



LONDON SCHOOL
OF EMERGING TECHNOLOGY

PYTHON PROGRAMMING

COURSE ID

PPD

DEPARTMENT

SOFTWARE
ENGINEERING

CAMPUS

1 CORNHILL

LEVEL

CERTIFICATE

METHOD

LECTURE + PROJECT

DURATION

3 MONTHS

Do you want to start your career in Data Science, AI, Machine Learning, or Web Development? Python is considered the most popular and suitable programming language for all of these fields. LSET's Python Programming Course teaches Python with practical hands-on exercises and real-world projects. Start learning today to become a capable Python professional!

**APPLY
NOW!**

to become a professional Python developer



Add on



Add on

In recent years, Python became very popular and known to be the most widely used programming languages. It is also one of the oldest programming languages which has been around for more than 28 years. Python is easy to learn and used in many different areas including but not limited to AI, Machine Learning, Data Science, Web Development, etc. Python is an interpreted high-level general-purpose programming language. It supports multiple programming paradigms, including structured (particularly, procedural), object-oriented and functional programming. It ensures

better and more concise codes with faster readability, something that no other programming language can offer.

This course aims to introduce you to Python. It starts with introduction of algorithm, concept of time and space complexity, Big O notation, etc. You will learn and develop pseudocodes and flowcharts to find solutions to problems. You will then move on to learn to write your first Python program. After writing your first program, you will get introduced to the basic python syntax, variables, data types, and Strings. You will learn this by writing relevant programs and going through code snippets. After this, you will get introduced to collection types like list, tuple, set, and dictionary. You will understand their real-world use cases by going through various examples and a hand-on assignment. You will then learn about conditional statement and understand file handling.

This is the most straight-forward course for the Python programming language. Whether you have not programmed ever, already have information about basic syntax, or willing to learn about Python, this course is for you!



COMPLEMENTARY WORKSHOPS



GIT MANAGEMENT



AGILE PROJECT
MANAGEMENT



TEAM BUILDING



PERSONALITY
DEVELOPMENT



INTERVIEW
PREPARATION

COURSE INFORMATION



SEPTEMBER
END: DECEMBER



JANUARY
END: APRIL



MAY
END: AUGUST

ENTRY CRITERIA

- ✔ No prior programming knowledge
- ✔ Basic proficiency with computers
- ✔ Have access to personal laptop
- ✔ Ability to complete assignments on time
- ✔ Ability to follow instructions in English
- ✔ Ability to work in Group

COURSE HIGHLIGHTS

- ✔ Hands-on Sessions
- ✔ Project-based Learning
- ✔ Live or Offline Capstone Project
- ✔ Real world development experience
- ✔ Industry Mentors
- ✔ Interactive Teaching Methodologies

EVALUATION CRITERIA

- ✔ 18 Coding exercises
- ✔ 5 Assignments
- ✔ 5 Quizzes
- ✔ Capstone Project
- ✔ Group activities
- ✔ Presentations

LEARNING OBJECTIVES

- ✔ Get hands-on experience to write programs in Python
- ✔ Understand the fundamental programming constructs in Python
- ✔ Learn to use conditional statements and loops in programs
- ✔ Learn the use of collection data types like list, tuple, set, and dictionary
- ✔ Learn to do String manipulation by using built-in functions
- ✔ Learn to write functions and pass arguments
- ✔ Learn to write Object-Oriented Programs
- ✔ Learn to use exception handling in programs
- ✔ Learn to use file handling feature in Python



3 MONTHS / 70+ HOURS



WEEKDAYS BATCH

5:30 pm - 7:30 pm
(Wed, Thu, Fri)



WEEKENDS BATCH

9:00 am to 12:00 am
(Sat, Sun)



INTERVIEW PREPARATION

Wednesday
(4 Workshops)



HANDS-ON WORKSHOPS

Thursday (2 Workshops)



PERSONALITY DEVELOPMENT

Friday (1 Workshop)



HANDS-ON WORKSHOPS



INTERVIEW PREPARATION



CV PREPARATION



PERSONALITY DEVELOPMENT

Join the LSET Python Certificate course to prepare yourself to learn Data Science, AI, Machine Learning, or Web Development. LSET follows project-based, hand-on approach to develop real-world applications using latest industry standards.



