

Pathway No: FR05101 (pathway 1605)
Issue No: 1 **Issue Date:** 1/1/2024
Review by Date:
Last Updated:
Issuing Authority: Welsh Government



Llywodraeth Cymru
Welsh Government

Welsh Apprenticeship Pathway

in

Healthcare - Informatics

The content of this Pathway has been agreed by Health Education and Improvement Wales (HEIW), in collaboration with Healthcare Sector Employers. This is the only Apprenticeship Pathway in the Healthcare sector approved for use in Wales that is eligible for Welsh Government funding.

More Information can be obtained from:

FEAD DfES • Ty Afon
Bedwas Rd • Bedwas
Cf838WT

DfES-ApprenticeshipUnit@gov.wales
Gwefan • website: www.llyw.cymru
www.gov.wales

Contents

[Learning Programme Content](#)

[Entry Requirements](#)

[Apprenticeship Pathway Learning Programme\(s\)](#)

- [Level 2 – Health Informatics](#)
- [Level 3 – Health Informatics](#)
- [Level 4 - Health Informatics](#)

[Other Additional Requirements](#)

[Job Roles](#)

[Progression](#)

[Equality & Diversity](#)

[Employment Responsibilities and Rights](#)

[Responsibilities](#)

[Annex 1 – Level 2: Health Informatics](#)

[Annex 2 – Level 3: Health Informatics](#)

[Annex 3 – Level 4: Health Informatics](#)

LEARNING PROGRAMME CONTENT

The Learning Programme provision shall comprise of three mandatory elements:

- Qualifications,
- Essential Skills
- On/off the job training

The total minimum credit value required for the Level 2 Pathway Health Informatics is 32 credits.

The total minimum credit value required for the Level 3 Pathway Health Informatics is 52 credits.

The total minimum credit value required for the Level 4 Pathway Health Informatics is 116 credits.

ENTRY REQUIREMENTS

ENTRY REQUIREMENTS

Employers from the Health Sector using this framework offer a broad range of skills training through the individual pathways, and welcome applicants from a wide range of diverse backgrounds and anticipate that they will have a wide range of experience, achievements and qualifications. The selection process by employers (or in partnership with learning providers) may include initial assessment where applicants will be asked if they have any qualifications or experience that can be accredited against the requirements of the apprenticeship. Apprentices will need to be able to comply with the Pre-Employment Checks of the employing organisation.

Level 2

Applicants to this Apprenticeship will be from different age groups, with differing backgrounds and experience. As a guide, applicants may enter via a range of routes including from:

- Work (current role)
- Work experience
- School
- College
- Training and/or experience which may include a portfolio showing what they have done

Applicants may have already achieved a range of qualifications eg:

- Essential Skills Wales
- Welsh BaccaLaureate
- Welsh BaccaLaureate with Principal Learning
- Foundation learning at Level 1
- Other Level 1 qualifications
- GCSEs in related subjects e.g. computer science or other Level 2 qualifications

Personal Attributes

Employers look for health sector apprentices who demonstrate the values and behaviours of the employing organisation and who:

- Are well organised and conscientious

- Can work in a team
- Are keen and motivated to work in a health informatic/digital environment
- Are willing to undertake a course of training both on-the-job and off-the-job and apply this learning in the workplace
- Have basic literacy, numeracy and communication skills on which the apprenticeship will build
- Are willing to undergo an Occupational Health Check.
- Are willing to undergo Disclosure and Barring Service checks if required (this may be needed as apprentices may come into contact with children, young people or vulnerable adults)
- Can be flexible as there may be a requirement to work shifts

Individual Healthcare sector employers may have additional employment entry requirements e.g. ability to travel between different locations depending on where services are delivered.

Level 3

Entry requirements are the same as Level 2, but also includes

Applicants may have already achieved a range of qualifications eg:

- Essential Skills Wales
- Level 2 Apprenticeship
- GCSEs
- GCEs
- Welsh Baccalaureate (at this time there is no credit transfer)
- Welsh Baccalaureate with Principal Learning (at this time there is no credit transfer)
- Other level 2 qualifications

Apprentices who wish to accredit any prior learning must select options within the Pathway which will equip them with new skills and learning.

Level 4

Entry requirements are the same as Level 3, but also includes

Applicants may have already achieved a range of qualifications eg:

- Essential Skills Wales
- Level 3 Apprenticeship
- GCSEs
- GCE A Levels
- Welsh Baccalaureate (at this time there is no credit transfer)
- Welsh Baccalaureate with Principal Learning (at this time there is no credit transfer)
- Other level 3 qualifications

Apprentices who wish to accredit any prior learning must select options within the Pathway which will equip them with new skills and learning.

