

4.0 Qualification specific information

Pathway 1 - Computer Control Programming SETSA

Learner's must complete the three mandatory assessment routes below plus two from the Optional Section (one assessment route must be chosen from Group A and one assessment route from Group B: a total of five units)

Mandatory: All three mandatory assessment routes must be completed

EAL code	Assessment route title	Level	Credit Value
SETS3/001A	Complying with statutory regulations and organisational safety requirements	5	5
SETS3/002A	Using and interpreting engineering data and documentation	5	5
SETS3/003A	Working efficiently and effectively in engineering	5	5

Group A

One optional assessment route must be completed

EAL code	Assessment route title	Level	Credit Value
SETS3/029A	Providing operational support for computer control programs	6	43
SETS3/030A	Loading and proving computer control programs	6	52

Group B

One optional assessment route must be completed

EAL code	Assessment route title	Level	Credit Value
SETS3/032A	Producing off-line programs for programmable logic controller equipment	6	46
SETS3/033A	Producing operating programs for industrial robots	6	46
SETS3/034A	Producing off-line programs for CNC laser profiling machines	6	46
SETS3/035A	Producing off-line programs for CNC fabrication machines	6	46
SETS3/036A	Producing off-line programs for CNC turning machines	6	46
SETS3/037A	Producing off-line programs for CNC milling machines	6	46
SETS3/041A	Producing off-line programs for CNC boring machines	6	46
SETS3/042A	Producing off-line programs for CNC machining centres	6	46

Pathway 2 - Technical Services SETSB

Learner's must complete the three Mandatory assessment routes below plus one further mandatory assessment route and three optional assessment routes (optional assessment routes must be chosen as follows: - at least one assessment route must be chosen from Group A) (a total of 7 units)

Mandatory : All three mandatory assessment routes must be completed

EAL code	Assessment route title	Level	Credit Value
SETS3/001A	Complying with statutory regulations and organisational safety requirements	5	5
SETS3/002A	Using and interpreting engineering data and documentation	5	5
SETS3/003A	Working efficiently and effectively in engineering	5	5

The following mandatory assessment route must be completed

EAL code	Assessment route title	Level	Credit Value
SETS3/043A	Resolving engineering or manufacturing support problems	6	53

Group A

A minimum of one optional assessment route must be completed

EAL code	Assessment route title	Level	Credit Value
SETS3/044A	Planning engineering activities	6	57
SETS3/045A	Implementing engineering activities	6	59
SETS3/046A	Monitoring engineering activities	6	60
SETS3/047A	Producing technical information for engineering activities	6	49
SETS3/048A	Obtaining resources for engineering activities	6	50
SETS3/049A	Obtaining and controlling materials for engineering activities	6	61
SETS3/050A	Providing technical sales and marketing support for engineering activities	6	45
SETS3/051A	Implementing quality control systems and procedures in an engineering environment	6	49
SETS3/052A	Scheduling engineering activities	6	68
SETS3/053A	Determining engineering requirements for the supply of products or services	6	64
SETS3/054A	Carrying out condition monitoring of engineering plant and equipment	6	42
SETS3/055A	Carrying out fault diagnosis on engineering plant and equipment	6	63
SETS3/073A	Supporting logistics operations in an engineering manufacturing environment	6	42

Group B

EAL code	Assessment route title	Level	Credit Value
SETS3/056A	Providing technical advice and guidance on engineering activities	6	38
SETS3/057A	Carrying out project management of engineering activities	6	82
SETS3/058A	Developing and maintaining effective customer relationships	6	56
SETS3/059A	Handing over and exchanging responsibility for control of engineering activities	6	49
SETS3/060A	Carrying out health and safety risk assessments on engineering activities	6	59
SETS3/061A	Producing contractual arrangements to supply or procure goods or services for engineering activities	6	56
SETS3/074A	Using and maintaining business procedures and protocols in an engineering environment	6	42

Pathway 3 - Engineering Drawing SETSC

Learner's must complete the three Mandatory assessment routes below plus one further optional assessment route (a total of four units)

Mandatory Units: All three mandatory assessment routes must be completed

EAL code	Assessment route title	Level	Credit Value
SETS3/001A	Complying with statutory regulations and organisational safety requirements	5	5
SETS3/002A	Using and interpreting engineering data and documentation	5	5
SETS3/003A	Working efficiently and effectively in engineering	5	5

