

The New Vocational Education and Training

**British vocational qualifications as a tool
for internationalising higher vocational
education and training in Spain**

Joaquín Francisco Carnicer

Education Department
British Council Spain

March 2023

www.britishcouncil.org

The New Vocational Education and Training

**British vocational qualifications as a tool
for internationalising higher vocational
education and training in Spain**

Joaquín Francisco Carnicer

Contents

Executive summary	06
1 Introduction	08
2 The Level 5 VET context in the UK and Spain	10
3 Comparative study	22
4 Regulatory framework	33
5 Stakeholder opinions	39
6 Mutual recognition	41
7 Opportunities and challenges	43
8 Final conclusions	45
References and links	47
Annexes	48

Executive summary

This report explores the current Level 5 VET context in the UK and Spain with the aim of identifying affinities that would facilitate **application of the British qualifications' experience to the internationalisation strategy** expressed in Spain's recently adopted law on vocational education and training that promotes the implementation of **double diplomas** with other countries and also identifies other related educational improvements.

The UK has a considerable number of Level 5 VET qualifications, as well as two-year university qualifications at the same level that have no equivalent in Spain. In this context, we have identified the following reasons why **Higher National Diplomas (HNDs)** offer a good tool for achieving the objectives of the new law on vocational education and training:

- Clear parity with Spanish Higher VET qualifications under the Qualifications Frameworks in the European Higher Education Area (QF-EHEA), as they share similar workloads, academic levels and learning content and outcomes.
- Extensive international deployment. This gives them flexibility and highly robust content, assessment and quality control systems.
- Existing deployment in Spain, providing case studies and best practice.

Based on exhaustive comparison of four qualifications in different occupational groups in the two countries, including arts courses, we can affirm the following:

- **Affinity between the learning content and outcomes stands at over 80%.**
- **Compatibility** between the general features of the two qualifications is excellent, allowing greater standardisation of assessment methods and acquisition of new competences.

Our study also reviews the **regulatory framework and the degree of mutual recognition**, highlighting the reforms under way in both countries as a precursor to a possible roadmap for these joint qualifications and making concrete suggestions to facilitate their deployment.

In order to also provide the view of the different **stakeholders** in an internationalisation process like this one, the report includes the opinions expressed in interviews conducted with universities, VET providers, accreditation bodies, educational counsellors and businesses.

Finally, this study identifies significant **opportunities** that deployment of this double CFGS/HND qualification model could offer the Spanish system:

1. Strengthen competence profiles and international standardisation
2. Enhance syllabus renewal and relevance
3. Facilitate bilingualism in VET
4. Improve progression pathways to university
5. Raise the status of Spanish VET internationally
6. Increase transnational mobility and agreements
7. Improve employability

There are also **several challenges** associated with deployment:

1. Effort required for implementation
2. Training of teaching staff (language and methodology)
3. Lack of regulation and legislative development
4. Difficulties in adapting administrative procedures
5. Academic recognition

To close, the **final conclusions** offer an overview and a series of reflections on what implementation of this model in the Spanish education system could entail.

In general, those conclusions are positive as regards the advantages that a double diploma model brings to the internationalisation of Spanish VET through the synergies achieved with British Level 5 vocational pathways. They also highlight the opportunity the model offers to further modernise Spain's educational framework through other collateral benefits aligned with the educational strategies and reforms under way at both national and European level.



There is consensus throughout the education community that internationalising VET meets a clear need and provides invaluable support in adapting Spain's qualifications to the demands of business and to combatting unemployment.

1 Introduction

Vocational education and training (VET) has been gaining prominence in the educational sphere throughout Europe for some years now. In a context characterised by a burgeoning range of future challenges, such as the mass generational handover expected as baby boomers retire, or the current issues posed by overqualification and high structural unemployment rates, Spain has no option but to wholeheartedly adopt a VET model that dispels past stigmas and embraces a new and more efficient production model aligned with the real needs of the economy.

Both the United Kingdom and Spain have long been implementing educational reforms intended to raise the status of vocational qualifications, and one of the cornerstones of these reforms is internationalisation.

Spain in particular is in the midst of simultaneously reforming and modernising both its university system and its VET framework, two spheres that have traditionally kept each other at arm's distance but that are destined to come to an understanding.

