

# **Enhanced ICT and Engineering Hybrid**

**Programme Specification** 

This version of the specification is valid until the FE sector is informed otherwise.

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Noddir gan **Lywodraeth Cymru**Sponsored by **Welsh Government** 

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## 1. Introduction

This Programme Specification sets out the requirements for delivery of the Enhanced ICT and Engineering Hybrid Programme. It provides an overview of the programme requirements, including learner eligibility and entry conditions; and details the data submission requirements to enable Medr to monitor programme delivery and learning outcomes for the Enhanced ICT and Engineering Hybrid Programme.

This Specification also forms part of the Agreement between institutions and the Welsh Ministers for the delivery and funding of Enhanced Learning Programmes. You must ensure that your Enhanced ICT and Engineering Hybrid Programme provision adheres to this Programme Specification.

One programmes of study is currently available, at level 3.

# 2. Purpose of the Programme

The Enhanced ICT and Engineering Hybrid Programme is a one-year programme, which has been developed to equip learners with the skills, knowledge and understanding they need to enter into a career in either the Information Technology or Engineering industries.

The Programme forms a closer link between SSA 6 Digital Technology and SSA 4 Engineering, and offers an opportunity for learners to gain industry-recognised qualifications alongside hands-on work experience.

The main aim of the Enhanced ICT and Engineering Hybrid Programme is to progress learners:

- preferably onto a full apprenticeship in the Information and Communications Technology or Engineering industries; or
- to higher education; or
- into employment upon completion of the programme.

At the same time the Programme will look to:

- increase the standard number of hours of learning delivered by institutions to a minimum of 24 hours per week to cover for an enhanced curriculum;
- equip learners with the skills and knowledge needed to thrive in the era of advanced manufacturing and digital transformation through a collaboration between STEM<sup>1</sup> subjects and Industry 4.0<sup>2</sup> sector needs;

<sup>&</sup>lt;sup>1</sup> STEM stands for Science, Technology, Engineering, and Mathematics - fields that play a pivotal role in driving innovation and solving real-world problems. In education, STEM-focused curricula prepares learners for high-demand careers in areas like software development, robotics, biotechnology, and aerospace engineering.

<sup>&</sup>lt;sup>2</sup> Industry 4.0, often referred to as the Fourth Industrial Revolution, represents the integration of advanced technologies into industries to enhance production, efficiency, and decision-making. Key technologies are:

<sup>•</sup> Internet of Things (IoT): connecting devices and machines for real-time data sharing and communication

<sup>•</sup> Artificial Intelligence (AI) and Machine Learning: improving decision-making and enabling automation

Big Data and Analytics: extracting actionable insights from vast amounts of information

Automation and Robotics: streamlining manufacturing and reducing human error

<sup>•</sup> Cybersecurity: ensuring the safety of interconnected systems

- utilise direct employer engagement through the work placement element of the learning programmes; and
- prepare participants for entry into employment via the Apprenticeship Programme where they will work towards an Apprenticeship framework.

## 3. Delivery Overview

Each programme should be delivered on a full-time basis for a minimum average of 24 hours per week over a total of at least 40 weeks.

As an integral part, programmes must include at least 5 weeks of work placement (up to a maximum of 12 weeks)<sup>3</sup> or the equivalent in individual days and should also incorporate a series of workplace trips or visits from industry specialists. It is expected that this will involve a minimum of 5 visits in the first 6 months of the programme.

As this is an Enhanced Programme, the learning and training undertaken should be at a higher level of intensity than normal provision, with some learning undertaken at a higher level where needed in order to satisfy the expectations and requirements of the sector.

#### 4. Learner Eligibility and Entry Requirements

To be eligible for entry onto the programme a learner must be aged 16 to 24 on 31 August, immediately prior to the commencement of the programme. Please note that Medr also expects priority to be given, in the first instance, to those learners aged 16 to 19 on the 31 August, immediately prior to the commencement of the programme.

The following minimum requirements will apply for all entrants to the programme:

- a minimum of 5 GCSEs at grade C or above.
- at least one grade C must be achieved in: either
  - GCSE Mathematics / GCSE Mathematics Numeracy or
  - o GCSE English / GCSE Welsh (First) Language
- successful completion of a level 2 Diploma in Creative Media Production with an appropriate mix of units.