One optional assessment routes must be completed

EAL code	Assessment route title	Level	Credit Value
SETS3/004A	Producing mechanical engineering drawings using computer aided techniques	6	53
SETS3/005A	Producing engineering drawings/models using 3D computer aided techniques	6	53
SETS3/006A	Producing electrical engineering drawings using computer aided techniques	6	53
SETS3/007A	Producing electronic engineering drawings using computer aided techniques	6	53
SETS3/008A	Producing fabrication/structural engineering drawings using computer aided techniques	6	53
SETS3/009A	Producing fluid power engineering drawings using computer aided techniques	6	53
SETS3/010A	Producing engineering systems/services drawings using computer aided techniques	6	53

Pathway 4 - Quality Control SETSD

Learner's must complete the three mandatory assessment routes below plus one optional assessment routes (a total of four units)

Mandatory: All three mandatory assessment routes must be completed

EAL code	Assessment route title	Level	Credit Value
SETS3/001A	Complying with statutory regulations and organisational safety requirements	5	5
SETS3/002A	Using and interpreting engineering data and documentation	5	5
SETS3/003A	Working efficiently and effectively in engineering	5	5

One optional assessment route must be completed

EAL code	Assessment route title	Level	Credit Value
SETS3/011A	Inspecting mechanical products	6	46
SETS3/012A	Inspecting components using co-ordinate measuring machines (CMM)	6	46
SETS3/013A	Inspecting fabricated components and structures	6	46
SETS3/014A	Carrying out visual inspection of welded fabrications	6	46
SETS3/015A	Inspecting and testing electrical products	6	28
SETS3/016A	Inspecting and testing electronic products	6	28
SETS3/017A	Checking and calibrating mechanical inspection equipment	6	39
SETS3/018A	Checking and calibrating electrical and electronic test equipment	6	39
SETS3/019A	Checking and calibrating process control instrumentation	6	40

Pathway 5 - Non-destructive Testing SETSE

Learner's must complete the three Mandatory assessment routes below plus two assessment routes from the optional section (two assessment routes - one of the following pairs from Option Group A or two assessment routes from Option Group B: a total of five units)

Mandatory: All three mandatory assessment routes must be completed

EAL code	Assessment route title	Level	Credit Value
SETS3/001A	Complying with statutory regulations and organisational safety requirements	5	5
SETS3/002A	Using and interpreting engineering data and documentation	5	5
SETS3/003A	Working efficiently and effectively in engineering	5	5

Group A

One pair of optional assessment routes must be completed from either Group A or two assessment routes from Group B

EAL code	Assessment route title	Level	Credit Value
SETS3/024A	Preparing ultrasonic flaw detection equipment for testing activities	6	38
SETS3/025A	Inspecting engineering products using ultrasonic testing techniques	6	49
OR			
SETS3/026A	Preparing work areas for radiographic testing activities	6	43
SETS3/027A	Carrying out radiographic testing activities	6	41

Group B

Two optional assessment routes must be completed

EAL code	Assessment route title	Level	Credit Value
SETS3/021A	Specifying non-destructive testing instructions for inspection activities	6	35
SETS3/022A	Inspecting engineering products by penetrant flaw detection techniques	6	44
SETS3/023A	Inspecting engineering products by magnetic particle testing	6	44
SETS3/028A	Analysing and interpreting the results of radiographic tests	6	48

Pathway 6 - Mechanical Testing SETSF

Learner's must complete the three Mandatory assessment routes below plus a further three mandatory assessment routes (a total of 6 units)

Mandatory: All three mandatory assessment routes must be completed

EAL code	Assessment route title	Level	Credit Value
SETS3/001A	Complying with statutory regulations and organisational safety requirements	5	5
SETS3/002A	Using and interpreting engineering data and documentation	5	5
SETS3/003A	Working efficiently and effectively in engineering	5	5

The following three mandatory assessment routes must be completed

EAL code	Assessment route title	Level	Credit Value
SETS3/075A	Preparing mechanical testing equipment	6	38
SETS3/076A	Carrying out mechanical testing	6	37
SETS3/077A	Analysing and interpret the results of mechanical tests	6	32