APPRENTICESHIP PATHWAY LEARNING PROGRAMME(S)

Level 2: Health Informatics

Qualifications

Participants must achieve one of the following combined qualification(s) below.

Level 2 Extended Certificate in Health Informatics Qualification (agored.cymru)					
Awarding Body	Qualification No.	Credit Value	Total Qualification Time	Competence / Knowledge / Combined	Qualification Assessment Language(s)
Agored Cymru	C00/0603/1	32	320	Combined	English-Welsh

Please see [Annex 1](#) for the relationship between the competence and knowledge units within the combined qualification. This will be included once the qualifications have been agreed for inclusion in the pathway.

Essential Skills Wales (ESW)

Essential Skills Wales qualifications assessment languages are English-Welsh

Level 2: Health Informatics	Level	Minimum Credit Value
Communication	1	6
Application of Number	1	6
Digital Literacy	1	6

On/Off the Job Training

Pathway	Minimum On the Job Training Hours	Minimum Off the Job Training Hours
Level 2: Health Informatics	214	239

On/Off the Job Essential Skills details (Minimum Credit & Hours)

On-the-job learning will comprise:
One of the Level 2 qualifications listed above
Evidence to support the application for an apprenticeship completion certificate for on-the-job training will include a copy of the qualification certificate detailing the units completed.

Off-the-job learning will comprise:
Level 1 Essential Skills Wales in Communication
Level 1 Essential Skills Wales in Application of Number
Level 1 Digital Literacy

Off-the-job training undertaken before the apprentice started their apprenticeship may count towards the off-the-job training required for the apprenticeship if it was undertaken in relation to an accredited qualification contained in the framework for which a completion certificate is to be applied for.

Evidence to support the application for an apprenticeship completion certificate for off-the-job training will include a copy of the qualification certificate for each of the above qualifications detailing the units completed.

It is expected that:

- On-the-job and off-the-job training hours are both planned, reviewed and evaluated jointly between the apprentice and a tutor, or teacher; their workplace supervisor or manager and, where relevant, the apprentice's coach or mentor.
- On-the-job and off-the-job training support via either a tutor, teacher, mentor or manager is made available when required by the apprentice.
- On-the-job and off-the-job training hours are delivered through one or more of the following methods: individual and group teaching; e-learning; distance learning; coaching; mentoring; feedback & assessment; collaborative/networked learning with peers; guided study.

On/Off the Job Essential Skills details (Minimum Credit & Hours)

- 6 credits / 45 GLH Level 1 Essential Skills Wales Communication
- 6 credits / 45 GLH Level 1 Essential Skills Wales Application of Number
- 6 credits / 45 GLH Level 1 Essential Skills Wales Digital Literacy

Level 3: Health Informatics

Qualifications

Participants must achieve one of the following combined qualification(s) below.

Level 3 Diploma in Health Informatics Qualification (agored.cymru)					
Awarding Body	Qualification No.	Credit Value	Total Qualification Time	Competence / Knowledge / Combined	Qualification Assessment Language(s)
Agored Cymru	C00/4885/6	52	520	Combined	English-Welsh

Please see [Annex 2](#) for the relationship between the competence and knowledge units within the combined qualification. This will be included once the qualifications have been agreed for inclusion in the pathway.

Essential Skills Wales (ESW)

Essential Skills Wales qualifications assessment languages are English-Welsh

Level 3: Health Informatics	Level	Minimum Credit Value
Communication	2	6
Application of Number	2	6
Digital Literacy	2	6

On/Off the Job Training

Pathway	Minimum On the Job Training Hours	Minimum Off the Job Training Hours
	277	341

On/Off the Job Qualification details (Minimum Credit & Hours)

On-the-job learning will comprise:
 One of the Level 3 qualifications listed above
 Evidence to support the application for an apprenticeship completion certificate for on-the-job training will include a copy of the qualification certificate detailing the units completed.

Off-the-job learning will comprise:
 Level 2 Essential Skills Wales in Communication
 Level 2 Essential Skills Wales in Application of Number
 Level 2 Digital Literacy

Off-the-job training undertaken before the apprentice started their apprenticeship may count towards the off-the-job training required for the apprenticeship if it was undertaken in relation to an accredited qualification contained in the framework for which a completion certificate is to be applied for.

Evidence to support the application for an apprenticeship completion certificate for off-the-job training will include a copy of the qualification certificate for each of the above qualifications detailing the units completed.