COURSE CONTENT

Browse the LSET interactive and practical curriculum

INTRODUCTION

- ▶ Course Introduction
- ▶ How to make the best of this course
- ▶ GIT Introduction and Setup
- ▶ Course Induction
- ▶ What is Python
- ▶ History of Python
- ▶ Benefits of Learning Python
- ▶ Pseudocode
- ▶ Design an Algorithm
- ▶ Flowchart
- ▶ Setting Up Python

PYTHON SYNTAX

- ▶ Indentation
- ▶ Variables
- ▶ Comments

PYTHON VARIABLES

- ▶ Variable Names
- ▶ Assign Multiple Values
- ▶ Output Variables
- ▶ Global Variables



UNDERSTANDING OF DATA TYPES

- ▶ Identifiers and Keywords
- ▶ Integral Types
- ▶ Floating-Point Types
- ▶ Strings
- ▶ Numbers
- ▶ Casting

LEARNING ABOUT STRINGS

- ▶ Strings
- ▶ Slicing Strings
- ▶ Modify Strings
- ▶ String Concatenation
- ▶ Format Strings
- ▶ Escape Characters
- ▶ String Methods

INTRODUCTION TO VALUES

- ▶ Booleans
- ▶ Operators

UNDERSTANDING OF LISTS

- ▶ Lists
- ▶ Access List Items
- ▶ Change List Items
- ▶ Add List Items
- ▶ Remove List Items
- ▶ Loop Lists



- ▶ Loop Dictionaries
- ▶ Copy Dictionaries
- ▶ Nested Dictionaries
- ▶ Dictionary Methods

LEARNING ABOUT CONDITIONS STATEMENTS

- ▶ If ... Else
- ▶ While Loops
- ▶ For Loops
- ▶ Functions
- ▶ Lambda
- ▶ Arrays
- ▶ Classes and Objects
- ▶ Inheritance
- ▶ Iterators
- ▶ Scope
- ▶ Modules
- ▶ Datetime
- ▶ Math
- ▶ JSON
- ▶ RegEx
- ▶ PIP
- ▶ Try Except
- ▶ User Input
- ▶ String Formatting

INTRODUCTION TO FILE HANDLING

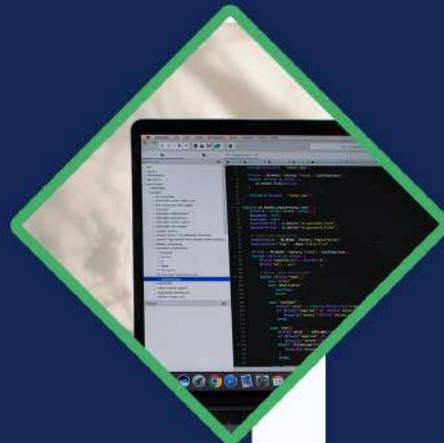
- ▶ File Handling
- ▶ Read Files
- ▶ Write/Create Files
- ▶ Delete File



DATABASE FUNDAMENTALS

- ▶ Introduction to Database
- ▶ Introduction to SQL
- ▶ Create Database and Table Commands
- ▶ DDL and DML
- ▶ Aggregation Functions
- ▶ JOINS
- ▶ Conditional Expressions and Procedures
- ▶ Database Connection from Program

*Modules of our curriculum are subject to change. We update our curriculum based on the new releases of the libraries, frameworks, Software, etc. Students will be informed about the final curriculum in the course induction class.



COURSE SCHEDULE

We offer weekdays and weekend batch choices so you can up-skill yourself while keeping your fulltime job. Both batches follow the same curriculum and learning style. However, weekend batches take a little faster approach.

WEEKDAYS		1st Month				
DAY	MON	TUE	WED	THU	FRI	
Week 1	Student Services Welcome Call		<ul style="list-style-type: none"> Student Introduction Course Introduction How to make the best of this course GIT Introduction and Setup 	<ul style="list-style-type: none"> What is Python History of Python Benefits of Learning Python Setting Up Python 	<ul style="list-style-type: none"> Pseudocode Design an Algorithm Flowchart 	
Week 2			<ul style="list-style-type: none"> Indentation Variables 	<ul style="list-style-type: none"> Comments Variable Names 	<ul style="list-style-type: none"> Assign Multiple Values Output Variables 	
Week 3	Student Feedback		<ul style="list-style-type: none"> Global Variables Identifiers and Keywords 	<ul style="list-style-type: none"> Integral Types Floating-Point Types 	<ul style="list-style-type: none"> Strings Numbers 	
Week 4	Personality Development		<ul style="list-style-type: none"> Casting Strings Slicing Strings 	<ul style="list-style-type: none"> Modify Strings String Concatenation Format Strings 	<ul style="list-style-type: none"> Escape Characters String Methods Booleans 	

