Template for CBQ units

Unit	**Procedural computer programming 3**
SSC Code	PP3
SQA Code	H3AF 04
SCQF Level	8
SCQF Credit Value	20
Guided Learning Hours	
Unit summary	

Learning Outcomes The learner will:	Assessment Criteria
1. Design procedural programs to address loosely-defined problems	1.1 Identify and structure procedures and functions to address problems 1.2 Select and use library functions and procedures 1.3 Structure the design with regard to coupling and cohesion 1.4 Specify the behaviour of functions and procedures to allow efficient implementation, selecting appropriate data types, data and file structures and algorithms 1.5 Record the design in an agreed format
2. Implement a software design using procedural programming	2.1 Use an agreed standard for naming, comments and code layout 2.2 Define the program modules, data and file structures required to implement the design 2.3 Select, declare and initialise variable and data structure types and sizes to meet design requirements 2.4 Adapt control structures to meet the design algorithms 2.5 Develop file structures to meet design file storage requirements

	2.6 Develop input/output routines to implement design requirements 2.7 Develop functions to replace repeating code sequences
3. Develop procedural programs to improve usability	3.1 Seek feedback on the usability of the program 3.2 Analyse feedback to identify improvements in usability 3.3 Design and implement data validation and error handling techniques which improve the usability of the program 3.4 Create on-screen help to assist program users
4. Develop test strategies and apply these to procedural programs	4.1 Develop and apply a test strategy consistent with the design identifying appropriate test data 4.2 Apply regression testing consistent with the test strategy 4.3 Analyse actual test results to identify discrepancies 4.4 Use appropriate tools to estimate the performance of the program 4.5 Critically review the program functionality and usability against design requirements
5. Document a procedural computer program	5.1 Create documentation to assist the users of a computer program 5.2 Create documentation for the support and maintenance of a computer program 5.3 Review program documentation against user and support needs
Additional information about the unit	
Guidance on approaches to assessment	Further guidance is set out in the CBQ Assessment principles developed by e-skills UK and agreed by the Joint Awarding Body Forum.
Details of the relationship between the unit and relevant National Occupational	This unit is based on the e-skills UK NOS for IT professionals (PROCOM) available from www.e-

Standards or other professional standards	skills.com/nos
Location of the unit within the subject/sector classification system	IT Professional
Name of the organisation submitting the unit	e-skills UK