Numerous legislative initiatives have striven to raise the status of vocational qualifications in response to the growing need for skilled workers in a labour market flooded with university graduates whose educational pathways are often far removed from the needs of business.

We can date the start of this shift to 2000 and the launch of the Lisbon Strategy as part of the newly created strategic framework for European cooperation in education and training (ET 2020), the main forum for collaboration and exchange of best practice between states.

The signing in 2020 of the Osnabrück Declaration on vocational education and training as an enabler of recovery and just transitions to digital and green economies marked another milestone and introduced a range of VET measures for 2021–2025. This and other initiatives are driving a process of international harmonisation that will achieve real transnational convergence between the labour market and vocational qualifications.

The most recent step in this European drive was taken in 2021 with the Council Resolution on a strategic framework for European cooperation in education and training towards the European Education Area and beyond (2021–2030).

In Spain, the recent reform of the law on vocational education and training has adapted the strategy to the national context. Four key aspects of the reform are worthy of note:

1. Firstly, the aim has been to encourage modularity in vocational qualifications by cataloguing them according to their scope in terms of both competences and length, running from Grade A micro-training, the most basic element under the new framework, through to Grade E specialisation, a type of postgraduate qualification specific to VET.
2. Secondly, the issue of flexibility and interrelationship between the education system's vocational qualifications and the VET for Employment system's competence units and occupational certificates has been addressed. This allows for crossover between these spheres and facilitates access to the education system's standardised pathways to workers with accredited competences and work experience.
3. The promotion of in-company (dual) VET is another key aspect of the new law, which seeks to extend this model to all vocational qualifications.
4. Finally, and the subject of this report, **there is a commitment to internationalising VET with the aim of harmonising professional profiles within every sector worldwide.** The intention is to improve the employability of our young people and upgrade their competences to facilitate their integration in a productive sector capable of capitalising on transnational talent and innovation.

This internationalisation strategy includes adoption of double diplomas with other countries to improve their recognition and interoperability and embraces the classroom bilingualism that has so much potential to facilitate students' participation in transnational and other cooperation projects, even within Spain's borders.

This report focuses on Level 5 vocational qualifications because of their particular position within higher education systems under the QF-EHEA. On finishing secondary education, students reach an important crossroads, and finding points of future alignment between VET qualifications and the university system opens gateways that prevent training pathways leading to eventual dead ends.

It complements this with examples of elements that favour employability, modularity, progression to university education and acquisition of internationally standardised competences.

Thus, this report identifies the affinities between Britain's higher national diplomas (HNDs) and Spain's higher vocational qualifications (CFGs, *Ciclo Formativo de Grado Superior*) that make it possible to apply the lessons learned from the internationalisation of the British qualifications to the change and improvement goals — as they stand in the current context — set in the law of May 2022. Given the genuine affinity between the two sets of qualifications, Spain already hosts VET providers that have found those synergies on their own initiative and offer HNDs either as stand-alone qualifications or jointly with compatible CFGS qualifications.

While a bilateral agreement on education between the United Kingdom and Spain is lacking and the aspects of the law that regulate double VET qualifications have yet to be implemented, a well-established, robust and efficient model for internationalising these qualifications is nevertheless already in place. Although this model needs to be adapted, contextualised, regulated and overseen, it ultimately provides a possible answer to the questions raised by many regional education authorities as regards the provisions of the new legislation. Irrespective of the degree of acceptance that the model achieves in each sphere, exploring these options will always produce positive outcomes and constitute a way of extracting the elements deemed most useful to the ongoing improvement of the Spanish education system.

Meanwhile, the more VET providers and students discover the benefits of these strategies and the more the education sector learns how to standardise them, the more progress will be made towards modernising education in Spain. Internationalisation in this case is merely a tool with which to achieve both that goal and the core objectives of any programme designed to prepare learners for work — acquisition of the skills that business demands and that, ultimately, improve social cohesion and equality of opportunities. In short, a tool that drives value-added processes:

- Efficient methodology that replicates the procedures employed by working professionals, taught from an overall perspective that acknowledges that the job could be located anywhere worldwide and involve teams spanning various nationalities.
- Assessment systems that are effortlessly understood and applied in both the classroom and the workplace.
- Flexible pathways that allow students to decide how far they want their efforts to take them, without artificial obstacles or constraints.
- Permanently up-to-date content with direct input from business.