Note: Learners who have achieved a grade D in GCSE Mathematics / GCSE Mathematics Numeracy may be admitted provided they have achieved a grade C or above in GCSE English / GCSE Welsh (First) Language. By the same token, learners who have achieved a grade D in GCSE English / GCSE Welsh (First) Language can be admitted provided they have achieved a grade C or above in GCSE Mathematics / GCSE Mathematics Numeracy. Only one grade D in either GCSE Mathematics / GCSE Mathematics Numeracy or GCSE English / GCSE Welsh (First) Language is acceptable, but not in both. Learners who have achieved a grade D on entry in either GCSE Mathematics / GCSE Mathematics Numeracy or GCSE English / GCSE Welsh (First) Language should be working towards a grade C or above as part of their programme of learning.

<sup>&</sup>lt;sup>3</sup> The same minimum average of 24 hours per week applies.

Colleges may want to set higher eligibility criteria if previous experience suggests completion and successful outcome require more than the minimum set out in this document.

## 5. Programme Content

In line with the requirements set out in the *Post-16 Funding Framework – Guide and Programmes Directory*<sup>4</sup>, the programme must follow the same basic structure as other full-time learning programmes, namely:

- a Core:
- Main Qualification(s);
- Community Learner Industry Focus (CLIF); and
- Work Related Experience (via Work Placement).

### The Core

The core of the programme must include the delivery of relevant Essential Skills Wales (ESW) or GCSE qualifications to support entry on to an Apprenticeship programme. The minimum requirement includes Essential Communication Skills and Essential Application of Number Skills.

The level of ESW may be different to the main qualification(s), based on the outcomes of the initial diagnostic assessment for each learner. ESW qualifications may be at the same level or one level above or below, but as a minimum we would expect learners on level 3 programmes to be undertaking ESW at level 2.

Learners working towards GCSE Mathematics / GCSE Mathematics Numeracy or GCSE English / GCSE Welsh (First) Language are not required to undertake separate Essential Communication Skills and Essential Application of Number Skills alongside each GCSE.

#### Main Qualification(s)

Main qualification(s) within learning programmes must be selected from those listed on the Qualifications in Wales database<sup>5</sup> as eligible for funding and approved for delivery.

This component of the programme must be the City & Guilds Level 3 Diploma in ICT Systems Support (7540-13)<sup>6</sup>.

#### Community Learner Industry Focus (CLIF)

Qualifications delivered under the CLIF should add value to a programme by developing wider skills or by developing skills to a higher level to aid progression to employment or an apprenticeship programme.

<sup>&</sup>lt;sup>4</sup> Please see Funding for providers.

<sup>&</sup>lt;sup>5</sup> See Qualifications in Wales.

<sup>&</sup>lt;sup>6</sup> The QW Approval/Designation No. is C00/0286/4 and the OfQual Qualification number is 501/1585/6.

This component of the programme is met through delivering the following Quality Assured Lifelong Learning (QALL) units:

Title	Awarding Organisation	Unit Owner Reference	Unit Level	Guided Learning Hours	Unit Credit Value
	Pearson Education Ltd		2	64	14
Preparing and	ETC Awards Limited	D/504/6390 / PEO2-018			
Using	GQA Qualifications Limited				
Industrial Robots	City and Guilds of London Institute				
	Excellence, Achievement & Learning Limited				
	Pearson Education Ltd	D/504/6437 / PEO2-047	2	61	11
Producing	ETC Awards Limited				
Components	GQA Qualifications Limited				
by Rapid Prototyping Techniques	City and Guilds of London Institute				
	Excellence, Achievement & Learning Limited				
Producing Electrical or Electronic Engineering Drawings using a CAD System	Pearson Education Ltd		2	61	11
	ETC Awards Limited				
	GQA Qualifications Limited	R/504/6421 /			
	City and Guilds of London Institute	PEO2-032			
	Excellence, Achievement & Learning Limited				
Selecting and Using Programmable Controllers	Pearson Education Ltd	D/600/0276 / Unit 19		60	10
	ETC Awards Limited	D/600/0276 / N/A	3		
Industrial	Pearson Education Ltd	Y/602/5130 / Unit 40		60	40
Robot Technology	Excellence, Achievement & Learning Limited	L/651/2116 / EMST3/030	3	75	10

## Work Placements

For the work placements, institutions are expected to work with employers to provide meaningful and hands-on work experience for learners. This element of the programme can be completed outside of term time or during half-term.

The Programme must include at least one work placement with an employer not partly or wholly owned by the institution. A college-based Realistic Working Environment (RWE) should only be used as a last resort to make up the required number of days.

Please note that the use of RWE may adversely affect the progression of a learner, as feedback from industry indicates that a placement in a True Work Environment is more advantageous for learners looking to progress to employment or an apprenticeship.

Institutions must ensure that arrangements are in place to oversee any work placements; including up-to-date health and safety and risk assessments.