2nd Month		MON	TUE	WED	THU	FRI
Week 1				<ul style="list-style-type: none"> Operators Lists 	<ul style="list-style-type: none"> Access List Items Change List Items 	<ul style="list-style-type: none"> Add List Items Remove List Items
Week 2	Interview Preparation			<ul style="list-style-type: none"> Loop Lists List Comprehension Sort Lists 	<ul style="list-style-type: none"> Copy Lists Join Lists List Methods 	<ul style="list-style-type: none"> Tuples Access Tuple Items Update Tuples
Week 3	Student Feedback Project Introduction Self Study	Project Introduction Self Study		<ul style="list-style-type: none"> Unpack Tuples Loop Tuples 	<ul style="list-style-type: none"> Join Tuples Tuple Methods 	<ul style="list-style-type: none"> Sets Access Set Items
Week 4	Interview Preparation Project Introduction Self Study	Hands-on Workshops Project Build-up and Environment Setup		<ul style="list-style-type: none"> Add Set Items Remove Set Items Loop Sets 	<ul style="list-style-type: none"> Join Sets Set Methods Dictionaries 	<ul style="list-style-type: none"> Access Dictionary Items Change Dictionary Items Add Dictionary Items

3rd Month

DAY	MON	TUE	WED	THU	FRI
Week 1	Interview Preparation		<ul style="list-style-type: none"> Remove Dictionary Items Loop Dictionaries Copy Dictionaries 	<ul style="list-style-type: none"> Nested Dictionaries Dictionary Methods If ... Else 	<ul style="list-style-type: none"> While Loops For Loops Functions Lambda
	User Stories Execution and Development	User Stories Execution and Development	User Stories Execution and Development	User Stories Execution and Development	Assignment
Week 2	Student Feedback	Hands-on Workshops	<ul style="list-style-type: none"> Arrays Classes and Objects Inheritance Iterators 	<ul style="list-style-type: none"> Scope Modules Datetime Math 	<ul style="list-style-type: none"> JSON RegEx PIP Try Except
	User Stories Execution and Development	User Stories Execution and Development	Quiz	User Stories Execution and Development	User Stories Execution and Development
Week 3	Interview Preparation		<ul style="list-style-type: none"> User Input String Formatting File Handling Read Files 	<ul style="list-style-type: none"> Introduction to Database Introduction to SQL Create Database and Table Commands DDL and DML 	<ul style="list-style-type: none"> Aggregation Functions JOINS Conditional Expressions and Procedures Database Connection from Program
	User Stories Execution and Development	User Stories Execution and Development	Testing, Deployment and Completion	Testing, Deployment and Completion	Assignment
Week 4			<ul style="list-style-type: none"> Write/Create Files Delete File 		Testing, Deployment and Completion
	Testing, Deployment and Completion	Testing, Deployment and Completion	Capstone Project Discussion	Capstone Project Presentation	Testing, Deployment and Completion
					Course Completion Session
					Alumni Welcome Session
					Awards Ceremony

WEEKEND

1st Month

DAY	MON	TUE	WED	THU	FRI	SAT	SUN
Week 1						<ul style="list-style-type: none"> Course Introduction How to make the best of this course Course Induction Student Introduction 	<ul style="list-style-type: none"> GIT Introduction and Setup What is Python History of Python Benefits of Learning Python
	Student Services Welcome Call						
Week 2						<ul style="list-style-type: none"> Pseudocode Design an Algorithm Flowchart Setting Up Python 	<ul style="list-style-type: none"> Indentation Variables Comments Variable Names
						Quiz	
Week 3						<ul style="list-style-type: none"> Assign Multiple Values Output Variables Global Variables 	<ul style="list-style-type: none"> Identifiers and Keywords Integral Types Floating-Point Types
	Student Feedback						Assignment
Week 4						<ul style="list-style-type: none"> Strings Numbers Casting 	<ul style="list-style-type: none"> Strings Slicing Strings Modify Strings
	Personality Development					Quiz	

