

Table of Contents

Copyright Notice.....	2
Revision History	3
Table of Contents	4
Acknowledgments.....	7
0. Introduction to this Syllabus	8
0.1 Purpose of this document	8
0.2 The Certified Tester Game Testing.....	8
0.3 Career Path for Testers	8
0.4 Business Outcomes	8
0.5 Examinable Learning Objectives and Cognitive Level of Knowledge.....	9
0.6 The Certified Tester Game Testing Certificate Exam	9
0.7 Accreditation	9
0.8 Handling of Standards	10
0.9 Keeping It Current.....	10
0.10 Level of Detail	10
0.11 How This Syllabus is Organized	10
1. Specificity of Game Testing – 75 minutes (K2)	12
1.1 Game Testing Basics.....	12
1.1.1 Specifics of Game Testing.....	12
1.1.2 Game product risks.....	12
1.1.3 Defects Related to Game Testing	13
1.1.4 How testing mitigates product risks of video games	14
1.1.5 The difference between testing and "playing"	15
1.2 Typical Roles of the Game Development Team	15
1.3 Testing Activities throughout the Game Software Development Lifecycle	16
2. Testing Game Mechanics - 180 minutes (K3)	18
2.1 Game Mechanics	18
2.1.1 Types of Game Mechanics.....	18
2.1.2 Difference between Testing Gameplay Mechanics and Testing Non-Gameplay Mechanics.....	19
2.1.3 Difference between Testing Core Mechanics and Meta Mechanics	19
2.1.4 Difference between Testing Client, Server and Client-Server Mechanics	20
2.1.5 Examples of Defects in Game Mechanics and Possible Causes of Their Occurrence.....	21
2.2 Approaches to Testing Game Mechanics.....	22
2.2.1 Procedures and Approaches for Testing Game Mechanics throughout the Software Development Lifecycle of a Game Product	22
2.2.2 The Importance of Testing Game Mechanics	23
2.2.3 The Importance of Review of Game Mechanics	23

2.2.4	Testing the Video Game State after the Resumption of the Session and When the User Is Inactive.....	24
3.	Graphics Testing - 165 minutes (K3)	28
3.1	<i>Principles and Concepts of Game Graphics.....</i>	28
3.1.1	Features of the Graphic Content of the Game Product.....	28
3.1.2	Types of Graphic Content Defects	31
3.2	<i>Approaches to Testing Graphics in Game Products.....</i>	36
3.2.1	Artistic testing	36
3.2.2	Technical Testing.....	37
3.2.3	Gameplay Testing.....	38
3.3	<i>Graphics Test Execution.....</i>	38
3.3.1	Graphics Test Execution at Different Stages of Object Production.....	38
3.3.2	Testing Graphics for Historical Accuracy.....	40
3.4	<i>Tools Support for Graphics Testing.....</i>	41
4.	Sound Testing - 190 minutes (K3).....	42
4.1	<i>Features of the Sound Content of the Game Product</i>	42
4.1.1	Types of Sounds.....	43
4.1.2	Sound Effects and Technology.....	44
4.1.3	Sounds Area	44
4.2	<i>Types of Defects in Sound Content</i>	45
4.3	<i>Approaches to Testing Sound Content in Game Products</i>	46
4.3.1	Content-auditory Testing	47
4.3.2	Testing the Mix of Music and Game Sounds.....	47
4.3.3	Testing Music Composition	48
4.4	<i>Sound Test Execution.....</i>	48
4.4.1	Levels of Testing Audio-music Content during the Game Software Development Lifecycle.....	48
4.4.2	Integrating Sounds into the Game.....	49
4.4.3	Areas of Responsibility of the Persons involved	49
4.4.4	Procedures and Approaches in Conducting Test Activities in Sound Object Testing.....	50
4.5	<i>Tools Support for Sound Testing</i>	50
5.	Game Level Testing - 65 minutes (K2).....	52
5.1	<i>Level Design Principles and Concepts</i>	52
5.1.1	The Term "Level" and Its Specificity Depending on the Genre of the Game Project	52
5.1.2	Understanding the Types of Defects in Level Design	53
5.2	<i>Stages and Execution of Game Level Testing.....</i>	55
5.2.1	Basic Stages of Game Level Design and Testing	55
5.2.2	Areas of Responsibility of the Persons involved	57
5.3	<i>Tools Support for Game Level Testing</i>	58
6.	Game Controllers Testing - 95 minutes (K2)	59
6.1	<i>Principles and Concepts of Game Controllers.....</i>	59
6.1.1	Types of Game Controllers.....	59
6.1.2	Defects Related to the Specifics of Game Controllers	60
6.2	<i>Approaches to Testing Controllers in Game Products.....</i>	61
6.3	<i>Tools Support for Game Controllers Testing</i>	62

7. Localization Testing - 155 minutes (K3)	64
7.1 <i>Principles and Concepts of Localization Testing</i>	64
7.1.1 Localization and Internationalization	64
7.1.2 Difference between Localization of a Game Product and Application Software	66
7.1.3 Localization testing stages	67
7.2 <i>Types of Localization Defects and their Causes</i>	71
7.2.1 Possible Causes of Defects in the Localization of the Game Product	71
7.2.2 Localization Defects and Risks	71
7.3 <i>Localization Testing Approaches and Execution</i>	72
7.3.1 Difference between Full and Partial Localization Testing	72
7.3.2 Procedures and Approaches for Testing Localization during the Software Development Lifecycle of a Game Product	72
7.3.3 Localization Testing Types	74
7.4 <i>Tools Support for Localization Testing</i>	76
8. References	77
8.1 <i>Standards</i>	77
8.2 <i>ISTQB documents</i>	77
8.3 <i>Books</i>	77
8.4 <i>Links (Web/Internet)</i>	78
9. Appendix A – Learning Objectives/Cognitive Level of Knowledge	79
10. Appendix B – Business Outcomes Traceability Matrix with Learning Objectives	81
11. Appendix C – Release Notes	84
12. Appendix D – Game Testing Specific and other Terms	85
13. Appendix E – Index	89