

A decorative blue dashed line runs vertically down the center of the slide, consisting of alternating thick and thin segments.

Cameron Holt (Product Specialist)

Qualification Introduction / handover

- 610/0793/6 – EAL Level 3 Extended Diploma in Machining (Development Knowledge)
- Whilst every effort has been made to ensure the information contained within this presentation is accurate, this has been provided as a quick reference only and must not be relied upon. All stakeholders should refer to the latest qualification manual before taking any action to ensure they are working to the most accurate and current source.

EAL Level 3 Extended Diploma in Machining (Development Knowledge)

- Planned registrations from the 1st September 2022
- Materials are available from the 20/07/22 through On-line services
- Developed at the request of the employer working group for the new apprenticeship standard: ST1305 Level 3 Machining Technician
- Utilises units from the existing 603/1033/9 Level 3 Diploma in Machining (Development Knowledge) within a new qualification structure (rule of combination) and also incorporates:
 - Selective level 2 skills unit(s) from 601/7179/0 Level 2 Diploma in Advanced Manufacturing Engineering (Foundation Competence)
 - Additional level 3 units that have been imported 603/1353/5 Level 3 Diploma in Advanced Manufacturing Engineering (Development Knowledge)

*Straightforward Approval for Centres which have the following qualifications on their remit already:

- 603/1033/9 EAL Level 3 Diploma in Machining (Development Knowledge)
- 601/7179/0 EAL Level 2 Diploma in Advanced Manufacturing Engineering (Foundation Competence)
- 603/1353/5 EAL Level 3 Diploma in Advanced Manufacturing Engineering (Development Knowledge)
- CASS Risk Rating will be set to align to the highest risk rating from the above three qualifications – presently '4'
 - *Subject to no existing issues or concerns i.e. maladministration, related actions or sanctions on the Centre

Qualification Structure / Rule of Combination (ROC), for further information please see appendix 1

- Credit value 111 to 130, 840 Guided Learning Hours and 1110 Total Qualification Time (hours).
- 4 x mandatory level 3 units (270 – 285 GLH)
- Mandatory level 2 skills unit(s): either AU2C2-048 or a combination of at least two other units from ROC (min 120 GLH)
 - The applicable level 2 skills unit(s) must be completed before the learner undertakes the optional machining specific units
- 3 x optional level 3 machining specific units (225 GLH)
- 2 x optional level 3 general / supportive units (150 GLH)
- 1 x optional level 3 enhancing technologies / sustainability unit (75 GLH)

Recognition of Prior learning (RPL)

- Detailed guidance relating to the RPL for this qualification has been provided within Smarter Touch document library. Please refer to the document titled: RPL Mapping to 610.0793.6 EAL Level 3 Extended Diploma in Machining (Development Knowledge). Any RPL must comply with EAL's RPL policy.

Recognition of Prior Learning (RPL) Mapping to 610/0793/6 EAL Level 3 Extended Diploma in Machining (Development Knowledge)

This document has been provided to signpost units from existing EAL qualifications that are considered to 'Fully Map' to the units within EAL Level 3 Extended Diploma in Machining (Development Knowledge). Any RPL must comply with EAL's RPL policy and it is the Centre's responsibility to ensure all necessary checks, processes and procedures have been followed. EAL reserves the right to change this guidance at any time. Where EAL codes/Ofqual codes have been shown below within the columns underneath the respective qualification numbers, these units (EAL code) are considered to 'Fully Map' to the units shown in the far left hand column. Where N/A has been indicated, a comparable unit has not been identified. This guidance to include the table below must be read in conjunction with the qualification structure contained within the qualification manual which details the rule of combination (ROC) and any applicable barred unit combinations.

Relevant EAL Qualifications

603/1033/9 L3 Diploma in Machining (Development Knowledge)
 603/1353/5 L3 Diploma in Advanced Manufacturing Engineering (Development Knowledge)
 603/1354/7 L3 Extended Diploma in Advanced Manufacturing Engineering (Development Knowledge)
 601/5800/1 L3 Certificate in Engineering Technologies
 601/5799/9 L3 Subsidiary Diploma in Engineering Technologies
 601/5801/3 L3 Diploma in Engineering Technologies
 601/5802/5 L3 Extended Diploma Engineering Technologies
 601/7179/0 L2 Diploma in Advanced Manufacturing Engineering (Foundation Competence)
 603/3220/7 L2 Diploma in Engineering Operations
 600/8264/1 L2 Diploma in Performing Engineering Operations

610/0793/6 EAL Level 3 Extended Diploma in Machining (Development Knowledge) – Mandatory level 3 units			603/1033/9		603/1353/5, 603/1354/7		601/5800/1, 601/5799/9, 601/5801/3 601/5802/5	
EAL code	Unit title	Ofqual code	EAL code	Ofqual code	EAL code	Ofqual code	EAL code	Ofqual code
AME3/001	Engineering & environmental health and safety	T/615/4847	AME3/001	T/615/4847	N/A	N/A	QET3/001A	L/507/0328
AME3/001B	Health and safety in the engineering workplace	K/650/2800	N/A	N/A	AMEDK3/001	K/615/6482	N/A	N/A
AME3/002	Engineering communications	A/615/4848	AME3/002	A/615/4848	AMEDK3/002	M/615/6483*	N/A	N/A
AME3/003	Properties and applications of engineering materials	F/615/4849	AME3/003	F/615/4849	AMEDK3/007	L/615/6488	N/A	N/A
AME3/004	Engineering mathematics	T/615/4850	AME3/004	T/615/4850	AMEDK3/003	T/615/6484**	QET3/003	T/507/0291

