YOGI VEMANA UNIVERSITY, VEMANAPURAM, KADAPA

ANDHRA PRADESH STATE COUNCIL OF HIGHER EDUCATION
(A Statutory body of the Government of Andhra Pradesh)
Revised UG Syllabus Under CBCS
(Implemented from Academic Year 2020-21)
PROGRAMME: FOUR YEAR B.Sc. (Hons)
Domain Subject**: COMPUTER SCIENCE**

*Skill Enhancement Courses (SECs) for Semester V, from 2022-23 (Syllabus with
Learning Outcomes, References, Co-curricular Activities)*

Structure of SECs for Semester – V
(To choose one pair from the three alternate pairs of SECs)

Univ Code	Course Number 6 & 7	Name of Course	Hours/ Week Theo/Prac	Credits Theo/Prac	Marks IA – 20 Filed Work 05	Sem End
	6A	Web Interface Designing Technologies	3	3	25	75
		Web Interface Designing Technologies Lab	*3*	*2*		*50*
	7A	Web Applications Development using PHP& MYSQL	3	3	25	75
		Web Applications Development using PHP& MYSQL Lab	*3*	*2*		*50*
			OR			
	6B	Internet of Things	3	3	25	75
		Internet of Things Lab	*3*	*2*		*50*
	7B	Application Development using Python	3	3	25	75
		Application Development using Python Lab	*3*	*2*		*50*
			OR			
	6C	Data science	3	3	25	75

		Data science Lab	3	2		50
	7C	Python for Data science	3	3	25	75
		Python for Data science Lab	3	2		50

Note-1: For Semester–V, for the domain subject Computer Science **any one** of the **three** pairs of SECs shall be chosen as courses 6 and 7, i.e., 6A & 7A or 6B & 7B or 6C & 7C. The pair shall not be broken (ABCD allotment is random, not on any priority basis).

Note-2: One of the main objectives of Skill Enhancement Courses (SEC) is to inculcate field related skills of the domain subject in students. The syllabus of SEC will be partially skill oriented. Hence, teachers shall also impart practical training to students on the skills embedded in syllabus citing related real field situations.

SNO	NAME	Designation	SIGNATURE
1	Dr A Srilakshmi	Chairman	Srilakshmi 11-11-2022
2	Dr M Pramod Kumar	Member	
3	D Manoj Prabhakar	Member	11/11/
4	G Chandra Sekhara Reddy	Member	GeSekreddy
5	Head Dept Of MCA	University Nominee	

A.P. State Council of Higher Education
Semester-wise Revised Syllabus under CBCS, 2020-21
Course Code:Domain Subject: **Computer Science** – Semester – V

Max Marks: 100 + 50

Course 6A: Web Interface Designing Technologies
(Skill Enhancement Course (Elective), Credits: 05)

I. Learning Outcomes: Students after successful completion of the course will be able to:

1. Understand and appreciate the web architecture and services.
2. Gain knowledge about various components of a website.
3. Demonstrate skills regarding creation of a static website and an interface to dynamic website.
4. Learn how to install word press and gain the knowledge of installing various plugins to use in their websites.

II. Syllabus: *(Total Hours: 90 including Teaching, Lab, and Field training, Unit tests etc.)*

Unit - I (10 hours)
HTML: Introduction to web designing, difference between web applications and desktop applications, introduction to HTML, HTML structure, elements, attributes, headings, paragraphs, styles, colours, HTML formatting, Quotations, Comments, images, tables, lists, blocks and classes, HTML CSS, HTML frames, file paths, layout, symbols, HTML responsive.

Unit – II (10 hours)
HTML forms: HTML form elements, input types, input attributes, HTML5, HTML graphics, HTML media – video, audio, plug INS, you tube.
HTML API'S: Geo location, Drag/drop, local storage, HTML SSE.
CSS: CSS home, introduction, syntax, colours, back ground, borders, margins, padding, height/width, text, fonts, icons, tables, lists CSS forms, CSS counters, CSS responsive.

Unit – III (10 hours)
Client side Validation: Introduction to JavaScript - What is DHTML, JavaScript, basics, variables, string manipulations, mathematical functions, statements, operators, arrays, functions. Objects in JavaScript - Data and objects in JavaScript, regular expressions, exception handling.

Unit – IV (10 hours)
Word press: Introduction to word press, servers like wamp, bitnami e.tc, installing and configuring word press, understanding admin panel, working with posts and pages, using editor, text formatting with shortcuts, working with media-Adding, editing, deleting media elements, working with widgets, menus.

Unit – V (10 hours)
Working with themes-parent and child themes, using featured images, configuring settings, user and user roles and profiles, adding external links, protecting word press website from hackers.

III. References

1. Chris Bates, Web Programming Building Internet Applications, Second Edition, Wiley (2007)
2. Paul S.WangSanda S. Katila, an Introduction to Web Design plus Programming, Thomson (2007).
3. Head First HTML and CSS, Elisabeth Robson, Eric Freeman, O'Reilly Media Inc.
4. An Introduction to HTML and JavaScript: for Scientists and Engineers, David R. Brooks. Springer, 2007

5. Schaum's Easy Outline HTML, David Mercer, Mcgraw Hill Professional.
6. Word press for Beginners, Dr.Andy Williams.
7. Professional word press, Brad Williams, David damstra, Hanstern.
8. Web resources:
   a. http://www.codecademy.com/tracks/web
   b. http://www.w3schools.com
   c. https://www.w3schools.in/wordpress-tutorial/
   d. http://www.homeandlearn.co.uk
9. Other web sources suggested by the teacher concerned and the college librarian including reading material.

