Kentucky CTE

Computer Science: Introduction to Programming

Demonstrate knowledge of the program development life cycle. IP1	**1 Demonstrate knowledge of the program development life cycle.** IP1
Design, develop, compile, debug, test, run, and document programs in the language studied. IP2	**2 Design, develop, compile, debug, test, run, and document programs in the language studied.** IP2
Design and develop programs using operators and assignments. IP3	**3 Design and develop programs using operators and assignments.** IP3
Design and develop programs that properly use variables, constants, data types, objects IP4	**4 Design and develop programs that properly use variables, constants, data types, objects** IP4
Design and develop programs that use sequence, selection, and repetition structures. IP5	**5 Design and develop programs that use sequence, selection, and repetition structures.** IP5
Design and develop programs that use simple data structures. IP6	**6 Design and develop programs that use simple data structures.** IP6
Design and develop programs that use effective error and exception handling. IP7	**7 Design and develop programs that use effective error and exception handling.** IP7

Design and develop programs that implement user-defined methods and modular programming. IP8	**8** Design and develop programs that implement user-defined methods and modular programming. IP8
Design and develop programs that implement file processing. IP9	**9** Design and develop programs that implement file processing. IP9
Design and develop programs that implement fundamental features that are unique to the language studied. IP10	**10** Design and develop programs that implement fundamental features that are unique to the language studied. IP10
Design and develop programs using object-oriented programming features, if applicable to the language studied. IP11	**11** Design and develop programs using object-oriented programming features, if applicable to the language studied. IP11
Explain how algorithms are used to produce artificial intelligences (AI). IP12	**12** Explain how algorithms are used to produce artificial intelligences (AI). IP12
Evaluate and critique effectiveness and efficiency of code written. IP13	**13** Evaluate and critique effectiveness and efficiency of code written. IP13