

## SELF - ASSESSMENT GUIDE

<b>Qualification:</b>	PROGRAMMING NC IV	
<b>Unit of competency:</b>	Develop applications using procedural-programming language	
<b>Units of competency covered:</b>	<ul style="list-style-type: none"> <li>• Design program logic</li> <li>• Apply program-development approach</li> <li>• Apply programming skills in a second language</li> </ul>	
Instruction: <ul style="list-style-type: none"> <li>• Read each of the questions in the left-hand column of the chart.</li> <li>• Place a check in the appropriate box opposite each question to indicate your answer.</li> </ul>		
<b>Can I?</b>	<b>YES</b>	<b>NO</b>
• Obtain design documentation and review and clarify requirements for the programs.		
• Determine design approach to be taken in coding and the modules and links required		
• Structure diagrams of program flow and modules according to project standards		
• Document program scope and limits according to project standards		
• Document or reference special routines or procedures according to project standards		
• Identify and revise references for tables, files, inputs, outputs, and other program functionalities according to program requirements		
• Use templates as applicable		
• Check program flow, states or conditions for interfaces and compliance to design documentation requirements		
• Gain/Obtain feedback/input from appropriate person as needed		
• Determine program activities and selects appropriate program development approach		
• Create an initial plan to guide the program development process		
• Use documentation tool for program development		
• Draw program structure and organization		
• Define and use proper naming conventions		
• Document input and output forms accordingly		
• Document program flow and processes accordingly		

• Identify resources for coding and testing programs		
• Monitor and check program activities against plan		
• Review and document opportunities for improvement, any lessons learned and possible recommendations for future projects		
• Observe basic language syntax rules and best practices		
• Use language data-types, operators and expressions		
• Use appropriate language syntax for sequence, selection and iteration constructs		
• Use basic programming constructs algorithms		
• Use modular programming approach		
• Demonstrate ability to create sequential search, insertion and deletion algorithms to operate on one dimensional array		
• Use and code standard sequential access algorithms for text and binary files		
• Use SQL or language facilities to access databases		
• Review code visually or by use of debugging tools provided by the system or by the organization		
• Use debugger to trace code execution and examines variable contents to detect and correct errors		
• Follow guidelines for developing maintainable code adhering to a set of coding standard		
• Follow and uses internal documentation standards and tools		
• Develop and conduct simple tests to confirm the coding process meets design specification		
• Document tests performed		
• Make corrections to the code and the documentation as needed		
I agree to undertake assessment in the knowledge that information gathered will only be used for professional development purposes and can only be accessed by concerned assessment personnel and my manager/supervisor.		
<b>Candidate's Signature:</b>	<b>Date:</b>	
<b>Assessor's Signature:</b>	<b>Date:</b>	