It is expected that:

- On-the-job and off-the-job training hours are both planned, reviewed and evaluated jointly between the apprentice and a tutor, or teacher; their workplace supervisor or manager and, where relevant, the apprentice's coach or mentor.
- On-the-job and off-the-job training support via either a tutor, teacher, mentor or manager is made available when required by the apprentice.
- On-the-job and off-the-job training hours are delivered through one or more of the following methods: individual and group teaching; e-learning; distance learning; coaching; mentoring; feedback & assessment; collaborative/networked learning with peers; guided study.

On/Off the Job Essential Skills details (Minimum Credit & Hours)

- 6 credits / 60 GLH Level 2 Essential Skills Wales Communication
- 6 credits / 60 GLH Level 2 Essential Skills Wales Application of Number
- 6 credits / 60 GLH Level 2 Essential Skills Wales Digital Literacy

Level 4: Health Informatics

Qualifications

Participants must achieve one of the following combined qualification(s) below.

Level 4 - Diploma in Health Informatics Qualification (agored.cymru)					
Awarding Body	Qualificat/ion No.	Credit Value	Total Qualification Time	Competence / Knowledge / Combined	Qualification Assessment Language(s)
Agored Cymru	C00/4885/7	116	1160	Combined	English-Welsh

Please see [Annex 3](#) for the relationship between the competence and knowledge units within the combined qualification. This will be included once the qualifications have been agreed for inclusion in the pathway.

Essential Skills Wales (ESW)

Essential Skills Wales qualifications assessment languages are English-Welsh

Level 4: Health Informatics	Level	Minimum Credit Value
Communication	2	6
Application of Number	2	6
Digital Literacy	2	6

On/Off the Job Training

Pathway	Minimum On the Job Training Hours	Minimum Off the Job Training Hours
Level 4: Health Informatics	696	464

On/Off the Job Qualification details (Minimum Credit & Hours)

On-the-job learning will comprise:
 One of the Level 4 qualifications listed above
 Evidence to support the application for an apprenticeship completion certificate for on-the-job training will include a copy of the qualification certificate for the above qualification detailing the units completed.

Off-the-job learning will comprise:

Level 2 Essential Skills Wales in Communication

Level 2 Essential Skills Wales in Application of Number

Level 2 Digital Literacy

Off-the-job training undertaken before the apprentice started their apprenticeship may count towards the off-the-job training required for the apprenticeship if it was undertaken in relation to an accredited qualification contained in the framework for which a completion certificate is to be applied for.

Evidence to support the application for an apprenticeship completion certificate for off-the-job training will include a copy of the qualification certificate for each of the above qualifications detailing the units completed.

It is expected that:

- On-the-job and off-the-job training hours are both planned, reviewed, and evaluated jointly between the apprentice and a tutor, or teacher, their workplace supervisor or manager and, where relevant, the apprentice's coach or mentor.
- On-the-job and off-the-job training support via either a tutor, teacher, mentor, or manager is made available when required by the apprentice.
- On-the-job and off-the-job training hours are delivered through one or more of the following methods: individual and group teaching; e-learning; distance learning; coaching; mentoring; feedback & assessment; collaborative/networked learning with peers; guided study.

On/Off the Job Essential Skills details (Minimum Credit & Hours)

- 6 credits / 60 GLH Level 2 Essential Skills Wales Communication
- 6 credits / 60 GLH Level 2 Essential Skills Wales Application of Number
- 6 credits / 60 GLH Level 2 Essential Skills Wales Digital Literacy

OTHER ADDITIONAL REQUIREMENTS

Apprentices are required to:

- Be willing to undergo Disclosure and Barring Service checks (this is needed as apprentices may come into contact with children, young people or vulnerable adults)
- Be flexible as there may be a requirement to work shifts
- Comply with the pre-employment checks of the employing organisation

JOB ROLES

The latest version of the job roles and job descriptions for this Pathway can be found [here](#)

Link to summary/Platform (the link will be inserted post consultation).

PROGRESSION

Level 2

Progression routes into the Apprenticeship:

See Entry Requirements

Progression from the Apprenticeship:

Health Information Assistants may go on to complete an Apprenticeship in Health Informatics, leading to a role as an Assistant Practitioner (Informatics) or work towards one of the emergent roles within the Health Informatics Career Pathway.

Learners may also progress from this Pathway onto further qualifications specific to their work context which may be in other areas such as IT, Customer Service or Library and Information Services. These may include further apprenticeship Pathways, qualifications or other work-related education and training to support Continuing Professional Development.

Progression should not just be seen as vertical. In some instances progressing into another role at the same level may be just as rewarding as it offers the opportunity to develop new skills and knowledge.

