery (per year)	24,00,000/-
Programme maintenance (per year)	5,00,000/-

Certificate Course in Web Designing

Credit Based Curriculum and Evaluation System

(i) Quality assurance mechanism and expected programme outcomes:

i.1 University's Moto:

' Excellence in Action'

i.2 University's Vision and Mission

Vision

Achieving Excellence in all spheres of Education, with particular emphasis on ' PEARL' - Pedagogy, Extension, Administration, Research and Learning.

Mission

Affording a High-Quality Higher Education to the learners so that they are transformed into intellectually competent human resources that will help in the uplift of the nation to Educational, Social, Technological, Environmental and Economic Magnificence (ESTEEM).

i.3 University Objectives

1. Providing for instructions and training in such branches of Learning at the university may determine.
2. Fostering Research for the Advancement and Dissemination of Knowledge and Application.

i.4 Quality Policy

Attaining Benchmark Quality in every domain of 'PEARL' to assure Stakeholder Delight through Professionalism exhibited in terms of strong purpose, sincere efforts, steadfast direction and skillful execution.

i.5 Quality Quote

Quality Unleashes Opportunities Towards Excellence (QUOTE).

i.6. Course benchmarks

The benchmark qualities of the programme may be reviewed based on the performance of students in their end semester examinations and number of enrolments of students. Feedback from the alumni, students, parents, stakeholders and employers will be received to analyze the benchmark qualities for the further improvement of the programme.

$$$$$

Certificate Course in Web Designing
Credit Based Curriculum and Evaluation System

Appendix A
Detailed Syllabi

22411 FUNDAMENTALS OF INFORMATION TECHNOLOGY

Course Objectives
- To understand the revolution in computers and communications
- To know about various application software
- To understand the information systems and software development
-

Course Outcome
At the end of the course, students will be able to;
- To know the latest trends in information technology
- To understand the fundamentals of computers

Unit I :

Information Technology: Introduction – Information systems – Definition of computer and system – Software and Data - IT in business and Industry – IT in the Home and at Play – It in Education and Training – IT in Entertainment and the Arts – IT in Science, Engineering, and Mathematics – Global Positioning System.

Unit II:

Introduction to Computers, History of computers, Types of computers, Characteristics of computers, Basic Anatomy of a computer, Applications of computer – Memory – Memory types.

Unit III:

Software- Kinds of Software - The five types of Applications software - Word processing – Spreadsheets - Database software, Presentation graphics software - Communications software- System Software – Operating system - functions.

Unit IV :

Computer Networks: Introduction – Definition Computer Networks - Types of Networks – Local Area Network – Metropolitan Area Network - Wide Area Network – Personal Area Network - internet – Intranet – firewalls - Network Topology – Bus – Ring – Hybrid – Star.

Unit V:

Basic Internet Concepts: – Analog and Digital Signals - modems and communication Software, ISDN lines, and Cable Modems - Definition of Internet - The World Wide Web - Connecting to the Internet – Browsing the web – Web browser – Uniform Resource Locator (URL) – E-mail communication.

Unit VI :

Internet address - Domain Name System – Locating information on the net – Internet Search Engines – Chatting and conferencing on the Internet Online Chatting –Messaging – Usenet Newsgroup.

References:
1. Dennis P.Curtin, Kim dolwy, KunL AWN, Xrhleen morin, Information Technology, the breaking wave, TMH 2000.
2. Stacey C Sawyer, Brain K Williams, Sarah E Hutchinson Using Information Technology – Brief Version A Practical Introduction to Computer and Communications Third Edition, McGraw Hill Companies 2011
3. James O'Brien – Introduction to Information systems. 16th edition, 2005.

*****

<div align="center">

22412 OPEN SOURCE SOFTWARE

</div>

Course Objectives:

- To understand the need, advantages and applications of open source software in web designing.

Course Outcome

At the end of the course, students will be able to;

- Attained to know and work with open source software like Linux, MySql, PHP etc in designing web pages.
- To be able to design a web page using PHP

Unit I :

Introduction to Open sources – Need of Open Sources – Advantages of Open Sources–Application of Open Sources.

Unit II:

Open source operating systems: LINUX: Introduction– General Overview–Kernel Mode and user mode–Process– Advanced Concepts–Scheduling – Personalities – Cloning – Signals – Development with Linux. .

Unit III:

MySQL: Introduction Setting up account Starting, terminating and writing your own SQL programs Record selection Technology– Working with strings – Date and Time

Unit IV:

MySQL: Sorting Query Results – Generating Summary – Working with metadata –Using sequences – MySQL and Web.

Unit V:

PHP: Introduction – Programming in web environment – variables – constants–data types – operators –Statements -Functions– Arrays – OOP –String Manipulation and regular expression –File handling and data storage.

Unit VI:

PHP and SQL database – PHP and LDAP – PHP Connectivity –Sending and receiving E-mails – Debugging and error handling – Security – Templates.

Text Books:
1. Remy Card, Eric Dumas and Frank Mevel, "The Linux Kernel Book", Wiley Publications, 2003
2. Steve Suchring, "MySQL Bible", John Wiley, 2002

Books for Reference:

1. Rasmus Lerdorf and Levin Tatroe, "Programming PHP", O'Reilly, 2002
2. Steven Holzner, "PHP: The Complete Reference", 2nd Edition, Tata McGraw-Hill Publishing Company Limited, Indian Reprint 2009.
3. Vikram Vaswani, "MYSQL: The Complete Reference", 2nd Edition, Tata McGraw-Hill Publishing Company Limited, Indian Reprint 2009.

<div align="center">

****

</div>

Certificate Course in Web Designing
Credit Based Curriculum and Evaluation System

22413 WEB DESIGNING

Course Objectives

- Students will gain the web design knowledge, skills and project-based creativity is needed for entry into web design and development careers.
- Students to learn to work as freelancers in web design or prepare to become employed at a website design firm.