2nd Month

DAY	MON	TUE	WED	THU	FRI	SAT	SUN
Week 1						<ul style="list-style-type: none"> String Concatenation Format Strings Escape Characters String Methods Booleans 	<ul style="list-style-type: none"> Operators Lists Access List Items Change List Items
Week 2	Interview Preparation					<ul style="list-style-type: none"> Add List Items Remove List Items Loop Lists List Comprehension 	Assignment
	Student Feedback						<ul style="list-style-type: none"> Sort Lists Copy Lists Join Lists List Methods
Week 3						<ul style="list-style-type: none"> Tuples Access Tuple Items Update Tuples Unpack Tuples 	<ul style="list-style-type: none"> Loop Tuples Join Tuples Tuple Methods Sets
	Student Feedback		Project Introduction Self Study	Project Introduction Self Study	Project Introduction Self Study		Project Introduction Self Study
Week 4						<ul style="list-style-type: none"> How to estimate when planning? The planning fallacy, optimism bias, illusion of control How much to buffer? Identifying dependencies Identifying the critical path 	Project Introduction Self Study
	Interview Preparation	Hands-on Workshops	Project Introduction Self Study	Project Build-up and Environment Setup	Project Build-up and Environment Setup		Quiz
						Product Backlog and Sprint Planning	Product Backlog and Sprint Planning

3rd Month

DAY	MON	TUE	WED	THU	FRI	SAT	SUN
Week 1						<ul style="list-style-type: none"> Loop Dictionaries Copy Dictionaries Nested Dictionaries Dictionary Methods If ... Else 	<ul style="list-style-type: none"> While Loops For Loops Functions Lambda Arrays
	Interview Preparation		User Stories Execution and Development	User Stories Execution and Development	User Stories Execution and Development		User Stories Execution and Development
Week 2						<ul style="list-style-type: none"> Classes and Objects Inheritance Iterators Scope Modules 	User Stories Execution and Development
	Student Feedback		User Stories Execution and Development	User Stories Execution and Development	User Stories Execution and Development		Quiz
Week 3						<ul style="list-style-type: none"> User Input String Formatting File Handling Read Files Write/Create Files Delete File 	User Stories Execution and Development
	Interview Preparation		User Stories Execution and Development	User Stories Execution and Development	Testing, Deployment and Completion		User Stories Execution and Development
Week 4						Testing, Deployment and Completion	Assignment
			Testing, Deployment and Completion	Testing, Deployment and Completion	Testing, Deployment and Completion		Testing, Deployment and Completion
						Capstone Project Presentation	Awards Ceremony

*Course Schedule is subject to change. Students will be informed about the final schedule in the course induction class.

ASSESSMENT CRITERIA

Students will need to clear all the assessments, quizzes, and project work in order to earn the certificate. At a minimum, students are required to satisfy the pass criteria of the course. Students who score 75% or more will be awarded Merit Grade, while students with 85% or more will be awarded Distinction Grade.

Following are the detailed criteria for each level

Pass Grade Criteria

Score minimum 50% aggregate and demonstrate the following;

- Proficiency in the technical skills and techniques
- Must have a minimum attendance of 90% in the classes unless proper medical proof is provided
- Submit all the projects and assignments before the last submission date
- Collaborate with peers in group projects



Merit Grade Criteria

Score minimum 75% aggregate and demonstrate the following;

- Excellent technical skills and techniques
- Discover and apply strategies to find the perfect solutions
- Select/design and apply appropriate methods/techniques
- Present and communicate appropriate findings



Distinction Grade Criteria

Score minimum 85% aggregate and demonstrate the following;

- Mastery of technical skills and techniques
- Use critical thinking for self-evaluation and justify valid conclusions
- Take the responsibility the manage and organise activities and teams
- Showcase convergent/lateral/creative thinking.



ASSESSMENT METHODS

LSET follows strict uniform standards in assessing students' performance during the certificate course. This ensures that the LSET certificate holders demonstrate high ethics and deep technical knowledge. Internal and external examiners will be assessing the students, while the platform will automatically evaluate the quizzes. Instructors are the internal examiners who only evaluate students' soft skills. At the same time, the external examiners are responsible for evaluating students' assessments and project work.

Internal Evaluation

Instructors only evaluate students on the following, which contribute to 20% of the total score. The total points that can be earned are 100.

- **Punctuality [10 points]:** Students are expected to show punctuality with their attendance, presence, and project/assignment submission time.
- **Dedication [10 points]:** LSET expects the students to give attention and show dedication throughout the curriculum.
- **Time Management [10 points]:** Students should show good time management by completing and submitting their assignments on time. Learning time management is very important for the students to prepare for the real work environment.
- **Attendance [10 points]:** Minimum 90% attendance is required unless a proper reason with evidence is provided. Attendance in LSET classes is important to ensure that the student has thoroughly learned the technical and non-technical concepts taught in the curriculum.
- **Working with Others (Teamwork) [10 points]:** LSET teaches concepts in a collaborative environment where we expect each student to show teamwork and collaboration skills.