All of the above are fundamental components of the machinery necessary to generate future value.

Over the following chapters we will present arguments demonstrating that implementation of a double CFGS and HND qualification model not only supports internationalisation but also increases curricular relevance, raises competence levels and provides real learning and assessment pathways aligned with the goals set in the recent legislative reforms.

2 The Level 5 VET context in the UK and Spain

In order to establish a correlation and identify opportunities for integration and complementarity, it is first necessary to situate each academic framework in its context to gain an overview of where real affinities exist.

In this section we will discuss the current Level 5 VET context in both countries in relation to their respective education systems. We will then review the context in each country.

2.1 VET in Spain

VET comprises the set of training actions that enable the qualified practice of occupations, access to employment and active participation in social, cultural and economic life. In addition to initial training, it includes actions to facilitate employability and reskilling, as well as continuing training in the workplace, all of which allow for the acquisition and constant updating of vocational skills.

It has two distinct branches, VET within the education system (formal) and VET for Employment (occupational).

The Ministry of Education and Culture is responsible for planning, coordinating and assessing VET within the education system. Spain's autonomous communities are responsible for organising and managing it in their respective territories. This means that, regardless of whether they are public or private, the centres providing this training must be authorised by the education authorities.

VET for Employment, on the other hand, comes under the remit of the Ministry of Labour and Social Security via the Spanish Public State Employment Service (SEPE, *Servicio Público de Empleo Estatal*) and the autonomous communities.

The purpose of VET within the education system is to train students for an occupation and to give them the skills needed to adapt to the inevitable changes in the labour market they will experience over the course of their lives. It is also intended to support their personal development and their role as members of Spanish society. It comprises a set of courses organised into modules of varying duration and differing theoretical and practical content tailored to each occupational field. It is organised into various levels: Basic VET, Intermediate VET, Higher VET and Specialist VET.

Intermediate VET, ranked at Level 3 in the EQF (European Qualifications Framework), focuses on preparation, execution and implementation functions, while Higher VET, ranked at Level 5, addresses organisation, coordination, planning, control and supervision. On passing the VET course, students obtain the Technician or Advanced Technician qualification in the corresponding specialism.

Students can access Intermediate VET after successfully completing compulsory secondary education or by taking a specific intermediate-level entry exam, for which they must be at least 17 years old. At the end of these studies, students obtain the Technician qualification in the corresponding occupation.

