

Trainer Name	
Author Name	<p style="text-align: center;"><b>Zeshan Iqbal Bela</b>  <b>CEO   Ez Solutions</b>  <b>Lahore</b></p>
Course Title	<p style="text-align: center;"><b>ISTQB® Certified Tester Foundation Level (CTFL)</b></p>
Objectives and Expectations	<p><b>Employable skills and hands-on practice in Certified Tester Foundation Level by ISTQB</b></p> <p>This is a special course designed to address unemployment in the youth. The course aims to achieve the above objective through hands on practical training delivery by a team of dedicated professionals having rich market/work experience. This course is therefore not just for developing a theoretical understanding/back ground of the trainees. Contrary to that, it is primarily aimed at equipping the trainees to perform commercially in a market space in independent capacity or as a member of a team.</p> <p>The course therefore is designed to impart not only technical skills but also soft skills (i.e. interpersonal/communication skills; personal grooming of the trainees etc.) as well as entrepreneurial skills (i.e. marketing skills; free lancing etc.). The course also seeks to inculcate work ethics to foster better citizenship in general and improve the image of Pakistani work force in particular.</p> <p>The ISTQB® Certified Tester Foundation Level (CTFL) certification provides essential testing knowledge that can be put to practical use and, very importantly, explains the terminology and concepts that are used worldwide in the testing domain. CTFL is relevant across software delivery approaches and practices including Waterfall, Agile, DevOps, and Continuous Delivery. CTFL certification is recognized as a prerequisite to all other ISTQB® certifications where Foundation Level is required.</p> <p><b><u>Main Expectations:</u></b></p> <p>In short, the course under reference should be delivered by professional instructors in such a robust hands-on manner that the trainees are comfortably able to employ their skills for earning money (through wage/self-employment) at its conclusion.</p> <p>This course thus clearly goes beyond the domain of the traditional training practices in vogue and underscores an expectation that a market-centric approach will be adopted as the main driving force while delivering it. The instructors should therefore be experienced enough to be able to identify the training needs for the possible market roles available out there. Moreover, they should also know the strengths and weaknesses of each trainee to prepare them for such market roles during/after the training.</p> <ol style="list-style-type: none"> <li>i. Specially designed practical tasks to be performed by the trainees have been included in the Annexure-I to this document. The record of all tasks performed individually or in groups must be preserved by the</li> </ol>

management of the training Institute clearly labeling name, trade, session, etc. so that these are ready to be physically inspected/verified through monitoring visits from time to time. The weekly distribution of tasks has also been indicated in the weekly lesson plan given in this document.

- ii. To materialize the main expectations, a special module on **Job Search & Entrepreneurial Skills** has been included in the latter part of this course (5<sup>th</sup> & 6<sup>th</sup> month) through which, the trainees will be made aware of the Job search techniques in the local as well as international job markets (Gulf countries). Awareness around the visa process and immigration laws of the most favored labor destination countries also form a part of this module. Moreover, the trainees would also be encouraged to venture into self-employment and exposed to the main requirements in this regard. It is also expected that a sense of civic duties/roles and responsibilities will also be inculcated in the trainees to make them responsible citizens of the country.
- iii. A module on **Work Place Ethics** has also been included to highlight the importance of good and positive behavior in the workplace in the line with the best practices elsewhere in the world. An outline of such qualities has been given in the Appendix to this document. Its importance should be conveyed in a format that is attractive and interesting for the trainees such as through PPT slides +short video documentaries. Needless to say that if the training provider puts his heart and soul into these otherwise non-technical components, the image of the Pakistani workforce would undergo a positive transformation in the local as well as international job markets.

To maintain interest and motivation of the trainees throughout the course, modern techniques such as:

- Motivational Lectures
- Success Stories
- Case Studies

These techniques would be employed as an additional training tool wherever possible (these are explained in the subsequent section on Training Methodology).

Lastly, evaluation of the competencies acquired by the trainees will be done objectively at various stages of the training and a proper record of the same will be maintained. Suffice to say that for such evaluations, practical tasks would be designed by the training providers to gauge the problem-solving abilities of the trainees.

