

Table of Contents

Revision History.....	3
Table of Contents	4
Acknowledgements	7
1. Introduction to this Syllabus 60 mins.	8
1.1 The International Software Testing Qualifications Board.....	8
1.2 Purpose of this Document.....	8
1.3 The Certified Tester Expert Level in Software Testing	8
1.3.1 Expectations	8
1.3.2 Entry and Renewal Requirements	9
1.3.3 Level of Knowledge	9
1.3.4 Examination	9
1.3.5 Accreditation	9
1.4 Normative versus Informative Parts	9
1.5 Level of Detail	10
1.6 How this Syllabus is Organized.....	10
1.7 Terms and Definitions	10
2. Test Missions, Policies, Strategies and Goals 555 mins.	11
2.1 Introduction.....	12
2.2 Mission, Policy, and Metrics of Success	12
2.3 Test Strategies	13
2.3.1 Analytical Strategies	13
2.3.2 Model-based Strategies	14
2.3.3 Methodical Strategies	14
2.3.4 Process- or Standard-compliant Strategies	15
2.3.5 Reactive Strategies.....	15
2.3.6 Consultative Strategies.....	15
2.3.7 Regression-Averse and Test Automation Strategies.....	16
2.4 Alignment of Test Policy and Test Strategy with the Organization	16
3. Managing the Test Team 855 mins.	18
3.1 Introduction.....	18
3.2 Building the Test Team	19
3.2.1 Job Descriptions	19
3.2.2 Resumés.....	19
3.2.3 Interviewing.....	20
3.2.4 Assimilating New People	21
3.2.5 Termination of Employment.....	22
3.2.6 Ending Contractual Relationships.....	22
3.3 Developing the Test Team	22
3.3.1 Developing Individuals	23
3.3.2 Setting Goals and Objectives	23
3.3.3 Defining Clear Roles and Responsibilities.....	23
3.3.4 Individual Personalities and Roles within Teams	24
3.3.5 Skills Development	24
3.3.6 Training Opportunities	25
3.3.7 Mentoring.....	25
3.3.8 Performance Reviews and Feedback.....	25
3.4 Leading the Test Team	26
3.4.1 Information Sharing and Communication	26
3.4.2 Fostering Loyalty and Trust	26
3.4.3 Team Building	26

3.4.4	Motivating and Challenging the Test Team	27
3.4.5	Managing Distributed Teams.....	27
4.	Managing External Relationships 330 mins.	28
4.1	Introduction.....	29
4.2	Types of External Relationships	29
4.3	Contractual Issues	29
4.4	Communication Strategies	30
4.5	Integrating from External Sources	30
4.6	Merging Test Strategies	31
4.7	Verifying Quality	32
5.	Managing Across the Organization 780 mins.	34
5.1	Introduction.....	35
5.2	Advocating the Test Team	35
5.2.1	Promoting and Advocating the Test Organization	35
5.2.2	Selling the Value of Testing	35
5.2.3	Creating a Defensible Team	36
5.2.4	Protecting and Supporting the Team	36
5.3	Placement of the Test Team	38
5.4	Stakeholder Communication	38
5.5	Creating and Building Relationships	39
5.6	Advocating Quality Activities Across the Organization	40
5.7	Integrating Tools Across the Organization	41
5.8	Handling Ethical Issues.....	42
5.8.1	Managing the Team's Ethics	42
5.8.2	Interacting with Test Stakeholders.....	42
5.8.3	Report Results	43
5.8.4	Test Management Ethics	43
6.	Project Management Essentials 615 mins.	44
6.1	Introduction.....	45
6.2	Project Management Tasks	45
6.2.1	Test Estimation	45
6.2.2	Defining the Testing Schedule.....	47
6.2.3	Budgeting and Resource Allocation	47
6.2.4	Managing and Tracking a Project	48
6.2.5	Dealing with Trade-offs.....	49
6.2.6	Change Management	49
6.2.7	Time Management.....	50
6.3	Project Risk Management	50
6.3.1	Managing Project Risks	50
6.3.2	Participating in Project-wide Risk Management	50
6.4	Quality Management	51
7.	Test Project Evaluation and Reporting 510 mins.	53
7.1	Introduction.....	53
7.2	Tracking Information	53
7.3	Evaluating and Using Information - Internal Reporting	54
7.4	Sharing Information - External Reporting.....	55
7.5	Test Results Reporting and Interpretation	56
7.5.1	Planning, Monitoring and Control	56
7.5.2	Analysis and Design	56
7.5.3	Implementation and Execution	57
7.5.4	Evaluating Exit Criteria and Reporting.....	58
7.5.5	Test Closure Activities	59
7.6	Statistical Quality Control Techniques	59
8.	Testing Considerations for Domain and Project Factors 270 mins.	60

8.1	Introduction.....	61
8.2	Test Management Considerations for Lifecycle Models	61
8.2.1	Comparison of Lifecycle Models	61
8.2.2	Agile Methods	62
8.3	Managing Partial Lifecycle Projects	64
8.3.1	Integration Projects	64
8.3.2	Maintenance Projects	64
8.3.3	Hardware/Software and Embedded Systems.....	65
8.3.4	Safety-critical Systems	66
8.4	Release Considerations	66
8.4.1	Market Demand	66
8.4.2	Ease of Maintenance	66
8.4.3	Ease of Installation	67
9.	Evaluating Effectiveness and Efficiency 195 mins.	68
9.1	Introduction.....	69
9.2	Effectiveness, Efficiency and Satisfaction Metrics for the Test Process	69
9.3	Effectiveness, Efficiency and Satisfaction Metrics for the Test Policy Objectives	70
9.4	Project Retrospectives	71
10.	References	72
10.1	ISTQB Documents	72
10.2	Trademarks	72
10.3	Books	73
10.4	Papers and Articles	74
10.5	Web References	74
11.	Appendix A – Notice to Training Providers.....	75
11.1	Training Times	75
11.2	Guidelines for Practical Exercises in the Workplace	75
11.3	Example Course Plans.....	77
11.3.1	Example Course Plan – without workplace learning objectives.....	77
11.3.2	Example Course Plan – with workplace learning objectives.....	77
11.4	Rules for e-Learning.....	78
11.5	Standards Used	78
	Index	79