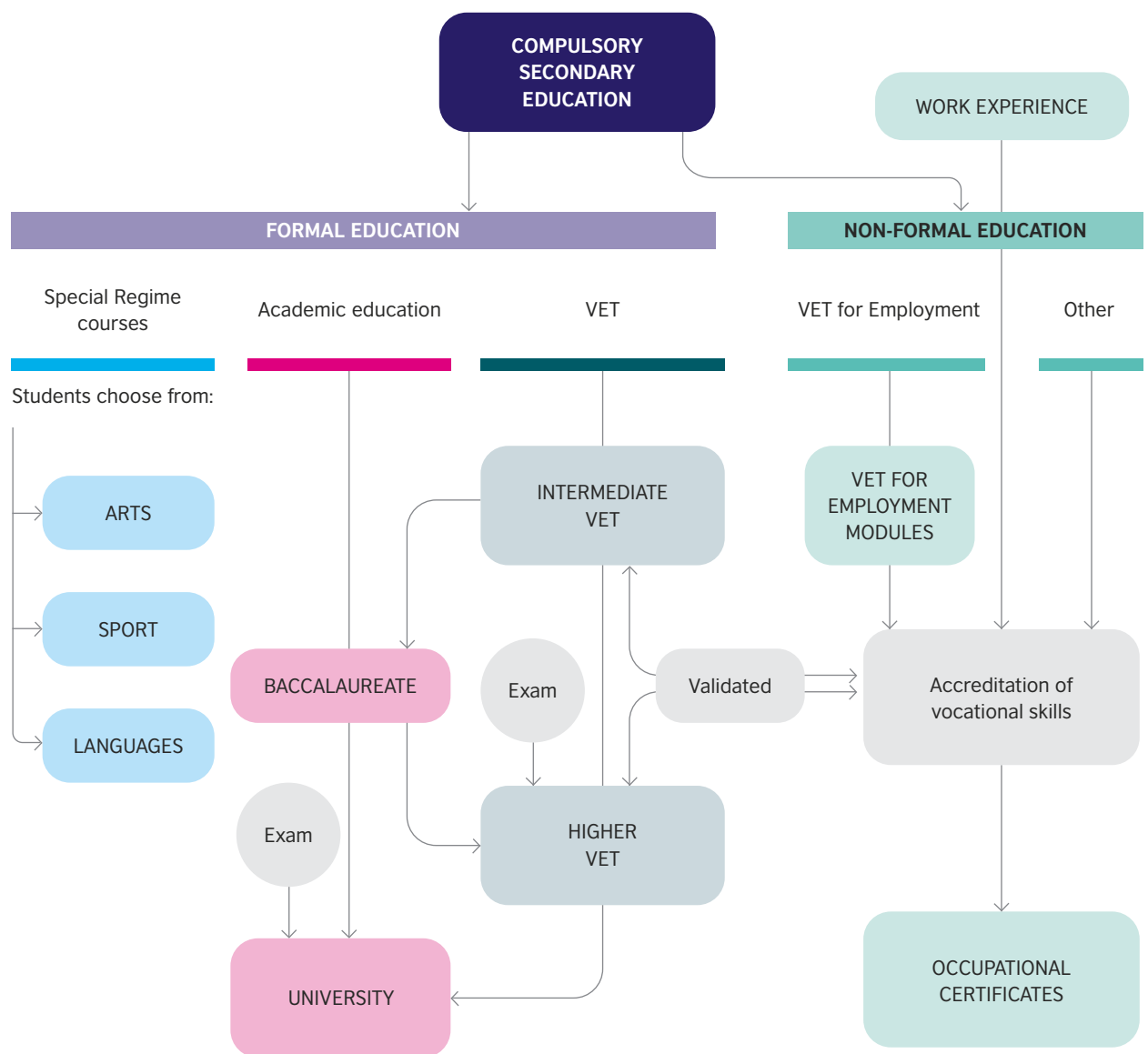
Higher VET (EQF 5, or MECES 1 under the Spanish Qualifications Framework for Higher Education [*Marco Español de Cualificaciones para la Educación Superior*]) is a form of non-university higher education comprising 120 ECTS credits. Students can access this VET after having completed the baccalaureate or after having earned an Intermediate VET qualification in the same branch. These studies grant university access without the need to take an entrance exam by validating certain credits on relevant bachelor's degrees, although current Spanish legislation does not allow their full recognition in university progression pathways. Recently, Specialist VET courses, which remain at EQF 5 and receive 60 ECTS credits, have been added to the offering. The catalogue of these courses is still limited.

These Higher VET qualifications are the subject of this report and their synergies with their British equivalents are explored with a view to internationalising them.

VET for Employment, meanwhile, aims to enhance professional development and is intended for both employed and unemployed people. VET for Employment helps improve workers' employability and especially targets groups that experience greater difficulties in finding work. This system awards occupational certificates.

Together, the two systems make up the National Catalogue of Vocational Qualifications (CNCP, *Catálogo Nacional de Cualificaciones Profesionales*).

The following diagram represents these pathways graphically:



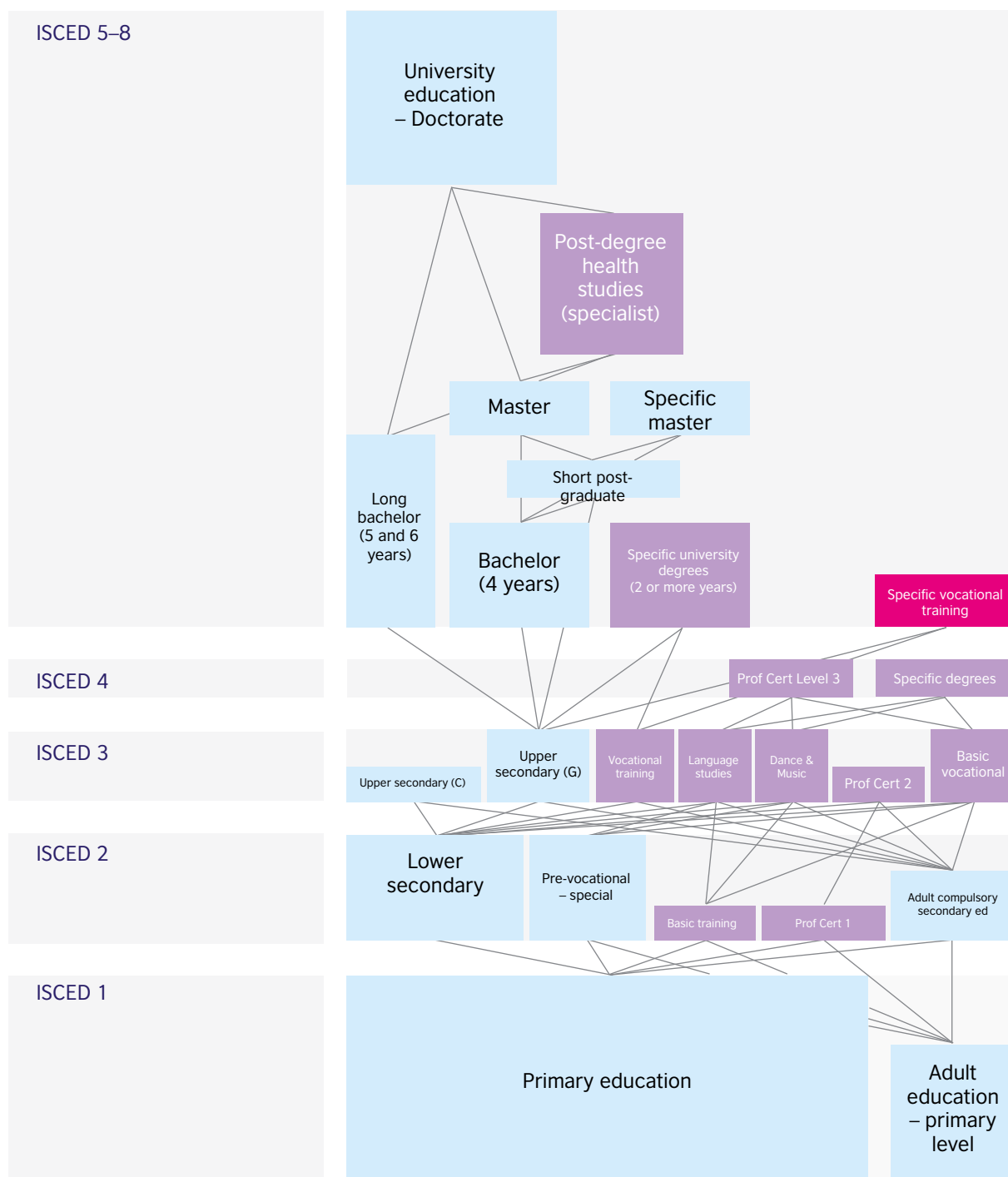
Integrated VET centres are authorised to operate in both areas and can offer all the training options available in the CNCP that culminate in VET qualifications or occupational certificates.

The current VET offering spans 584 occupational certificates, 176 VET diplomas (28 Basic, 59 Intermediate and 89 Higher VET qualifications) and 21 Specialist VET courses. For its part, the CNCP, the basis and reference point for the training offering, contains a total of 756 qualifications organised into 26 occupational groups.

The following diagram maps the Spanish education system onto the international ISCED framework, with Level 5 vocational qualifications highlighted in red.