*AMEDK3/002 / M/615/6483 – Title is 'Communications for Engineering Technicians'

**AMEDK3/003 / T/615/6484 – Title is 'Mathematics for Engineering Technicians'

Assessment strategy

- The assessment strategy reflects the combining of the requirements from both the:
 - 603/1033/9 EAL Level 3 Diploma in Machining (Development Knowledge)
 - and
 - 601/7179/0 EAL Level 2 Diploma in Advanced Manufacturing Engineering (Foundation Competence)

Assessment strategy (continued)

• Level 3 knowledge units

- Staffing requirements align to technical certificate/VRQ
- Typical VRQ requirements apply to internal and external assessments

• Level 2 skills units

- Staffing requirements align to an occupational/NVQ qualification
- Units derive from employer units of competence (EUC's)
- a minimum of two different examples of performance of the unit required
- much to be gained by acquiring the basic engineering competencies required in the Foundation Phase of the Apprenticeship whilst working in a sheltered but realistic environment

Grading

- **Level 3 knowledge units**

- Pass, merit distinction
- IQA must include the moderation of completed knowledge and practical assessments to ensure marks have been awarded accurately and consistently by assessors across learners

- **Level 2 skills units**

- Pass/refer (competent or not yet competent)

Appendix 1 - ROC

- The qualification will be awarded when the learner has successful the required combination of mandatory and optional units from the list within the table below.
- This qualification has a credit value 111 to 130, 840 Guided Learning Hours and 1110 Total Qualification Time (hours).
- The applicable level 2 skills unit(s) must be completed before the learner undertakes the level 3 optional machining specific units

Appendix 1 – ROC (continued)

- **Mandatory level 3 Units: all **three** units must be completed:**
 - AME3/002 – Engineering Communications
 - AME3/003 – Properties and Applications of Engineering Materials
 - AME3/004 – Engineering Mathematics
- **Plus, either AME3/001 or AME3/001B must be completed from the choice below:**
 - AME3/001 – Engineering and environmental health and safety (inc external assessment)
 - AME3/001B – Health and safety in the engineering workplace

Appendix 1 – ROC (continued)

- **Mandatory level 2 skills unit(s): either **AUEC2-048** or a combination of at least **two** other units listed below, where unit combinations are not barred:**
 - AUEC2/005 – Producing components using hand fitting techniques
 - AUEC2/012 – Producing mechanical assemblies
 - AUEC2/013 – Preparing and using lathe for turning operations
 - AUEC2/014 – Preparing and using milling machines
 - AUEC2/019 – General turning, milling and welding applications
 - AUEC2/033 – Preparing and using grinding machines
 - AUEC3/048 – General machining, fitting and assembly applications

Appendix 1 – ROC (continued)

- Barred unit combinations have been set on the premise that the learner should not be able to achieve the mandatory level 2 skills without having undertaken at least one machining process. Barred units may be undertaken as additional units. The following units are barred:
 - Where unit AUEC2-005 is undertaken, AUEC2-012 is barred and vice versa
 - Where unit AUEC2-019 is undertaken, AUEC2-013 and AUEC2-14 are barred

Appendix 1 – ROC (continued)

- Optional level 3 machining specific units: at least **three** units from the following units must be completed:
 - AME3/006 – Advanced manufacturing techniques computer numerical control – CNC
 - AME3/007 – Precision grinding
 - AME3/008 – Gear cutting
 - AME3/009 – Advance milling
 - AME3/010 – Advanced turning
 - AME3/011 – Specialist machining
 - AME3/013 – Computer numerical control (CNC) programming/machining

Appendix 1 – ROC (continued)

- Optional level 3 general / supportive of machining activity units: at least **two** units from the following units must be completed:
 - AME3/005 – Computer Aided Design (CAD) Techniques
 - AME3/012 – Advanced Manufacturing Techniques
 - AME3/014 – Further Engineering Mathematics
 - AME3/015 – Engineering Inspection and Quality Control
 - AME3/016 – Engineering Organisational Efficiency and Improvement (inc external assessment)
 - AME3/017 – Mechanical Engineering Principles
 - AME3/018 – Engineering design process
 - AME3/019 – Engineering drawing
 - AME3/020 – Mechanical measurement and inspection techniques
 - AME3/021 – Toolmaking/presswork/extrusion design

Appendix 1 – ROC (continued)

- Optional enhancing technologies / sustainability unit: at least **one** unit from the following units must be completed:
 - AME3/022 – Industrial robot technology
 - AME3/023 – Workplace improvement
 - AME3/024 – Additive manufacture

Further information can be obtained from

- **Your Centre's EQA or Cameron Holt (Product Specialist)**
cholt@eal.org.uk
- **Customer experience enquiries**
 - If you'd like to speak to someone about becoming an EAL Recognised Centre, delivering EAL qualifications or for any other enquiries, please contact our friendly Customer Experience Team, Monday to Friday, 8 am to 5 pm.
 - Tel: +44 (0)1923 652400
Email: customer.experience@eal.org.uk

Thanks