

Field 205 – Computer Science

Alignment of Test Framework Objectives with State and National Standards

Illinois Licensure Testing System Framework Objectives for Computer Science	Computer Science Teachers Association K-12 Computer Science Standards	International Society for Technology in Education Standards for Computer Science Educators	Computer Science Teachers Association DRAFT K-12 Computer Science Standards
Subarea I: Computational Thinking			
0001 Understand the problem-solving process.	L2-CT, L3A-CT, L3B-CT	1.a	L2-PA, L3A-PA, L3A-DI, L3B-PA, L3B-DI
0002 Understand types and characteristics of algorithms.	L3A-CT, L3B-CT	1.b	L3A-PA, L3B-PA
0003 Understand object-oriented program design.	L3A-CPP, L3B-CPP	1.b	L3A-PA, L3B-PA
Subarea II: Computer Programming			
0004 Understand characteristics of various computational tools.	L3A-CPP, L3B-CPP	1.b	L3A-PA, L3B-PA, L3A-CDS
0005 Understand characteristics and functions of data types and data structures.	L3B-CT	1.a, 1.b	L3B-PA
0006 Understand program control.	L3A-CPP, L3B-CPP	1.a, 1.b	L2-PA, L3A-PA
0007 Understand software development and testing.	L2-CPP, L3A-CPP	1.a, 1.b	L3A-PA, L3-PA
Subarea III: The Internet			
0008 Understand the structure and operations of the Internet.	L3A-CPP, L3A-CD, L3B-CPP	1.c	L3A-NC, L3A-DI, L3B-NC, L3B-DI
Subarea IV: Impacts of Computing and Learning Environments			
0009 Understand the social and global impact of computing.	L3A-CI, L3B-CI	1.d	L3A-IC, L3B-IC
0010 Understand the learning environment and effective teaching and learning strategies in computer science.		2.a, 3.a, 4.a	