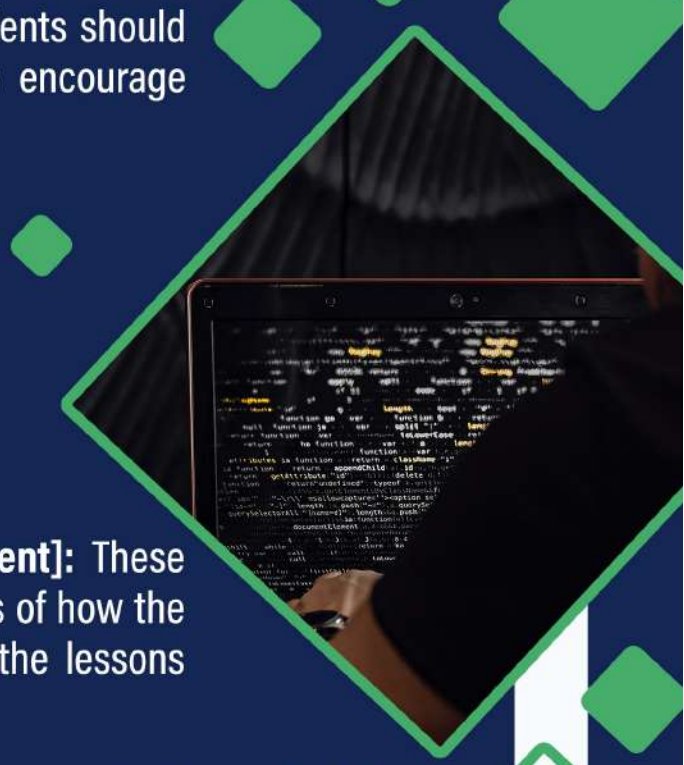
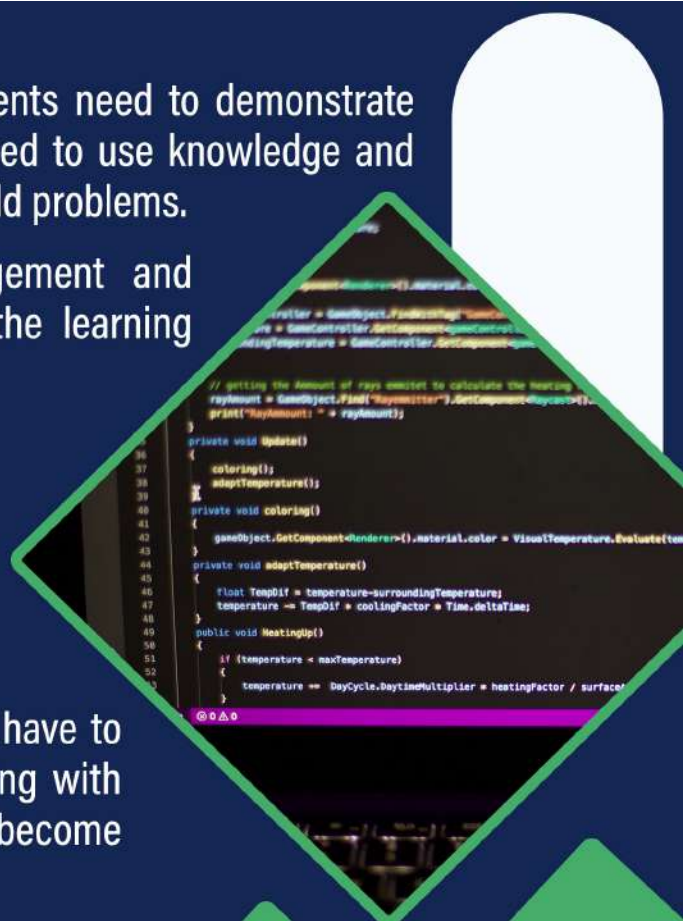


- Problem-Solving Skills [10 points]:** Students need to demonstrate proper problem solving skills. Students need to use knowledge and skills gained in the course to solve real-world problems.
- Class Participation [10 points]:** Engagement and participation are crucial to ensure that the learning experience is interactive.
- Communication Skills [10 points]:** Students should display formal communication skills to communicate with their teammates. This prepares them for their future workplace.
- Presentation Skills [10 points]:** Students have to show their presentation skills while working with their group projects and assignments to become more presentable.
- Ability to ask Questions [10 points]:** Students should ask relevant questions in the classes to encourage healthy discussion on technical topics.

