E.G.S. PILLAY ENGINEERING COLLEGE

(Autonomous)

Approved by AICTE, New Delhi | Affiliated to Anna University,
Chennai Accredited by NAAC with 'A' Grade | Accredited by NBA

NAGAPATTINAM – 611002

B.TECH. COMPUTER SCIENCE AND BUSINESS SYSTEMS

R-2019

VIII SEMESTER										
Code No.	**Course**	**L**	**T**	**P**	**C**	**Hours/ Week**	**Maximum Marks**			**Category**
							CA	**ES**	**Total**	
1903BS0XX	Professional Elective V	3	0	0	3	3	40	60	100	PE
1904BS851	Project Work	0	0	14	7	14	50	50	100	EEC
Total		**3**	**0**	**14**	**10**	**17**	**90**	**110**	**200**	

		L T P J C
1903BS017	**Modern Web Applications**	**3 0 2 0 4**
Course Objectives:		
1. To comprehend and analyze the basic concepts of web programming and internet protocols.		
2. To describe how the client-server model of Internet programming works.		
3. To demonstrates the uses of scripting languages and their limitations.		
Expected Course Outcome:		
1. Differentiate web protocols and web architecture.		
2. Apply HTML and CSS effectively to create interactive websites.		
3. Implement client-side scripting using JavaScript to design dynamic websites.		
4. Develop XML based web applications.		
5. Design PHP application with Database connectivity.		
Module: 1 Introduction to Internet & World Wide Web		**9 hours**
History of the Internet & World- Wide Web, Web Browsers, Web Servers, Uniform Resource Locator, Tools and Web Programming Languages. Web Standards, Categories of Web Applications, Characteristics of Web Applications, Tiered Architecture		
Module: 2 Hypertext Mark Up Language (HTML) and Cascading Style Sheets (CSS) 9 hours		
Basic HTML page, Text Formatting, Table, Headers, Linking, Images, List, Meta Elements, Cascading Style Sheets: Inline, Internal and External Style Sheet, Bootstrap - CSS Text, CSS forms, CSS Components drop down		
Module: 3 Java Script		**9 hours**
Introduction to Java Scripts, Objects in Java Script, Dynamic HTML with Java Script, Bootstrap - JS Alert, JS Button, JS popover, Document Object Model (DOM) with JavaScript		
Module: 4 Extensible Markup Language (XML)		**9 hours**
Introduction, Structuring Data, Document Type Definition, XML Vocabularies, Extensible Style sheet Language Transforms (XSL)		
Module: 5 Basic PHP Programs ,PHP Database Connectivity and Manipulating Data 9 hours		
Introduction to PHP, Numbers and Strings, Literals and Variables, Operators and Functions, arrays.Connecting to MySQL Server, Selecting Databases, Checking for Errors, Closing the MySQL Server		
Guest lecture by industry experts		Total Lecture hours: 45 hours
Text Book		
1.Paul Deitel, Harvey Deitel, Abbey Deitel, Internet & World Wide Web - How to Program, 2020 6th edition, Pearson Education.		
Reference Books		
1.Fritz Schneider, Thomas Powell, JavaScript – The Complete Reference, 2017, 3rd Edition, McGraw Hill.		
2. Steven Holzener, PHP – The Complete Reference,2017, 1st Edition, Mc-Graw Hill		

1903BS018		HR Management for Industry 4.0	L	T	P	C
			3	0	0	3

PREREQUISITE:	
COURSE OBJECTIVES:	
	1. To equip HR professionals with the knowledge and capabilities needed to navigate the complexities of Industry 4.0.
	2. To thrive in the evolving workplace landscape shaped by technological advancements.

Module I	**Introduction**	**9 Hours**
Understanding the Fourth Industrial Revolution -- Introduction on HR 4.0, Key Trends in HR in Industry 4.0, Roles and purpose of HR in Industry 4.0, Benefits of HR 4.0, People challenges in HR 4.0		
Module II	**Talent Acquisition and Management in the Digital Age**	**9 Hours**
Essential Digital Competencies for HRM in Industry 4.0 - Training and Upskilling Strategies - Digital Recruitment Strategies - Building and Managing a Digital Workforce .		
Module III	**Employee Engagement in Industry 4.0**	**9 Hours**
Designing Positive Work Environments - Technology's Role in Employee Experience - Employee Well-being and Mental Health Support - Implementing HR 4.0 in company - Six Imperatives for the Workforce of the Future.		
Module IV	**Data-Driven HR Analytics and Decision-making**	**9 Hours**
Introduction to HR Analytics - Utilizing Data for Talent Management – Agile HR Practices - Flexible Work Arrangements: Strategies for Implementing Flexible Work Policies .		
Module V	**Security in HRM**	**9 Hours**
Cybersecurity Awareness for HR Professionals - Protecting Employee Data - Compliance with Privacy Regulations.		
	Total:	**45 Hours**

COURSE OUTCOMES:	
	After completion of the course, Students will be able to
CO1	Understand the key principles and technologies associated with Industry 4.0
CO2	Develop proficiency in leveraging digital tools for HR functions.
CO3	Focus on enhancing the overall employee experience through technology-enabled initiatives.
CO4	Integrate HR analytics to make data-driven decisions, measure employee performance and enhance HR processes.
CO5	Understand and navigate the ethical and legal considerations associated with HR practices in the digital era.

References:

1. "Human Resource Management: Gaining a Competitive Advantage" by Raymond A. Noe, John R. Hollenbeck, Barry Gerhart, and Patrick M. Wright.
2. "Human Resource Management in the Fourth Industrial Revolution: New challenges, New Perspectives" by Arup Varma and Pawan S.Budhwar.
3. "The Future of Leadership: Rise of Automation, Robotics and Artificial Intelligence" by Brigette Tasha Hyacinth
4. "Digital HR: A Guide to Technology-Enabled Human Resources" by Deborah Waddill
5. "The Future of Work: Attract New Talent, Build Better Leaders, and Create a Competitive Organization" by Jacob Morgan.