Further detailed information and advice on careers within the health sector can be found at <http://www.wales.nhs.uk/>

Level 3

Progression routes into the Apprenticeship:

See Entry Requirements

Progression from the Apprenticeship:

Learners may progress from this pathway onto a Level 4 Health (Informatics) Apprenticeship. Learners may also progress into other areas such as IT, Customer Service or Library and Information Services. These may include qualifications or other work-related education and training to support Continuing Professional Development. Learners may also progress from this pathway into Higher Education undertaking a range of Informatics related degrees.

Progression should not just be seen as vertical. In some instances progressing into another role at the same level may be just as rewarding as it offers the opportunity to develop new skills and knowledge.

Further detailed information and advice on careers within the health sector can be found at <http://www.wales.nhs.uk/>

Level 4

Progression routes into the Apprenticeship:

See Entry Requirements

Progression from the Health Informatics Apprenticeship:

Learners may progress from this pathway onto further qualifications specific to their work context which may be in other areas such as IT, Data Analysis or Library and Information

Services. These may include qualifications or other work-related education and training to support Continuing Professional Development. Learners may also progress from this pathway into Higher Education undertaking a range of Computer Science, Digital or Informatics related degrees.

Progression should not just be seen as vertical. In some instances progressing into another role at the same level may be just as rewarding as it offers the opportunity to develop new skills and knowledge.

EQUALITY & DIVERSITY

It is important that apprenticeship Pathways are inclusive and can demonstrate an active approach to identifying and removing barriers to entry and progression. Pathways should advance equality of opportunity between persons who share protected characteristics and those persons who do not as identified in the Equality Act 2010.

The protected characteristics identified in the Equality Act are age, disability, gender re-assignment, race, religion or belief, sex, sexual orientation, pregnancy and maternity. Marriage and civil partnership is also included although only in respect of the requirement to eliminate discrimination in employment.

Training providers and employers MUST also comply with the other duty under the Equality Act 2010 to ensure that applicants are not discriminated against in terms of entry to the industry based upon those nine protected characteristics.

There is a gender imbalance within the health sector, which is a predominantly female workforce. All jobs are open to both males and females and are advertised accordingly. Male role models are positively promoted through marketing materials, photos and case studies. However, a perception that certain job roles are for women remains and this may discourage some males from applying to work in these job roles.

Local apprenticeship programmes may be designed by employers to encourage a higher number of male applicants into these roles and into the workforce as a whole. For all health apprenticeships local recruitment is encouraged to reflect the local community.

It is equally important that we must increase the numbers of Welsh speakers in healthcare and improve access to services through the medium of Welsh. This will meet the Government expectation of More than Just Words and the Active Offer where people are offered and can receive their support through the medium of Welsh if they want to.

Apprentices undertaking this pathway may also be adult learners who may have been away from education for a considerable period of time. It is therefore important that the education/training provider delivering this pathway has support systems in place to maximise learners' potential and to ensure that their educational needs are met by developing a personalised learning programme. Healthcare apprentices undertaking this pathway must be made aware of all the learner support services available to them. There should be open recruitment of apprentices to the programme, which is available to all people, regardless of gender, ethnic origin, religion/belief, sexual orientation or disability who meet the stated selection criteria. Employers/providers must be able to demonstrate that there are no overt or covert discriminatory practices in selection and employment. All promotional, selection and training activities must comply with the following relevant legislation such as:

The Equality Act 2010

The Welsh Language Act 1993

The Care Standards Act 2000
Data Protection Act 1998
Employment Right Act 1996
Health and Safety at Work Act 1974
Human Rights Act 1998
Public Interest Disclosure Act 1998 (Whistle Blowing Charter)
Rehabilitation of Offenders Act 1974-1986
Amendment Sexual Discrimination Act 1976
Additional Learning Needs and Education Tribunal (Wales) Act 2018

It is recommended that employers/providers conduct an exit interview if the apprentice leaves the programme before completion. During the learner's exit interview, it is recommended that information on learners leaving the programme before completion is identified and used to support the learner and develop the provision where necessary.

EMPLOYMENT RESPONSIBILITIES AND RIGHTS (ERR)

Employment Responsibilities and Rights (ERR) is no longer compulsory. But it is recommended that all apprentices (especially the 16 years -18 year group) receive a company induction programme.

RESPONSIBILITIES

It is the responsibility of the Training Provider and Employer to ensure that the requirements of this pathway are delivered in accordance with the Welsh Government Apprenticeships Guidance.

Further information may be obtained from:

Welsh Government
DfES-ApprenticeshipUnit@gov.wales

Annex 1

Level 2: Health Informatics

Relationship between competence and knowledge qualifications

The list below sets out how the credit for knowledge has been assigned across mandatory units.

