ISTQB - Certified Tester Expert Level Syllabus Test Management

1. Introduction to this Syllabus
1.1 The International Software Testing Qualifications Board
1.2 Purpose of this Document
1.3 The Certified Tester Expert Level in Software Testing
1.3.1 Expectations
1.3.2 Entry and Renewal Requirements
1.3.3 Level of Knowledge
1.3.4 Examination
1.3.5 Accreditation
1.4 Normative versus Informative Parts
1.5 Level of Detail
1.6 How this Syllabus is Organized
1.7 Terms and Definitions

2. Test Missions, Policies, Strategies and Goals
2.1 Introduction
2.2 Mission, Policy, and Metrics of Success
2.3 Test Strategies
2.3.1 Analytical Strategies
2.3.2 Model-based Strategies
2.3.3 Methodical Strategies
2.3.4 Process- or Standard-compliant Strategies
2.3.5 Reactive Strategies
2.3.6 Consultative Strategies
2.3.7 Regression-Averse and Test Automation Strategies
2.4 Alignment of Test Policy and Test Strategy with the Organization

3. Managing the Test Team
3.1 Introduction
3.2 Building the Test Team
3.2.1 Job Descriptions
3.2.2 Resumés
3.2.3 Interviewing
3.2.4 Assimilating New People
3.2.5 Termination of Employment
3.2.6 Ending Contractual Relationships
3.3 Developing the Test Team
3.3.1 Developing Individuals
3.3.2 Setting Goals and Objectives
3.3.3 Defining Clear Roles and Responsibilities
3.3.4 Individual Personalities and Roles within Teams
3.3.5 Skills Development
3.3.6 Training Opportunities

3.3.7 Mentoring
3.3.8 Performance Reviews and Feedback
3.4 Leading the Test Team
3.4.1 Information Sharing and Communication
3.4.2 Fostering Loyalty and Trust
3.4.3 Team Building
3.4.4 Motivating and Challenging the Test Team
3.4.5 Managing Distributed Teams

4. Managing External Relationships
4.1 Introduction
4.2 Types of External Relationships
4.3 Contractual Issues
4.4 Communication Strategies
4.5 Integrating from External Sources
4.6 Merging Test Strategies
4.7 Verifying Quality

5. Managing Across the Organization
5.1 Introduction
5.2 Advocating the Test Team
5.2.1 Promoting and Advocating the Test Organization
5.2.2 Selling the Value of Testing
5.2.3 Creating a Defensible Team
5.2.4 Protecting and Supporting the Team
5.3 Placement of the Test Team
5.4 Stakeholder Communication
5.5 Creating and Building Relationships
5.6 Advocating Quality Activities Across the Organization
5.7 Integrating Tools Across the Organization
5.8 Handling Ethical Issues
5.8.1 Managing the Team's Ethics
5.8.2 Interacting with Test Stakeholders
5.8.3 Report Results
5.8.4 Test Management Ethics

6. Project Management Essentials
6.1 Introduction
6.2 Project Management Tasks
6.2.1 Test Estimation
6.2.2 Defining the Testing Schedule
6.2.3 Budgeting and Resource Allocation
6.2.4 Managing and Tracking a Project
6.2.5 Dealing with Trade-offs
6.2.6 Change Management
6.2.7 Time Management
6.3 Project Risk Management
6.3.1 Managing Project Risks

6.3.2 Participating in Project-wide Risk Management
6.4 Quality Management

7. Test Project Evaluation and Reporting
7.1 Introduction
7.2 Tracking Information
7.3 Evaluating and Using Information - Internal Reporting
7.4 Sharing Information - External Reporting
7.5 Test Results Reporting and Interpretation
7.5.1 Planning, Monitoring and Control
7.5.2 Analysis and Design
7.5.3 Implementation and Execution
7.5.4 Evaluating Exit Criteria and Reporting
7.5.5 Test Closure Activities
7.6 Statistical Quality Control Techniques

8. Testing Considerations for Domain and Project Factors
8.1 Introduction
8.2 Test Management Considerations for Lifecycle Models
8.2.1 Comparison of Lifecycle Models
8.2.2 Agile Methods
8.3 Managing Partial Lifecycle Projects
8.3.1 Integration Projects
8.3.2 Maintenance Projects
8.3.3 Hardware/Software and Embedded Systems
8.3.4 Safety-critical Systems
8.4 Release Considerations
8.4.1 Market Demand
8.4.2 Ease of Maintenance
8.4.3 Ease of Installation

9. Evaluating Effectiveness and Efficiency
9.1 Introduction
9.2 Effectiveness, Efficiency and Satisfaction Metrics for the Test Process
9.3 Effectiveness, Efficiency and Satisfaction Metrics for the Test Policy Objectives
9.4 Project Retrospectives