IV. Co-Curricular Activities

a) **Mandatory:** *(Training of students by teacher in field related skills: (lab: 10 + field: 05) :*
1. **For Teacher**: Field related training of students by the teacher in laboratory/field for not less than 15 hours on identifying the case study to build a website, designing the format, structure, menus, submenus etc for a website and finally to build a website.
2. **For Student**: Students shall (individually) search online and visit any of the agencies like hotels, hospitals, super bazaars, organizations, etc. where there is a need for a website and identify any one case study and submit a hand-written Fieldwork/Project work/Project work/Project work/Project work Report not exceeding 10 pages. Example: Choosing a firm or business to develop a website, identifying various business entities to be included in the website, identifying menu bar and content to be placed in their websites.
3. Max marks for Fieldwork/Project work/Project work/Project work/Project work/Project work Report: 05.
4. Suggested Format for Fieldwork/Project work/Project work/Project work/Project work:
Title page, student details, index page, details of place visited, observations, findings and acknowledgements.
5. Unit tests (IE).

b) **Suggested Co-Curricular Activities**
1. Build a website with 10 pages for the case study identified.
2. Training of students by related industrial experts.
3. Assignments
4. Seminars, Group discussions, Quiz, Debates etc. (on related topics).
5. Presentation by students on best websites.

Course 6A: Web Interface Designing Technologies – <u>PRACTICAL SYLLABUS</u>

V. Learning Outcomes:

On successful completion of this practical course, student shall be able to:

1. Create a basic website with the help of HTML and CSS.

2. Acquire the skill of installing word press and various plugins of Word press.

3. Create a static website with the help of Word press.

4. Create an interface for a dynamic website.

5. Apply various themes for their websites using Word press.

VI. Practical (Laboratory) Syllabus: *(30 hrs.)*

HTML and CSS:

1. Create an HTML document with the following formatting options:

   (a) Bold, (b) Italics, (c) Underline, (d) Headings (Using H1 to H6 heading styles), (e) Font (Type, Size and Color), (f) Background (Colored background/Image in background), (g) Paragraph, (h) Line Break, (i) Horizontal Rule, (j) Pre tag

2. Create an HTML document which consists of:

   (a) Ordered List (b) Unordered List (c) Nested List (d) Image

3. Create a Table with four rows and five columns. Place an image in one column.

4. Using "table" tag, align the images as follows:

5. Create a menu form using html.

6. Style the menu buttons using css.

7. Create a form using HTML which has the following types of controls:

   (a) Text Box (b) Option/radio buttons (c) Check boxes (d) Reset and Submit buttons

8. Embed a calendar object in your web page.

9. Create an applet that accepts two numbers and perform all the arithmetic operations on them.

10. Create nested table to store your curriculum.

11. Create a form that accepts the information from the subscriber of a mailing system.

12. Design the page as follows:
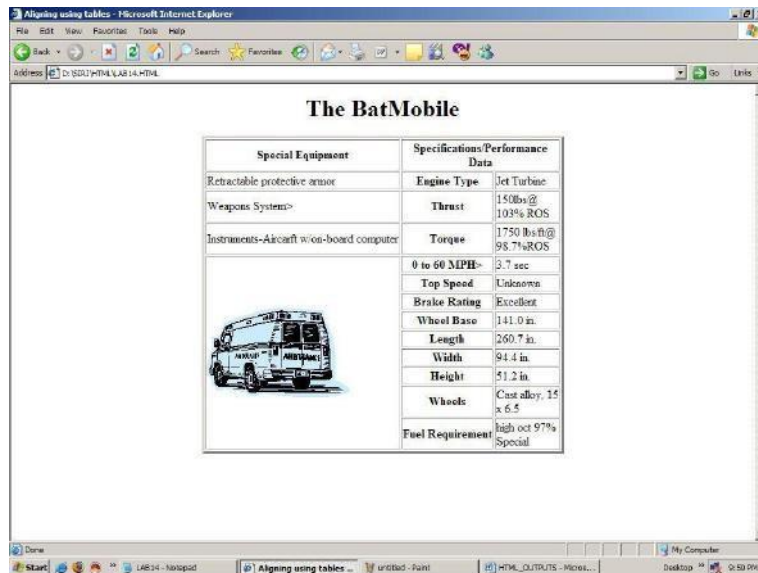
13. Create a help file as follows:

14. Create a webpage containing your bio data (assume the form and fields).

15. Write a html program including style sheets.

16. Write a html program to layers of information in web page.

17. Create a static webpage.

Word press:

18. Installation and configuration of word press.

19. Create a site and add a theme to it.

20 Create a child theme

21. Create five pages on COVID – 19 and link them to the home page. .

22. Create a simple post with featured image.

23. Add an external video link with size 640 X 360.

24. Create a user and assign a role to him.

25. Create a login page to word press using custom links

26. Create a website for your college.

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