External Evaluation

External examiners evaluate students on the following, which contribute to 70% of the total score. The total points that can be earned are 250.

- 5 Assessments [10 points per assessment]:** These assessments are done entirely on the basis of how the student has performed in understanding the lessons and concepts taught by the instructor.
- 1 Capstone Project [200 points]:** The capstone project is conducted at the end of the certificate course to practice all the practical concepts. Students must satisfy the required criteria mentioned in the project requirement document in order to earn the full points.



Auto Evaluation

Auto evaluation will be conducted via the platform, which contributes to 10% of the total score. The total points that can be earned are 50

- 5 Quizzes [10 points per quiz]: Quizzes in a class ensures maximum participation and ensure that the students have learned the taught concepts with attention. Students will be presented with multiple choice questions.

Having Doubts?

Contact LSET Counsellor

We love to answer questions, empower students, and motivate professionals. Feel free to fill the form and clear up your doubts related to our Python Course.

Best Career Paths

Python Developer

It is the most common job after learning Python. You have to develop websites, optimise data algorithms, solve data analytics problems, implement security and data protection, etc.

Product Manager

Data plays a crucial role in project management. Python is a great language for handling huge sets of data with ease. Therefore, companies are looking for product managers who have knowledge of Python.

Data Analyst

There are powerful Python libraries that make it easy to handle large sets of data. It is often considered the best language for machine learning and AI. Data analysts with the knowledge of Python are high in demand.

Educator

There's no shortage of new learners who want to learn Python. You can become a computer science instructor to teach the language. A teaching role could give you a decent salary package.



Financial Advisor

The best financial institutions want their professionals to learn Python to assist their financial planning with the effective use of data. Thus, finance students are also learning Python to excel in their career.

Machine learning engineer

A machine learning professional has to develop and train machines, programs, and other computers to make predictions based on Python. It is considered a great language for automation and algorithms.



Top Companies Hiring Front End Developers



The Course Provides Shared Expertise by

 LSET TRAINERS  INDUSTRY EXPERTS  TOP EMPLOYERS

Skills You will Gain

- ⇒ Flowchart
- ⇒ Learning about Strings
- ⇒ Operators
- ⇒ Lists
- ⇒ Tuples
- ⇒ Loop
- ⇒ Sets
- ⇒ Dictionaries
- ⇒ File Handling
- ⇒ Write/Create Files
- ⇒ Datetime
- ⇒ Nested Dictionaries
- ⇒ Lambda
- ⇒ Arrays
- ⇒ Classes and Objects
- ⇒ Inheritance
- ⇒ Functions
- ⇒ Iterators
- ⇒ Scope
- ⇒ Modules
- ⇒ JSON
- ⇒ Try Except
- ⇒ String Formatting
- ⇒ PIP

Complete Learning Experience

This course focuses on providing a complete hands-on guided learning experience to help you learn the fundamentals in a practical manner.

- ⇒ We constantly update the curriculum to include the latest releases and features.
- ⇒ We focus on teaching the industry best practices and standards.
- ⇒ We let you explore the topics through guided hands-on sessions.
- ⇒ We provide industry experienced mentor support to every student.
- ⇒ We give you an opportunity to work on the real world examples.
- ⇒ Work with hands-on projects and assignments
- ⇒ We help you to build a technical portfolio which you can present to your prospective employers.

Reasons to Choose LSET

- ⇒ Interactive live sessions by the industry experts.
- ⇒ Practical classes with project-based learning with hands-on activities.
- ⇒ International learning platform to promote collaboration and teamwork.
- ⇒ Most up-to-date course curriculum based on current industry demand.
- ⇒ Gain access to various e-learning resources.
- ⇒ One-to-one attention to ensure maximum participation in the classes.
- ⇒ Lifetime career guidance to get the students employed in good companies.
- ⇒ Free lifetime membership to the LSET Alumni Club

What Will Be Your Responsibilities?