#### **(i) Motivational Lectures**

The proposed methodology for the training under reference employs motivation as a tool. Hence besides the purely technical content, a trainer is required to include elements of motivation in his/her lecture. To inspire the trainees to utilize the training opportunity to the full and strive towards professional excellence. Motivational lectures may also include general topics

such as the importance of moral values and civic role & responsibilities as a Pakistani. A motivational lecture should be delivered with enough zeal to produce a deep impact on the trainees. It may comprise of the following:

- Clear Purpose to convey the message to trainees effectively.
- Personal Story to quote as an example to follow.
- Trainees Fit so that the situation is actionable by trainees and not represent a just idealism.
- Ending Points to persuade the trainees on changing themselves.

A good motivational lecture should help drive creativity, curiosity, and spark the desire needed for trainees to want to learn more.

The impact of a successful motivational strategy is amongst others commonly visible in increased class participation ratios. It increases the trainees' willingness to be engaged on the practical tasks for a longer time without boredom and loss of interest because they can see in their mind's eye where their hard work would take them in short (1-3 years); medium (3 -10 years) and long term (more than 10 years).

As this tool is expected that the training providers would make arrangements for regular well planned motivational lectures as part of a coordinated strategy interspersed throughout the training period as suggested in the weekly lesson plans in this document.

Course-related motivational lectures online link is available in **Annexure-II**.

#### **(ii) Success Stories**

Another effective way of motivating the trainees is using Success Stories. Its inclusion in the weekly lesson plan at regular intervals has been recommended till the end of the training.

A success story may be disseminated orally, through a presentation, or using a video/documentary of someone that has risen to fortune, acclaim, or brilliant achievement. A success story shows how a person achieved his goal through hard work, dedication, and devotion. An inspiring success story contains compelling and significant facts articulated clearly and easily comprehensible words. Moreover, it is helpful if it is assumed that the reader/listener knows nothing of what is being revealed. The optimum impact is created when the story is revealed in the form of:-

- Directly in person (At least 2-3 cases must be arranged by the training institute)
- Through an audio/ videotaped message (2-3 high-quality videos must be arranged by the training institute)

It is expected that the training provider would collect relevant high-quality success stories for inclusion in the training as suggested in the weekly lesson plan given in this document.

The suggestive structure and sequence of a sample success story and its various shapes can be seen in **Annexure III**.

#### **(iii) Case Studies**

	<p>Where a situation allows, case studies can also be presented to the trainees to widen their understanding of the real-life specific problem/situation and to explore the solutions.</p> <p>In simple terms, the case study method of teaching uses a real-life case example/a typical case to demonstrate a phenomenon in action and explain theoretical as well as practical aspects of the knowledge related to the same. It is an effective way to help the trainees comprehend in depth both the theoretical and practical aspects of the complex phenomenon in depth with ease. Case teaching can also stimulate the trainees to participate in discussions and thereby boost their confidence. It also makes the classroom atmosphere interesting thus maintaining the trainee interest in training till the end of the course.</p> <p>Depending on suitability to the trade, the weekly lesson plan in this document may suggest case studies be presented to the trainees. The trainer may adopt a PowerPoint presentation or video format for such case studies whichever is deemed suitable but only those cases must be selected that are relevant and of a learning value.</p> <p>The Trainees should be required and supervised to carefully analyze the cases.</p> <p>For this purpose, they must be encouraged to inquire and collect specific information/data, actively participate in the discussions, and intended solutions to the problem/situation.</p> <p>Case studies can be implemented in the following ways: -</p> <ol style="list-style-type: none"> <li>i. A good quality trade-specific documentary ( At least 2-3 documentaries must be arranged by the training institute)</li> <li>ii. Health &amp; Safety case studies (2 cases regarding safety and industrial accidents must be arranged by the training institute)</li> <li>iii. Field visits( At least one visit to a trade-specific major industry/ site must be arranged by the training institute)</li> </ol>
<p><b>Entry-level of trainees</b></p>	<p>For an advanced course of ISTQB® Certified Tester Foundation Level (CTFL) proposed entry level is minimum bachelors in relevant subject, so expectations from the trainees are:</p> <ul style="list-style-type: none"> <li>• Have knowledge of Software Development Life Cycle</li> <li>• Have concept of Computer system</li> <li>• Having a knowledge of basic Technical Writing</li> </ul>
<p><b>Learning Outcomes of the course</b></p>	<p>The content of this lesson plan is adopted from the internationally recognized ISTQB certification course, "Certified Tester Foundation Level (CTFL)," ensuring alignment with global standards and practices. For further reference, the link to the source material is provided below.</p> <p>By the end of this course, students will be able to:</p> <ol style="list-style-type: none"> <li>1. Promote efficient and effective communication by using a common vocabulary for software testing</li> </ol>