Institutions must also ensure that each learner has a Work Placement Plan, which sets out his/her planned attendance and the arrangements in place for monitoring the placement. A suggested template for a Work Placement Plan is attached at Annex A.

#### **Toolkit**

Each learner is eligible to receive a toolkit, the value of which should be at least £200. Financial provision for the purchase of this has been included in the overall programme funding.

#### 6. Data Submission Requirements

Medr will use data from the Lifelong Learning Wales Record (LLWR) / Pupil Level Annual School Census (PLASC) to monitor programme delivery and learning outcomes for the Enhanced ICT and Engineering Hybrid Programme.

In line with the conditions set out in the annual *Grant Award Letter*, institutions must ensure that data is submitted in the correct format and in a timely manner.

The LLWR User Support Manual<sup>7</sup> and the PLASC Technical Completion Notes<sup>8</sup> set out the guidelines that institutions should follow when submitting data for the current academic year.

#### **Programme Code**

The following programme code (LP74) should be used for learners on the Enhanced ICT and Engineering Hybrid Programme:

0601C03B Enhanced IT / Engineering Hybrid Programme Level 3

# Recording of Work Placement(s)

Medr will use the information submitted via the LLWR fields *LP12* (*Employer Name*) and *LP13* (*Employer Postcode*) to monitor this requirement, thus the institutions must ensure that data is completed in a timely manner for each learner.

We appreciate that some learners will not be linked with an employer or have a work placement in place at the start of the programme, thus the expectation is that the relevant details to be populated as soon as the employer information is known and whilst the learner is still on-programme.

<sup>&</sup>lt;sup>7</sup> See <u>Lifelong learning Wales record (LLWR)</u>.

<sup>&</sup>lt;sup>8</sup> See Pupil level annual school census (PLASC).

Institutions must also ensure that any hours spent on work placement with an employer are recorded using the following LLWR fields:

- LP70 (Estimated Work Based Hours); and
- LP72 (Actual Work Based Hours).

# 7. Monitoring and Audit

Monitoring and audit will play a role in ensuring that the guidance is being applied consistently and to help assesses whether policies, procedures and controls are adequate.

## Monitoring Approach

The approach to monitoring will focus on the following areas:

- · compliance with the programme's specifications; and
- learning outcomes for the programme.

This will be achieved through a combination of in-year and end-of year monitoring; a data matching exercise; and detailed audit testing of learners on Enhanced Programmes.

#### Compliance with Programme Specification

Medr will use LLWR / PLASC data to monitor compliance with the programme specification. This will include:

- regular monitoring of learners' work placements using LP12 and LP13 data; and
- monitoring of the data from the programme and activity datasets to check that delivery requirements are being met.

#### **Learning Outcomes**

Learner destination is a key performance measure for the programme and crucial in evaluating programme delivery. The expectation is that the majority of learners who successfully complete the Enhanced ICT and Engineering Hybrid Programme will progress to employment and, ideally, employment with an apprenticeship in either an Information and Communications Technology or Engineering disciplines.

We recognise, however, that a handful of learners may wish to continue with their full-time studies after completing an Enhanced ICT and Engineering Hybrid Programme. For learners who have completed the level 3 programme, progression should be on to the second year of a full-time level 3 programme where the learning will support progress towards entering full-time higher education or on to an apprenticeship programme.

#### Audit Testing

In addition to the approach to monitoring set out above, all data returned by the Further Education institutions will be subject to existing end of year audit requirements<sup>9</sup>. Within

<sup>&</sup>lt;sup>9</sup> The audit requirements for the current year will be published at the end of the academic year.

this, a particular emphasis will be placed in the *Auditors' Notes for Guidance* to ensure that external auditors appropriately sample learners undertaking the Enhanced Programmes.

# 8. Contact Details

For any queries relating to the content of this Programme Specification, please contact Medr at the following mailbox: <a href="mailto:lnvestmentandPerformance@medr.cymru">lnvestmentandPerformance@medr.cymru</a>.

# 9. Annexes

# A. Recording the Work Experience<sup>10</sup>

Learner name:								
Qualification(s) being undertal	ken:							
Employer name:								
Work placement address:								
Nature of business:								
Name of person learner will re	port to:							
Planned attendance:								
Planned monitoring visits by to	utor:							
I agree to the above Work Placement Plan:								
Signed by Learner:	Signed by Tutor:	Signed for Employer:						
Learner name:	Tutor name:	Position in company:						
Date:	Date:	Date:						

**Enhanced ICT and Engineering Hybrid Programme – Work Placement Plan** 

 $<sup>^{\</sup>rm 10}$  NB: This is only a suggested template for the Work Placement Plan.





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