Course Outcome

At the end of the course, student will be able to:
- Be acquainted with elements, Tags and basic structure of HTML files.
- Develop the concept of basic and advanced text formatting.
- Practice the use of multimedia components in HTML documents.
- Designing of webpage-Document Layout, Working with List, Working with Tables.
- Practice Hyper linking, Designing of webpage-Working with Frames, Forms and Controls.
- Prepare creating style sheet, CSS properties, Background, Text, Font and styling etc.
- Working with List, HTML elements box, Positioning and Block properties in CSS.

Unit I :
Web Design using HTML – Introduction – Basic Tags - Comments – attributes – headings - Paragraphs - Text formatting – Hyperlinks – Table manipulation -Lists - frames -forms -images - videos. Introduction to Dynamic HTML.

Unit II:
Cascading Style Sheets - Introduction – Syntax – selectors – comments – color -font – background - image - link - table – border -margin - CSS types – Inline – Internal – External.

Unit III:
XML: Introduction – benefits of XML – XML syntax - XML declaration – processing -comments – XML schema – XML with CSS.

Unit IV:
Document Type Definition (DTD) – building blocks of XML documents – creating DTD – internal DTD – external DTD - Introduction to Document Object Model.

Unit V:
JavaScript - Introduction – features of java script - syntax – variables – constants - operators – dialog boxes - arrays – control statements – if-else – nested if - switch – for loop – while loop - functions – string handling – JavaScript objects – events – events handling.

Unit VI:
VBscript – Introduction – syntax -variables -constants – operators – arrays - control statements – if-else – nested if – looping : for loop – do-while loop- functions – string handling , date and time functions – events - events handling.

Books for Reference:
1. Deitel, Deitel and Nieto, Internet and World Wide Web – How to program, Pearson Education, 2000.
2. Chris Bates, "Web Programming, building internet applications", 2ndEdition, WILEY, Dreamtech, 2008.

*****

22414 WEB DESIGNING LAB

Course Objectives
- Students will gain the web design knowledge, skills and project-based creativity is needed for entry into web design and development careers.
- Students to learn to work as freelancers in web design or prepare to become employed at a website design firm.

Course Outcome
At the end of the course, student will be able to:
- Be acquainted with elements, Tags and basic structure of HTML files.
- Develop the concept of basic and advanced text formatting.
- Practice the use of multimedia components in HTML documents.
- Designing of webpage-Document Layout, Working with List, Working with Tables.
- Practice Hyper linking, Designing of webpage-Working with Frames, Forms and Controls.
- Prepare creating style sheet, CSS properties, Background, Text, Font and styling etc.
- Working with List, HTML elements box, Positioning and Block properties in CSS.

Exercises based on the following;
- Acquaintance with elements, Tags and basic structure of HTML files.
  - Practicing basic and advanced text formatting.
  - Practicing use of multimedia components (Image, Video & Sound) in HTML.
  - Designing of webpage-Working with List, tables
  - Practicing Hyper linking of webpages.
  - Designing of webpage-Working with frames, forms and Controls.
  - Designing of webpage for real-time applications
- Acquaintance with creating style sheet, CSS properties and styling.
  - Working with Background, Text, list and Font properties.
  - Designing with cascading style sheet-Internal style sheet , external style sheet
  - Designing of webpage for real-time applications using CSS
- Simple exercises based on XML
- Introduce the concepts of JavaScript
  - Working with basic arithmetic operations, arrays and functions
  - Designing forms with validation
  - String manipulation exercises
  - Event handling exercises
- Simple Exercises based on VBscript
  - Working with basic arithmetic operations, arrays and functions
  - Designing forms with validation
  - String manipulation exercises
  - Event handling exercises

Books for Reference:
1. Deitel, Deitel and Nieto, Internet and World Wide Web – How to program, Pearson Education, 2000.
2. Chris Bates, "Web Programming, building internet applications", 2ndEdition, WILEY, Dreamtech, 2008.

Minutes of the Meeting of the Board of Studies in Computer Science by circulation to Board Members, for the Diploma in Computer Applications, Certificate Course in Computer Fundamentals, Certificate Course in Web Designing and Certificate Course in C Programming programmes to be offered through Distance Education mode held at the Directorate of Distance Education, Alagappa University, Karaikudi on 29-06-2020 at 3.00 p.m.

MEMBERS PRESENT:

1.	Dr.V.Palanisamy	:	Chairman
2.	Dr.T.Meyyappan	:	Member
3.	Dr.P.Prabhu	:	Member
4.	Mr.S.Balasubramanian	:	Member
5.	Dr.P.Eswaran	:	Member
6.	Dr.P.Thiyagarajan	:	Member
7.	Dr.R.Indra	:	Member
8.	Dr.A.Veera Ravi	:	Ex-Officio Member

After the deliberation and discussion the board resolved the following:

1. The Board considered the curriculum design and detailed syllabi of Computer Science Programmes prepared as per the norms and the Board scrutinized and necessary modifications are specified.

2. The Board resolved to approve curriculum design detailed syllabi and other regulations for the Diploma in Computer Applications, Certificate Course in Computer Fundamentals, Certificate Course in Web Designing and Certificate Course in C Programming programmes to be offered from 2020-2021 academic year onwards by the Directorate of Distance Education, Alagappa University, Karaikudi.

Dr.V.PALANISAMY   Dr.T.MEYYAPPAN   Dr.P.PRABHU

Mr.S.BALASUBRAMANIAN   Dr.P.ESWARAN   Dr.P.THIYAGARAJAN

Dr.R.INDRA   Dr.A.VEERA RAVI