	<ol style="list-style-type: none"> <li>2. Understand fundamental concepts of software testing</li> <li>3. Demonstrate understanding of how different development and testing practices, and different constraints on testing, may apply in optimizing testing to different contexts</li> <li>4. Contribute effectively in reviews</li> <li>5. Use established techniques for designing tests at all test levels</li> <li>6. Interpret and execute tests from given test specifications, and report on test results</li> <li>7. Understand test management principles for resources, strategies, planning, project control, and risk management</li> <li>8. Write and communicate clear and understandable defect reports</li> <li>9. Understand the project factors that drive the test priorities and test approach</li> <li>10. Understand the value that software testing brings to stakeholders</li> <li>11. Appreciate how testing activities and work products align with project objectives, measures, and targets</li> <li>12. Assist in the selection and implementation process of testing tool</li> </ol>
<b>Course Execution Plan</b>	<p>The total duration of the course: <b>1 month (4 Weeks)</b>  Class hours: <b>4 hours per day</b>  Theory: <b>20%</b>  Practical: <b>80%</b>  Weekly hours: <b>20 hours per week</b>  Total contact hours: <b>80 hours</b></p>
<b>Companies offering jobs in the respective trade</b>	<ul style="list-style-type: none"> <li>• <b>Healthcare:</b> The healthcare industry is using Web and Software development to improve patient care and increase efficiency. Medical device companies, hospitals, and research institutions are all looking for individuals with QA Testing skills to help them develop and implement new technologies.</li> <li>• <b>Manufacturing:</b> Web/Software Development is being used in manufacturing to automate processes and increase efficiency. Companies such as Ford, General Motors, and Toyota are investing heavily in web/software and are looking for individuals with the necessary skills to help them testing their web portals.</li> <li>• <b>Finance:</b> The finance industry is using web/software development to analyze data, identify patterns, and make predictions. Banks, insurance companies, and investment firms are all looking for individuals with QA Testing skills to help them improve their services and increase profits.</li> <li>• <b>Agriculture:</b> Web/Software Development is being used in agriculture to automate tasks such as planting, harvesting, and monitoring crops. Companies such as John Deere and Monsanto are investing in web/software development technologies and are looking for individuals with the QA testing skills to help them develop and implement new systems.</li> </ul>
<b>Job Opportunities</b>	<ul style="list-style-type: none"> <li>• Test Manager</li> <li>• QA Tester</li> <li>• QA Engineer</li> </ul>

	<ul style="list-style-type: none"> <li>• Software Development Engineer in Test (SDET)</li> </ul>
<b>No of Students</b>	25
<b>Learning Place</b>	Classroom / Lab
<b>Instructional Resources</b>	<p><b>ISTQB® is the leading global certification scheme in the field of software testing.</b>  As of June 2023, ISTQB® has administered over <b>1.2 million</b> exams and issued more than <b>914k</b> certifications in over <b>130 countries</b>.  <a href="https://www.istqb.org/">https://www.istqb.org/</a></p> <p><b>Certified Tester Foundation Level (CTFL) v4.0</b>  <a href="https://www.istqb.org/certifications/certified-tester-foundation-level">https://www.istqb.org/certifications/certified-tester-foundation-level</a></p> <p><b>What Is ISTQB? What Is Foundation Level Certification &amp; Its Benefits?</b>  <a href="https://www.youtube.com/watch?v=oDju81HbvPw">https://www.youtube.com/watch?v=oDju81HbvPw</a>  Hi, In this video, I am explaining what is ISTQB, exam patterns &amp; some of its benefits. I hope you will like the video &amp; it will be useful. Thank you!</p> <p><b>ISTQB Foundation Level #1 - Introduction to ISTQB CTFL Certification</b>  <a href="https://www.youtube.com/watch?v=g_6HGxqTkw0">https://www.youtube.com/watch?v=g_6HGxqTkw0</a></p> <p><b>Software Testing Full Course In 10 Hours   Software Testing Tutorial   Edureka</b>  <a href="https://www.youtube.com/watch?v=sO8eGL6SFsA">https://www.youtube.com/watch?v=sO8eGL6SFsA</a>  This Edureka Software Testing Full Course will help you understand Core Software Testing concepts and will take in details of how different Software Testing techniques and tools work with practical implementation.</p> <p><b>ISTQB Online Training by ISTQB Guru</b>  <a href="https://www.youtube.com/watch?v=LvGx_nOsUuU">https://www.youtube.com/watch?v=LvGx_nOsUuU</a>  Are you ready to elevate your career in software testing? Join our comprehensive ISTQB Online Training Course today! This course offers you a unique opportunity to deepen your understanding, sharpen your skills, and gain an internationally recognized certification from the comfort of your home. Whether you're a beginner aiming to break into the field or an experienced professional looking to stay ahead of the curve, our expert-led training will guide you through every aspect of the ISTQB syllabus. You'll enjoy interactive sessions, practical exercises, and real-world scenarios that ensure you're well-prepared for the ISTQB certification exam. Don't miss this chance to enhance your credibility and open doors to new opportunities in the ever-evolving world of software testing. Sign up now and be part of a community committed to excellence in quality assurance!</p>