- ⇒ Work creatively in a problem-solving environment.
- ⇒ Ask questions and participate in the class discussions.
- ⇒ Work on assignments and quizzes on timely manner.
- ⇒ Read additional resources on the course topics and ask questions in the class.
- ⇒ Actively participate in the team projects and presentations.
- ⇒ Work with the career development department to prepare for interviews
- ⇒ Respond to the instructors, student service officers, career development officers, etc. in a timely manner.
- ⇒ And most importantly, have fun while learning at LSET



How Does Project-Based Learning Work?

LSET project-based learning model gives students an opportunity to work on the real-world applications and apply their knowledge and skills gained in the course to build high performing industry grade applications. As part of this course, students learn agile project management concepts, tools, and techniques to work on the assigned project in collaborative manner. Project work is done individually by each student but they are encouraged to enhance their solution by collaborating with the teammates.

Following are the steps involved in the LSET's project-based learning;

Step 1: Project Idea Discussion

In this step, students get introduced to the problem and develop a strategy to build the solution.



Step 2: Build Product Backlog

This step requires students to enhance the existing starter product backlog available in the project. This helps students to think about the real-life business requirements and formulate them in proper user stories.

Step 3: Design Releases and Sprints

In this step, students define software releases and plan sprints in each release. Students need to go through sprint planning individually and learn about story points and velocity.

Step 4: Unit and Integration Tests

In this step, students learn to write unit tests to make sure each and every part of the application works fine.



Step 5: Use CI/CD to Deploy

In this step, students learn to use CI/CD (Continuous Integration Continuous Delivery) pipeline to build their application as a docker image and deploy to Kubernetes.



Capstone Project

LSET gives you an opportunity to work on the real world project which will greatly help you to build your technical portfolio

Project Topic: Online Banking

London has been a leading international financial centre since the 19th century. In recent years, London has seen many FinTech start-ups and major innovations in the banking sector. The aim of this project is to introduce students to the financial sector and technologies used in handling billions of transactions per day. As part of this project, students will learn the current technological advances and build up their knowledge to start a simple banking application. This application focuses on building the basic functionality by using agile project management practices. Students will be presented with user stories that will build up the initial project backlog. Students then need to enhance this backlog by adding more relevant user stories and work on them.

LSET emphasis on project-based learning as it provides an opportunity to the students to master the course content by going through the near real-world work experience. LSET projects are carefully designed to teach the industry required skills and mindset. It motivates the students on various essential aspects like learning to work in teams, improve communication with peers, taking initiatives to look for innovative solutions, improve problem solving skills, understand the end user requirements to build user specific product, etc.

Capstone Projects are aimed to build students' confidence on handling projects and apply their newly learned skills to solve real world problems. This gives an opportunity to the students to reflect upon their learning and find the opportunity to get the most out of the course.

Learning Outcome

- » Students will learn to work in an agile environment
- » Students will learn the agile project management terms which are used in the industry like product backlog, user stories, story point, epics, etc.
- » Students will learn to use Git repository and learn the concepts like commit, pull, push, branch, etc.
- » Students will learn to communicate in a team environment and express their ideas in an effective manner

Guidance and Help

A dedicated project coordinator will be assigned to this project who can mentor students on the process. Students can also avail the instructor's hours as and when needed. LSET may get an industry expert with subject specific experience to come and help students to understand the industry and its challenges.



Execution Process

This project will be carried out in phases. Each phase is designed to teach students a specific aspect on the subject and/or development paradigm. Following are the phases students will follow to complete this project.

Phase 1: Project Introduction Self Study [6 days]

In the first phase, students will learn about the financial industry and go through the project introduction documentation to build up the subject knowledge. This is a self-learning stage however instructor hours are available if required.

Phase 2: Project Build-up and Environment Setup [2 days]

In this phase, students are required to follow the project guide to setup the development environment. Project document guides students on finding and connecting to the LSET Git repository and install the required libraries or tools.

Phase 3: Product Backlog and Sprint Planning [2 days]

In this phase, students will use the existing product backlog and enhance it as per their project scope. Students can seek help from the project coordinator and/or the instructor. Project coordinator will help students to do sprint planning and assign story points to the stories. This process is meant to give students real world work environment experience. Students can consider this as a mock exercise on using the agile project management practices.



Phase 4: User Stories Execution and Development [12 days]

In this phase, students will work on the user stories identified in the Phase 3 process. Students will write code and algorithms to complete the development objectives. Project coordinator will be available to help students to guide on the development and answer any questions they may have. Students can also discuss this with the instructor.

