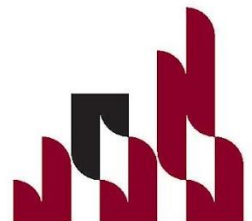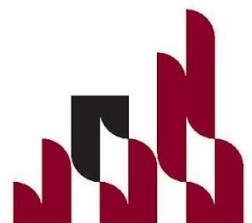## 1. React.JS

Course outline	Web development
	- Introducing HTML5, VSCode - HTML Basic, Elements, Attributes - Headings, Paragraphs, Styles - Formatting, Comments - CSS Positions - CSS Flex, Grid layout - Practice Portfolio from PSD /tablet, mobile/ - Practice Mini shop from Figma /tablet, mobile/ - Practice Travel Agency /tablet, mobile/ **JavaScript** - JavaScript Fundamentals - Code quality - Objects: the basics - Data types - Advanced working with functions
	Advanced JavaScript - Object properties configuration - Prototypes, inheritance - OOP Concepts, Classes, ... - Error handling - Promises, async/await - Generators, advanced iteration - Modules - Practice: Game 1 - Practice: Game 2
	React.JS - Introduction to frameworks, React.JS.

	- Creating a new React app - React.JS base concepts - Rendering Elements - Components and Props - Data handling - Conditional Rendering - React/Redux - Next.JS - Practice: Shop 1 - Practice: Shop 2 /catogories, products, .../ - Practice: Booking Big Project 3
Duration of the course	**192 hours**

2. Python

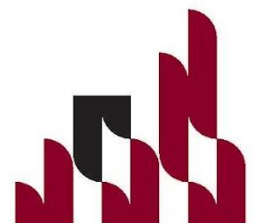|	
Course outline	**Python** - Basic concepts in Python - Built-in Functions in Python - Variables - Data types and structures - Strings - Integers and other numbers in Python - Boolean type - Magic Methods - Lists and Ranges - Looooooooooops - Dictionaries - Tuples and Sets - Functions, lambda - Del statement / Joining strings - Error processing

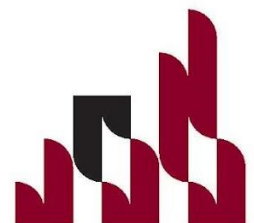|	
	Advanced Python - Python OOPs Concepts - Objects and classes - Magic methods in classes - Modules - JSON - Dates and times - Files, zip, csv - SQLite database - Virtual environments, PIP and Pipenv
Duration of the course	**110 hours**

3. QA Automation

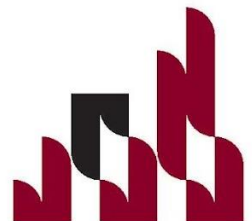|	
Course outline	**Python** - Introduction to Python - Python and VSCode - Variables - Data Types - Basic Operators in Python - Conditional Code - Looooooooooops - Lists and Tuples - Set and Dictionary - Arrays - Functions, Lambda - Python PIP - Files and Modules - Tkinter Project Game /tic tac toe/ - OOP (Object Oriented Programming) - Classes and Objects

	Git and GitHub - Get Started - Pull from GitHub - Push to GitHub - GitHub Branch - Pull Branch from GitHub - Push Branch to GitHub - GitHub Flow - GitHub Pages
	Selenium - Introduction to Selenium/Python - WebDriver and Functions - Introduction to HTML and CSS - Web elements and locators /id, name, class, tag, xpath/ - Selenium scripts - Parameterization and data-driven testing with Selenium and Python - Pytest framework - Headless browser testing, browser profiling, browser extensions - Selenium Grid and parallel testing - Debugging and troubleshooting Selenium scripts - Building an Automation project
	API - Introduction to Web Services - REST API - Microservices VS Monolithic architecture - HTTP request methods: GET, POST, PUT, PATCH, DELETE - Requests library - HTTP status codes and response headers - Parsing and extracting data from HTTP responses - JSON and XML data formats in Requests - Handling binary data with Requests: images, audio, video - Building an Automation project

Duration of the course	**106 hours**

4. Node.JS

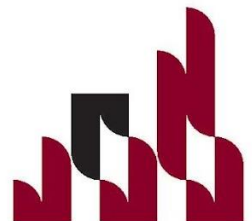| Course outline	
Course outline	**JavaScript** - JavaScript Fundamentals - Code quality - Objects: the basics - Data types - Advanced working with functions
	Advanced JavaScript - Object properties configuration - Prototypes, inheritance - OOP Concepts, Classes, ... - Error handling - Promises, async/await - Generators, advanced iteration - Modules
	Node.JS - Introduction to Node.js - Setting up Node.js - Node.js Modules - Node Package Manager (NPM) - Creating a Basic Server - Routing and Handling Requests - File System - **Database**

	- PostgreSQL - MongoDB - Express.JS - Callbacks - Promises and async/await - Event Emitters - Working with Databases - API Integration - Practice: Project 1 - Practice: Project 2
Duration of the course	**192 hours**

5. SolidWorks

Course outline	**SolidWorks** - Introduction - Quick Start - Basic Part Modeling - Sketch Tools - Modifying Sketches - Reference Geometry - Adding fillets to a part - Advanced part Modeling - Hole Wizard - Blocks - Building Assemblies - Advanced Mates

	- In-Context Modeling - Using Design tables - Part Drawings - Dimensioning - Adding General Annotations - Assembly Drawing
	Drawing - Projection - Coordinate System, Point,Line - Angle relationships and parallel lines - Simple geometric figures - Regular polygons - Plane - Prism, Prism section, Unfolded Rectangular prism, Unfolded Triangular prism, Unfolded truncated Prism - Cylinder, Cylinder section , Unfolded Cylinder,Unfolded truncated Cylinder - Pyramid, Pyramid section, Unfolded Pyramid,Unfolded truncated Pyramid - Cone, Cone section, Unfolded Cone, Unfolded truncated Cone - Sphere, Sphere section - Intersecting objects,Intersections - Three dimensional figures unfolded - Unfolded Cube, Unfolded truncated Cube - Tangency problems - Linear Perspective, Types of Linear Perspective - Perspective Drawing - Drawing requirements
Duration of the course	**104 hours**