## MODULES

Scheduled Weeks	Module Title	Days	Hours	Learning Units	Home Assignment
Week 1	Introducing Software Testing Fundamentals	Day 1	Hour 1 to 4	<b>Software Testing Basics</b> <ul style="list-style-type: none"> <li>• Introduction to software testing</li> <li>• Seven principles of testing</li> <li>• Group discussion on the importance of testing</li> </ul>	<ul style="list-style-type: none"> <li>• Task 1</li> </ul> <p><i><u>Details may be seen at Annexure-I</u></i></p>
		Day 2	Hour 1 to 4	<b>Testing Process and Principles</b> <ul style="list-style-type: none"> <li>• Testing process stages</li> <li>• Analyzing testing principles</li> <li>• Case study analysis on applying testing principles</li> </ul>	
		Day 3	Hour 1 to 4	<b>Test Design Techniques</b> <ul style="list-style-type: none"> <li>• Black-box and white-box testing techniques</li> <li>• Equivalence Partitioning and Boundary Value Analysis</li> <li>• Hands-on exercise on creating test cases</li> </ul>	
		Day 4	Hour 1 to 4	<b>Test Management</b> <ul style="list-style-type: none"> <li>• Test planning and estimation</li> <li>• Test strategy and approach</li> <li>• Creating a test plan for a hypothetical project</li> </ul>	

		Day 5	Hour 1 to 4	<b>Review and Practice</b> <ul style="list-style-type: none"> <li>• Review of software testing fundamentals</li> <li>• Practice quiz on basic software testing concepts</li> <li>• Q&amp;A session to clarify doubts</li> </ul>	
Week 2	Advanced Testing Concepts and Techniques	Day 1	Hour 1 to 4	<b>Test Execution and Defect Management</b> <ul style="list-style-type: none"> <li>• Test execution process</li> <li>• Defect lifecycle</li> <li>• Role-play exercise: Defect reporting and tracking scenario</li> </ul>	<ul style="list-style-type: none"> <li>• <b>Task 2</b></li> </ul> <p><i><u>Details may be seen at Annexure-I</u></i></p>
		Day 2	Hour 1 to 4	<b>Test Automations and Fundamentals</b> <ul style="list-style-type: none"> <li>• Introduction to test automation</li> <li>• Benefits and challenges of test automation</li> <li>• Hands-on practice with a test automation tool</li> </ul>	



		Day 3	Hour 1 to 4	<b>Performance testing and Security testing</b> <ul style="list-style-type: none"> <li>• Performance testing concepts</li> <li>• Security testing fundamentals</li> <li>• Case study analysis on performance and security testing</li> </ul>	
		Day 4	Hour 1 to 4	<b>Test process Improvement and Metrics</b> <ul style="list-style-type: none"> <li>• Test process improvement models</li> <li>• Test metrics and measurements</li> <li>• Developing a test improvement plan</li> </ul>	

