



Course Information

L3 DIPLOMA IN ENGINEERING AND MANUFACTURING SUPPORT TECHNOLOGIES (EMST)

This Course Information document must be read in conjunction with the 'TESA Handbook' which can be found here -

https://www.theengineeringtrust.org/tesa/course_downloads/

EAL - OUR AWARDING BODY

EAL maintain a comprehensive range of Engineering & Manufacturing and Building Services Engineering qualifications, designed and maintained by industry and assessment experts. ETT use EAL qualifications both at The Engineering Skills Academy (TESA) and for the competency qualifications delivered within your workplace.

COURSE AIMS

Our L3 EMST is designed for apprentices working in the engineering and manufacturing industry. This qualification has been developed at the request of the employer working group for the apprenticeship Standard: ST1395 Level 3 Engineering and Manufacturing Technical Support Technician as a mandated qualification. It is a recognised diploma qualification required for your apprenticeship plus will give you the wider knoweldge which allows you to further progress in employment over the longer term. It is recognised as a technician qualification and can lead onto further courses at higher levels e.g. HNC or above.

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ONE ROUTEWAY

You will follow the below routeway which has been agreed with your employer and stated in your apprenticeship paperwork.

Routeway

Unit 1: Health & safety in the Engineering Workplace

Unit 2: Communications for Engineering Technicians

Unit 3: Mathematics for Engineering Technicians

Unit 4: Properties & applications of engineering material

Unit 7: Mechanical principles of Engineering Systems

Unit 9: Organisational Efficiency and Improvement

Unit 10: Electro, Pneumatic and Hydraulic Systems and Devices

Unit 11: Engineering Drawing for Technicians

Unit 12: Computer Aided Design (CAD) Techniques

Unit 21: Mechanical Measurement and Inspection Techniques

Unit 22: Electrical and Electronic Principles in Engineering

Unit 25: Workplace Improvement

Unit 33: Additive Manufacturing

GRADING

'Unit' is the area of study as described above.

'Component' is an area of study within a 'unit'.

You must achieve at least a Pass in ALL units for the qualification to be awarded. If you are unsuccessful in one or more of the units then the overall result for the qualification will be 'referred' and a certificate will not be awarded.

Providing you are successful in ALL units, the final grade for the qualification will be determined from the grades achieved by you within all units. The grading criteria is set out for each component and will be given to you at the start of each unit and component.

GRADING OF UNITS

Once all assessments/assignments have been completed and marks established, these are then added together and an overall grade for the unit is given.

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GRADING OF UNITS (CONT.)

As an example.

Unit 1: Health and Safety in the Engineering Workplace

This unit is made up of 3 components and they will be marked based upon the learning outcomes as set out below.

- 1. Understand health and safety legislation and regulations
- 2. Know about hazards ad risks in the workplace
- 3. Understand the methods used when reporting and recording accidents and incidents

A mark is determined by the detail within the assessment/assignment for each component and can loosely be shown by the below table.

1 Mark 2 Marks 3 Marks Learners provide a brief Learners provide a clear Learners provide a clear, explanation containing some explanation containing most detailed and precise details of the possible details of the possible explanation containing all consequences and cost consequences and cost relevant details of the possible implications of employers and implications of employers and consequences and cost employees not abiding by employees not abiding by implications of employers and legislation and regulations legislation and regulations employees not abiding by when carrying out their roles when carrying out their roles legislation and regulations and responsibilities in a given and responsibilities in a given when carrying out their roles health and safety situation and health and safety situation and and responsibilities in a given health and safety situation and environmental management. environmental management. A basic assessment is made A clear assessment is made environmental management. containing some details of the containing most details of the A clear, detailed and precise extent to which legislation and extent to which legislation and assessment is made containing all relevant details of the extent regulations are satisfied in a regulations are satisfied in a given health and safety given health and safety to which legislation and situation. situation. regulations are satisfied in a given health and safety situation.

The marks achieved within each component of the unit are added together and this determines your overall grade for the unit as shown in Table 1.

Table 1		
Grade	Marks range	
Pass	3 - 4	
Merit	5 – 6	
Distinction	7 - 9	

GRADING OF THE WHOLE QUALIFICATION

The grade from each unit will be converted to a mark (table 2 below). The converted mark for each unit will be added together. This mark will be used to determine the overall grade for the qualification (table 3). You will compete 11 units however the marks range is based on 12 as Unit 4 Project is a double unit.

Table 2		
Grade	Mark	
Pass	1	
Merit	2	
Distinction	3	

Table 3		
Grade	Marks ranges	
Pass	13 - 20	
Merit	21 – 30	
Distinction	31 - 39	

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ASSESSMENT/ASSIGNMENT GUIDANCE

For each unit/component there will be typically two types of evidence that you will be graded upon. The rules around these can be found below.

1. Internal Assessments

Internal assessment includes practical and/or theory assessments, which have been designed to assess your knowledge, understanding and skills for individual units. These are carried out in a controlled environment at refer and you will be required to complete them within a set refer. Your assessment will be marked and graded which in turn will be converted to a score of 1, 2 or 3 based upon grading criteria.

Re-taking internal assessments

If you fail to achieve a Pass in an internally marked controlled assessment you will be permitted ONE re-take opportunity after feedback and appropriate tuition has taken place. If you undertake a resit, a Pass grade is the maximum that will be applied irrespective of the grade you achieve for the re-take assessment.

If you achieve a pass in the first assessment, you will not have the opportunity to resit the assessment to improve the grade.

2. Assignments

Assignments once set can be completed outside of TESA within a set time period, typically 2 weeks. Assignments will be based upon what you have been taught at TESA so it is extremely important that you take on the learning and maintain accurate notes to refer back to.

Upon submission of an assignment, it will be marked and graded which in turn will be converted to a score of 1, 2 or 3 based upon grading criteria.

Resubmission of assignments

If you fail to achieve a Pass in an assignment, you will be permitted ONE resubmission opportunity after feedback has been given. If you undertake a resubmission, a Pass grade is the maximum that will be applied irrespective of the grade you achieve for the resubmitted assignment.

If you achieve a Pass or Merit in an assignment, you will be permitted ONE resubmission opportunity to improve your original mark. If you undertake a resubmission a hand-in date will be set. It will then be marked and if successful a higher grade will be given. If the resubmission does not improve the grade, then the original will be given.

APPEALING AN ASSESSMENT/ASSIGNMENT MARK

If you feel that a you have been given is wrong can then you have the right to appeal. You can find more information on how to do this in the **TESA Student Handbook**.

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REASONABLE ADJUSTMENT

ETT can make reasonable adjustments to an assessments or assignments to take account of individual needs. This is in line with awarding body (EAL) guidance for reasonable adjustment and special consideration in vocational internally assessed units. In most instances, adjustments can be achieved by following the guidance, for example allowing the use of assistive technology, additional time to complete assessments or adjusting the format of the evidence.

If you wish to discuss any individual needs, please speak to your Tutor(s) or the Head of Engineering Learning.

CONDITIONS FOR THE AWARD

To achieve the award of L3 Diploma in Engineering and Manufacturing Support Technologies , you must undertake and complete all 13 units listed. All units are internally delivered and assessed with external verification from the awarding body, EAL.

Each unit is assessed through a series of assessments and/or assignments, and each is individually graded. The overall grade is then given for the unit based upon the grades for each assessment/assignment undertaken.

Assessment is made based on individual evidence, unless otherwise stated. You must complete a submission document alongside your work, confirming it is your own and has not been plagiarised. TESA has a policy that endorses and states actions if plagiarism is detected, see the **TESA Student Handbook** for more details.