■ General/academic

■ Vocational/professional

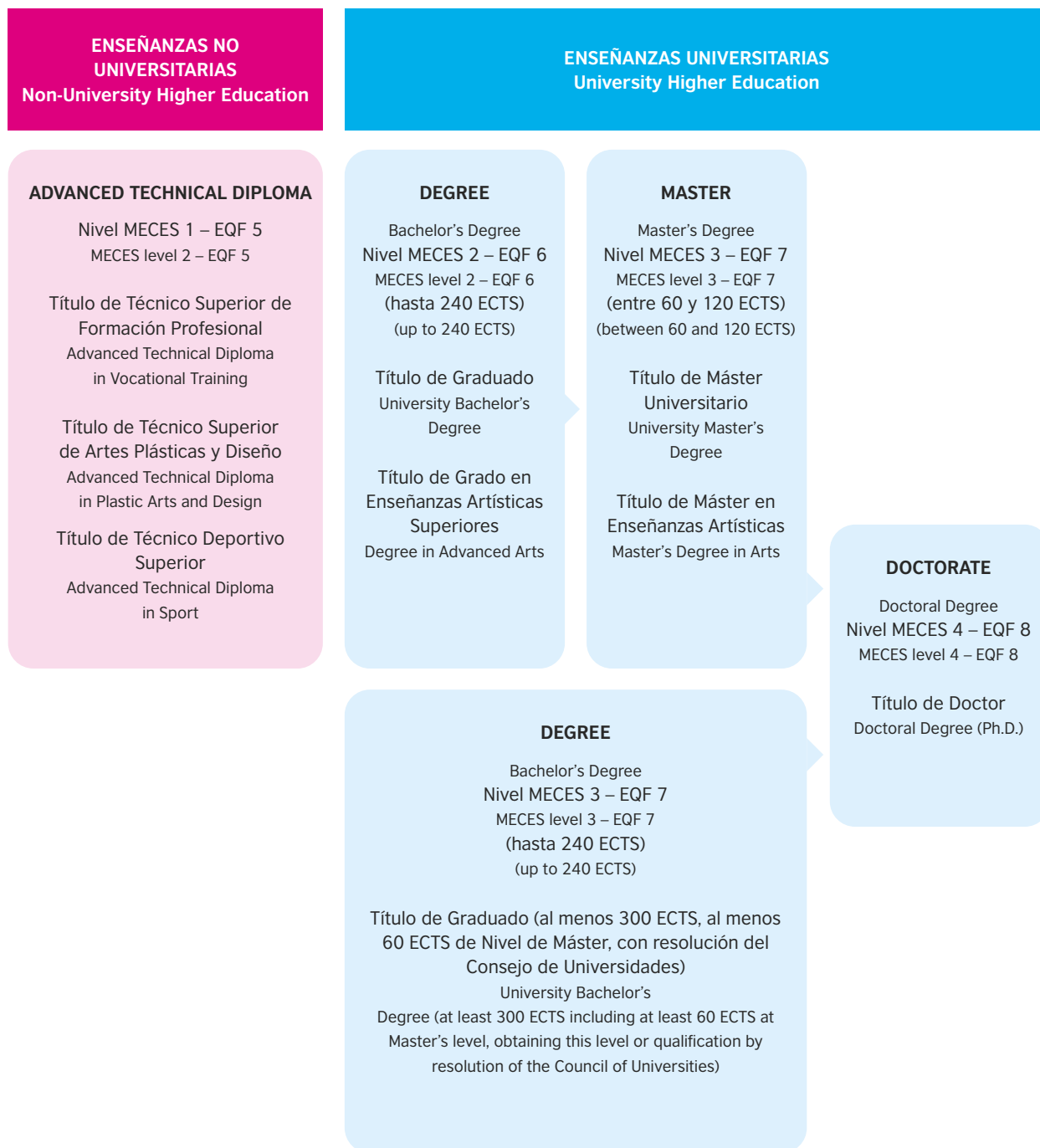


Compulsory education: 10 years

UNESCO-UNEVOC: Education system diagram – <https://unevoc.unesco.org/home/TVET+Country+Profiles>