		Day 5	Hour 1 to 4	<b>Application and Integration</b> <ul style="list-style-type: none"> <li>Applying learned concepts and techniques to real-world scenarios</li> <li>Integrating testing practices into software development processes</li> <li>Reflection on lessons learned and challenges faced</li> </ul>	
Week 3	Project Work	Day 1	Hour 1 to 4	<b>Project Planning and Scope Definition</b> <ul style="list-style-type: none"> <li>Review project requirements and objectives</li> <li>Define project scope and deliverables</li> <li>Assign roles and responsibilities within the group</li> </ul>	<ul style="list-style-type: none"> <li>Task 3</li> </ul> <p><i>Details may be seen at <a href="#">Annexure-1</a></i></p>
		Day 2	Hour 1 to 4	<b>Research and Resource Gathering</b> <ul style="list-style-type: none"> <li>Conduct research on relevant testing methodologies and tools</li> <li>Gather necessary resources such as testing frameworks and documentation</li> </ul>	
		Day 3	Hour 1 to 4	<b>Test Planning and Strategy Development</b> <ul style="list-style-type: none"> <li>Develop a detailed test plan outlining testing objectives, approach,</li> </ul>	

				and schedule <ul style="list-style-type: none"> <li>Define testing strategies for different components of the project</li> </ul>	
		Day 4	Hour 1 to 4	<b>Test Design and Implementation</b> <ul style="list-style-type: none"> <li>Create test cases based on project requirements and test plan</li> <li>Implement test cases using chosen testing tools or frameworks</li> </ul>	
		Day 5	Hour 1 to 4	<b>Initial Testing and Feedback Gathering</b> <ul style="list-style-type: none"> <li>Execute initial tests to identify defects and issues</li> <li>Gather feedback from team members and stakeholders on the testing process</li> </ul>	
Week 4	Project Presentation and Conclusion	Day 1	Hour 1 to 4	<b>Presentation Preparation and Rehearsals</b> <ul style="list-style-type: none"> <li>Review and finalize project documentation and results</li> <li>Prepare slides and visuals for the presentation</li> </ul>	<ul style="list-style-type: none"> <li><b>Task 4</b></li> </ul> <p><i>Details may be seen at Annexure-1</i></p>
		Day 2	Hour 1 to 4	<b>Project Presentation and Rehearsals (cont)</b> <ul style="list-style-type: none"> <li>Rehearse presentation delivery and timing</li> </ul>	
		Day 3	Hour 1 to 4	<b>Finalize Presentation and Feedback Session</b> <ul style="list-style-type: none"> <li>Finalize presentations with any necessary adjustments based on</li> </ul>	

				feedback <ul style="list-style-type: none"> <li>• Conduct peer review sessions to provide constructive feedback to other groups</li> </ul>	
		<b>Day 4</b>	<b>Hour 1 to 4</b>	<b>Project Presentation</b> <ul style="list-style-type: none"> <li>• Each group presents their project findings, including test plans, test cases, and results</li> <li>• Peer evaluation and feedback sessions for each presentation</li> </ul>	
		<b>Day 5</b>	<b>Hour 1 to 4</b>	<b>Reflection and Course Conclusion</b> <ul style="list-style-type: none"> <li>• Reflect on the project experience and lessons learned</li> <li>• Discuss future learning and career paths in software testing</li> <li>• Course evaluation and feedback collection from participants</li> <li>• Distribution of certificates of completion</li> </ul>	

**Tasks for Certificate in ISTQB® Certified Tester Foundation Level (CTFL)**

Task No.	Task	Description	Week
1.	Develop a comprehensive test plan outline based on the principles learned	Create an outline for a thorough test plan incorporating key testing principles learned, outlining objectives, scope, and strategy.	Week 1
2.	Expand the test plan outline into a detailed document covering test objectives, scope, strategy, and resources required.	Elaborate the test plan outline into a comprehensive document specifying test objectives, scope, strategy, and necessary resources.	Week 2
3.	Implement the test plan by creating test cases and executing tests based on a provided software application or scenario.	Execute the test plan by generating test cases and conducting tests using a given software application or scenario.	Week 3
4.	Present the finalized test plan, including test results and recommendations, to the class for review and feedback.	Deliver the finalized test plan to the class, incorporating test results and suggestions, for peer review and feedback.	Week 4

## **Motivational Lectures ISTQB® Certified Tester Foundation Level (CTFL)**

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### **What Is ISTQB? What Is Foundation Level Certification & Its Benefits?**

<https://www.youtube.com/watch?v=oDju81HbvPw>

Hi, In this video, I am explaining what is ISTQB, exam patterns & some of its benefits. I hope you will like the video & it will be useful. Thank you!