Project Presentation

LSET emphasis on preparing students for real work environment by giving them opportunities to learn the required soft skills. After completing the project, students are required to present their work to the instructor and an invited project reviewer panel. Please note that the assigned external examiner will not be part of this panel and hence will not know about the students. This ensures an unbiased assessment by the external examiner. The aim of this exercise is to give students an opportunity to experience an environment they may face in their real job. Also, it gives them an opportunity to get feedback from the industry experts who can guide students on various parts of the project. This will help students to learn and fix anything they find necessary in their project. This not only ensures the quality output but also help students to learn about industry requirements.

Instructor and the project reviewer panel will assess the students on the following;

Project Repository on GitHub [10 points]: Instructor will ensure that the students have uploaded the project repository to the LSET's GitHub account as per the guidelines given in the project requirement documentation. Full points will be awarded if the repository is properly setup as per the instructions given.

Presentation Skills [20 points]: Students are required to present their work in the given timeframe. Full points will be awarded if students cover everything needed to present their work in the given timeframe.

Communication Skills [20 points]: Students need to present their work in a manner which is understandable by all the participants. More focus will be given on the way student communicates and not the language. Full points will be awarded if students able to communicate their work properly.

Evaluation Criteria

LSET promotes transparent and unbiased evaluation process. All the external examiners will follow a set process to grade students. No student's personal or identification information will be shared with the external examiners so they will not be knowing about the person they are grading. They will only get the project files and grading guidelines to follow. This will ensure the equal quality standards across the institute.

Following are some of the key areas the LSET external examiners will be grading on.

Project Documentation [10 points]: Project documentation is properly filed up with the information which can be used to understand the project work. Students can use the supplied project documentation template to fill up the information. External examiner to confirm if all the information is filled up. Full points will be awarded if all the sections are covered.

Project Structure [10 points]: Students need to follow the proper structure while developing their project. This structure is being taught and/or covered in the project requirement documentation. External examiner to confirm if the project files are properly structured. Full points will be awarded if the structure meets the given guideline.

Solves Basic Problem [50 points]: Students need to ensure that they implement all the requirements given in the project documentation. External examiner to confirm if the project solves the given problem. Full points will be awarded if the students include everything that was asked in the project requirement.

Innovation [20 points]: Students are encouraged to bring new ideas into their development. They can improve the design, use new design patterns, code with a better coding style, or simply add an additional feature. External examiner to confirm if the students have added more than the requirement given to improve the design or solution. The new addition must include a new feature and should not be similar to the requirements given. Full points will be awarded if the external examiner finds a new innovation or see students going beyond the asked requirements.

Best Practices [20 points]: Students are required to follow the best practices in their development. This will help them to become a quality resource for their prospective employer. External examiner to confirm if the supplied best practices are followed in the project. Full points will be awarded if the best practices are properly implemented.



Performance Consideration [20 points]: Students need to think about performance while working on their project. Performance is one of the important industry requirement. External examiner to confirm if the student considered the performance improvements in the project. Full points will be awarded if the external examiner sees efforts taken to consider performance aspect in the development.

Security Structure [20 points]: Students need to consider the security aspect if applicable in the design and development. External examiner to confirm if the security consideration is applicable in this project, if it is applicable, the examiner to confirm if the student has considered the security elements in the project. Full points will be awarded if the external examiner sees efforts taken to consider the security aspect in the development.



Benefits of LSET Certificate

Earning the LSET Certificate means you have demonstrate hard working capabilities and learnt the latest technologies by completing hands-on exercises and real world projects. Following are some of the traits employers can trust you have built up through your course;

- You know how to work in a team environment and communicate well.
- You know the tools which are necessary in your desired job.
- You know how to use the latest technologies to develop technologically advanced solutions
- You have developed problem solving skills to navigate through complex problem scenarios and figure out right solutions.
- You are now ready to take on the challenge and help your prospective employer to build the desired solutions



What to expect after completing the course?

After earning your certificate from LSET, you are entitled to join the LSET's Alumni club. There are countless benefits associated with the Alumni Club membership. As a member of LSET Alumni you can expect the following;

- LSET to hold your hand all the way to find a successful career
- Advice you on choosing right career based on your passion and goals
- Connect you with industry experts for career progression
- Provide you opportunities to participate in events to keep yourself updated
- Provide you an opportunity to contribute to the game changing open source projects
- Provide you a platform to shine by giving you an opportunity to speak at our events

TOOLS & TECHNOLOGIES YOU WILL LEARN FROM THIS COURSE



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