Web Development Foundations

Part Time

Sessi on No#	Session mode	Session Details	Week-Day	Durati on Hrs
1	EL-Async	SDLC & Technical Design - Phases in SDLC, System Requirements Specifications, UML Diagrams Complete MCQ	Before Sync session	2
2	FC -Sync	IU 1: Fundamentals of SDLC & Technical Design Familiarization of software development process and technical design Explain assignment 1	1-1	3
3	AS -Sync	Complete the assignment and submit Assignment 1: Assignment 1 - Application Design: Develop system block diagram and UML diagrams	1-2	3
4	AP-Async	Additional Practice- Complete all the pending works	Before Sync session	7
5	EL-Async	Back-end development - Handling of HTTP requests and responses, connecting with the database - Building responses, managing the request lifecycle Development using MVC pattern - Backend framework overview, developing presentation layer, data layer, web layer & application logic layer Complete MCQ	Before Sync session	2
6	FC- Sync	IU 2: Back-end development principles and techniques Back-end development - Handling of HTTP requests and responses, connecting with the database - Building responses, managing the request lifecycle IU 3: Design patterns Development using MVC pattern - Backend framework overview, developing presentation layer, data layer, web layer & application logic layer Explain assignment 2	2-3	3
7	AS- Sync	Complete the assignment and submit Assignment 2 : Application Development: Create the application components and web pages based on the functionality	2-4	3
8	AP-Async	Additional Practice- Complete all the pending work	Before Sync session	7
9	EL-Async	Application creation with insert, update, and delete records from a database	Before Sync session	2

		Login, exception handling Unit Testing, Integration Testing, User Acceptance Testing Complete MCQ		
10	FC-Sync	IU 4: Development using framework Application creation with insert, update, and delete records from a database IU 5: Testing & Documentation Login, exception handling Unit Testing, Integration Testing, User Acceptance Testing Explain assignment 3 & 4	3-5	3
11	AS -Sync	Complete the assignment and submit Assignment 3: Application Development: Implement business logics and test. Assignment 4: Test Report Review and Bug Fixing	3-6	3
12	AP-Async	Additional Practice- Complete all the pending work	Before Sync session	6
13	PM-Sync	Project Mentoring – Explain project and its tasks 1. Define the system requirements specification to meet the business objectives 2. Design the necessary modules to fulfil the specified system requirements. 3. Assess the tools and frameworks needed for the development process.	4-7	3
14	PI-Async	Complete project tasks 1 & 2	Before Sync session	3
15	PI-Async	Complete project task 3	Before Sync session	3
16	PM-Sync	Project Mentoring – Explain project and its tasks 1. Implement the software based on the established design. 2. Evaluate the implemented solution to ensure its effectiveness and efficiency.	4-8	3
17	PI-Async	Complete Project task 4 & 5 and submit Project report	Before Assessment	3
18	SA-Sync	Summative Assessment (Each learner)	5-9	30 min

Full Time

Sessi on No#	Session mode	Session Details	Week-Day	Durati on Hrs
1	EL-Async	SDLC & Technical Design - Phases in SDLC, System Requirements Specifications, UML Diagrams Complete MCQ	1-1	2
2	FC -Sync	IU 1: Fundamentals of SDLC & Technical Design Familiarization of software development process and technical design Explain assignment 1	1-2	3
3	AS -Sync	Complete the assignment and submit Assignment 1: Assignment 1 - Application Design: Develop system block diagram and UML diagrams	1-3	3
4	AP-Async	Additional Practice- Complete all the pending works	1-4	7
5	EL-Async	Back-end development - Handling of HTTP requests and responses, connecting with the database - Building responses, managing the request lifecycle Development using MVC pattern - Backend framework overview, developing presentation layer, data layer, web layer & application logic layer Complete MCQ	1-5	2
6	FC- Sync	IU 2: Back-end development principles and techniques Back-end development - Handling of HTTP requests and responses, connecting with the database - Building responses, managing the request lifecycle IU 3: Design patterns Development using MVC pattern - Backend framework overview, developing presentation layer, data layer, web layer & application logic layer Explain assignment 2	2-6	3
7	AS- Sync	Complete the assignment and submit Assignment 2 : Application Development: Create the application components and web pages based on the functionality	2-7	3
8	AP-Async	Additional Practice- Complete all the pending work	2-8	7
9	EL-Async	Application creation with insert, update, and delete records from a database	2-9	2

		Login, exception handling Unit Testing, Integration Testing, User Acceptance Testing Complete MCQ		
10	FC-Sync	IU 4: Development using framework Application creation with insert, update, and delete records from a database IU 5: Testing & Documentation Login, exception handling Unit Testing, Integration Testing, User Acceptance Testing Explain assignment 3 & 4	2-10	3
11	AS -Sync	Complete the assignment and submit Assignment 3: Application Development: Implement business logics and test. Assignment 4: Test Report Review and Bug Fixing	3-11	3
12	AP-Async	Additional Practice- Complete all the pending work	3-12	6
13	PM-Sync	Project Mentoring – Explain project and its tasks 4. Define the system requirements specification to meet the business objectives 5. Design the necessary modules to fulfil the specified system requirements. 6. Assess the tools and frameworks needed for the development process. •	3-13	3
14	PI-Async	Complete project tasks 1 & 2	3-14	4
15	PI-Async	Complete project task 3	3-15	4
16	PM-Sync	Project Mentoring – Explain project and its tasks 3. Implement the software based on the established design. 4. Evaluate the implemented solution to ensure its effectiveness and efficiency.	4-16	3
17	PI-Async	Complete Project task 4 & 5 and submit Project report	4-17	2
18	SA-Sync	Summative Assessment (Each learner)	4-18	30 min

EL-E-Learning
FC-Flipped Class
AS-Assignment
PM-Project Mentoring
PI-Project Implementation
AP-Additional Practice
SA-Summative Assessment
Sync- Synchronous Sesson
Async- Asynchronous Session