Title	Total Credits	Credits for Competency	Credits for Knowledge
Introduction to Personal Development in Health, Social Care or Children's and Young People's Settings	3	2	1
Introduction to Communication in Health, Social Care or Children's and Young People's Settings	3	2	1
Introduction to Equality and Inclusion in Health, Social Care or Children's and Young People's Settings	2	0	2
The Role of the Health and Social Care Worker	2	1	1
Contribute to Health and Safety in Health and Social Care	4	1	3
Maintaining Quality Standards in the Health Sector	1	0	1
Service Improvement in the Health Sector	2	0	2
Store and Retrieve Information	3	2	1
Essentials in Health Informatics	2	1	1
Research Information	4	3	1
Organise and Report Data	3	2	1
IT Security for Users	2	1	1
IT User Fundamentals	3	3	0
IT Communication Fundamentals	2	2	0
Data Management Software	3	3	0
Bespoke Software	3	3	0
Specialist Software	3	3	0
Using Collaborative Technologies	4	4	0
Creating a Procedural Computer Program	7	7	0

Annex 2

Level 3: Health Informatics

Relationship between competence and knowledge qualifications

The list below sets out how the credit for knowledge has been assigned across mandatory units.

Title	Total Credits	Credits for Competency	Credits for Knowledge
Principles of Communication for Working in a Professional Environment	3	0	3
Risk Management for IT in Health Informatics	2	1	1
Communication Skills for a Professional Environment	2	2	0
Identify Information Requirements in a Health Context	7	5	2
Manage Own Performance in a Business Environment	2	1	1
Principles of Managing Information and Producing Documents	3	0	3
Analyse and Present Health Related Data and Information	4	3	1
Principles of Working in the Public Sector	5	0	5
IT Security for Users	1	1	0
Quality Service Improvement in the Health Sector	3	0	3
Spreadsheet Skills	3	3	0
Using Collaborative Technologies	4	3	1
Word Processing Techniques	3	3	0
User Centred Development (UX) in Health Informatics	7	5	2
Analyse and Report Data	6	4	2
Contribute to Operational Decision-making in a Health Environment	3	2	1
Coding	10	10	0
Scripting Language	3	2	1
Database software	4	4	0
Deliver Training Through Demonstration and Instruction	3	2	1
Deliver, Monitor and Evaluate Customer Service to External Customers	3	2	1
Maintaining Quality Standards in the Health Sector	2	0	2
Manage and Evaluate an Information System	6	3	3
Plan and Manage a Project	8	7	1
Project Management Software	4	4	0
Understanding Bilingualism in Work	2	0	2

Annex 3

Level 4: Health Informatics

Relationship between competence and knowledge qualifications

The list below sets out how the credit for knowledge has been assigned across mandatory units.

Title	Total Credits	Credits for Competency	Credits for Knowledge
Analyse and Report on Health Related Data and Information	6	4	3
Develop Own Effectiveness and Professionalism	12	10	1
Promote Good Practice in Handling Information in Health Settings	5	3	0
Principles of Data Science	24	0	2
Manage a Digital Content Development Project	9	5	1
Spreadsheet Software	6	4	3
Word Processing Software	6	4	1
The Principles of Health Records Management	11	0	5
Quality Management of Digital Products and Services	9	6	3
Software Design	10	6	4
The Principles of Knowledge and Information Management in the Health Sector	5	0	5
Software Development	10	7	3
Data Analysis Tools	18	16	2
Data Management Infrastructure	18	13	5
Develop Interactive Multimedia Digital Content	12	7	5
Investigating and Defining Customer Requirements for ICT Systems	15	11	4
IT System Operation 2	14	10	4
Manage and Evaluate an Information System	6	3	3
Networking Principles	10	4	6
Plan and Manage a Project	8	7	1
Principles of Data Management Infrastructure	18	0	18
Principles of Information Security Testing	10	5	5
Principles of Secure System Development	7	0	7
Project Management Software	5	4	1
Statistical Analysis of Data Sets	15	9	6
Testing the Security of Information Systems	15	13	2

On completing the above qualification, the total number of credits which an apprentice will attain equals 116 which exceeds the required minimum of 37 credits.

The combined qualification exceeds the required minimums of 10 credits for competence and 10 credits for technical knowledge.

The minimum requirement of 10 credits of assessed knowledge is met in this pathway through the achievement of the mandatory units required to meet the credit threshold. The learner may achieve more than the minimum requirement in undertaking the full qualification.

Annex 4