### **ISTQB Foundation Level #1 - Introduction to ISTQB CTFL Certification**

[https://www.youtube.com/watch?v=g\\_6HGxqTkw0](https://www.youtube.com/watch?v=g_6HGxqTkw0)

### **Software Testing Full Course In 10 Hours | Software Testing Tutorial | Edureka**

<https://www.youtube.com/watch?v=sO8eGL6SFsA>

This Edureka Software Testing Full Course will help you understand Core Software Testing concepts and will take in details of how different Software Testing techniques and tools work with practical implementation.

### **ISTQB Online Training by ISTQB Guru**

[https://www.youtube.com/watch?v=LvGx\\_nOsUuU](https://www.youtube.com/watch?v=LvGx_nOsUuU)

Are you ready to elevate your career in software testing? Join our comprehensive ISTQB Online Training Course today! This course offers you a unique opportunity to deepen your understanding, sharpen your skills, and gain an internationally recognized certification from the comfort of your home. Whether you're a beginner aiming to break into the field or an experienced professional looking to stay ahead of the curve, our expert-led training will guide you through every aspect of the ISTQB syllabus. You'll enjoy interactive sessions, practical exercises, and real-world scenarios that ensure you're well-prepared for the ISTQB certification exam. Don't miss this chance to enhance your credibility and open doors to new opportunities in the ever-evolving world of software testing. Sign up now and be part of a community committed to excellence in quality assurance!

## **Workplace/Institute Ethics Guide**

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Work ethic is a standard of conduct and values for job performance. The modern definition of what constitutes good work ethics often varies. Different businesses have different expectations. Work ethic is a belief that hard work and diligence have a moral benefit and an inherent ability, virtue, or value to strengthen character and individual abilities. It is a set of values-centered on the importance of work and manifested by determination or desire to work hard.

The following ten work ethics are defined as essential for student success:

**1. Attendance:**

Be at work every day possible, plan your absences don't abuse leave time. Be punctual every day.

**2. Character:**

Honesty is the single most important factor having a direct bearing on the final success of an individual, corporation, or product. Complete assigned tasks correctly and promptly. Look to improve your skills.

**3. Team Work:**

The ability to get along with others including those you don't necessarily like. The ability to carry your weight and help others who are struggling. Recognize when to speak up with an idea and when to compromise by blend ideas together.

**4. Appearance:**

Dress for success set your best foot forward, personal hygiene, good manner, remember that the first impression of who you are can last a lifetime

**5. Attitude:**

Listen to suggestions and be positive, accept responsibility. If you make a mistake, admit it. Values workplace safety rules and precautions for personal and co-worker safety. Avoids unnecessary risks. Willing to learn new processes, systems, and procedures in light of changing responsibilities.

**6. Productivity:**

Do the work correctly, quality and timelines are prized. Get along with fellows, cooperation is the key to productivity. Help out whenever asked, do extra without being asked. Take pride in your work, do things the best you know-how. Eagerly focuses energy on accomplishing tasks, also referred to as demonstrating ownership. Takes pride in work.

**7. Organizational Skills:**

Make an effort to improve, learn ways to better yourself. Time management; utilize time and resources to get the most out of both. Take an appropriate approach to social interactions at work. Maintains focus on work responsibilities.

**8. Communication:**

Written communication, being able to correctly write reports and memos.  
Verbal communications, being able to communicate one on one or to a group.

**9. Cooperation:**

Follow institute rules and regulations, learn and follow expectations. Get along with fellows, cooperation is the key to productivity. Able to welcome and adapt to changing work situations and the application of new or different skills.

**10. Respect:**

Work hard, work to the best of your ability. Carry out orders, do what's asked the first time. Show respect, accept, and acknowledge an individual's talents and knowledge. Respects diversity in the workplace, including showing due respect for different perspectives, opinions, and suggestions.