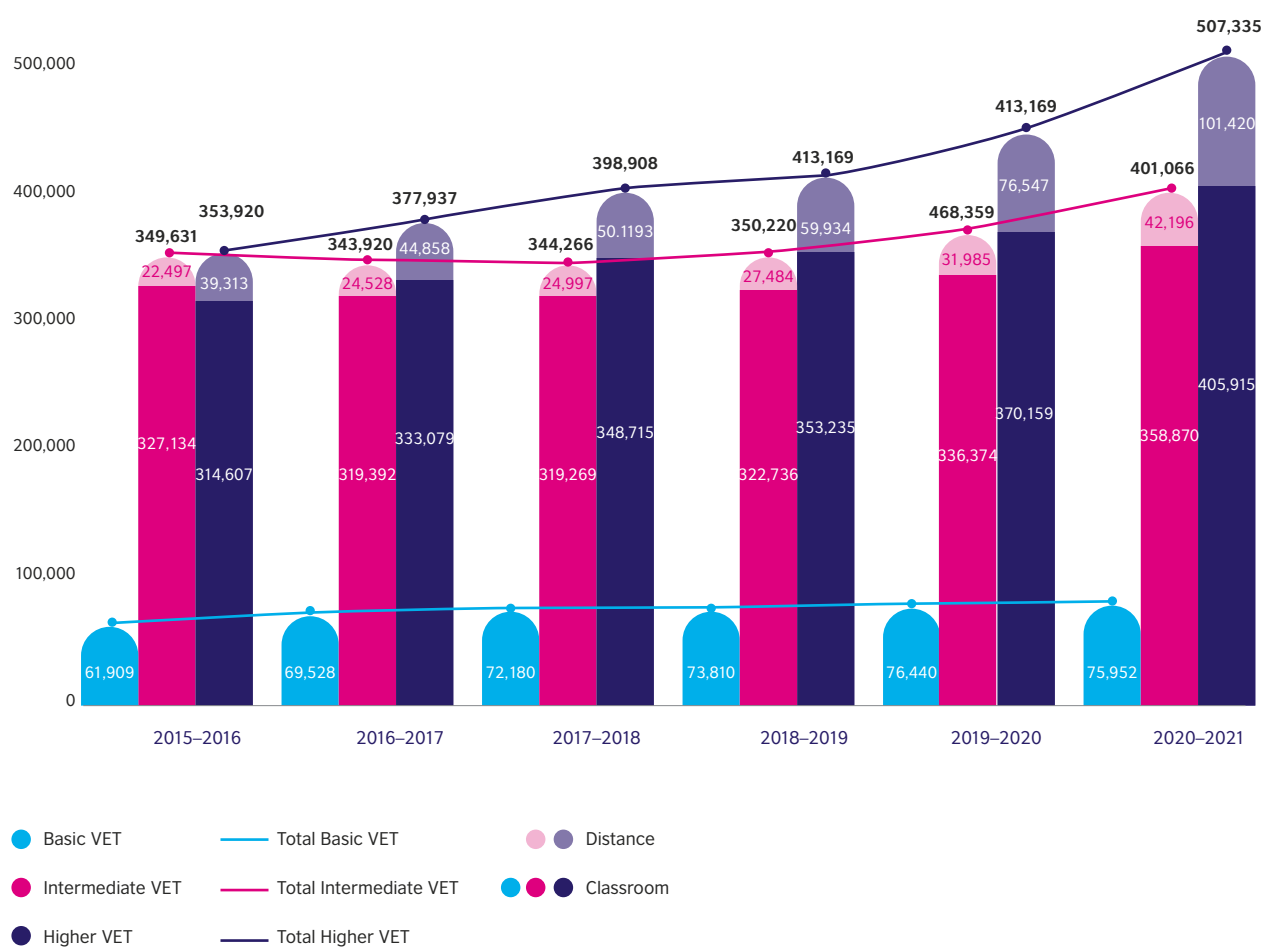
The Spanish education system designates its different higher education levels under the MECES framework. These levels are in turn mapped onto the EQF in a four-level classification. According to this classification, EQF 5-level studies fall under MECES level 1, which includes higher VET, higher diplomas in plastic arts and design and higher sports studies.

Thus, within the European Higher Education Area (EHEA), the levels of the Spanish MECES framework are as shown in the following diagram:



MECES level	Qualification	Equivalent EHEA cycle
4	• Doctoral Degree	Third cycle – EQF 8
3	• University Degree (300 ECTS or more) • University Master's Degree • Master's Degree in Arts	Second cycle – EQF 7
2	• Bachelor's Degree • Degree in Arts	First cycle – EQF 6
1	• Advanced Technical Diploma in Vocational Training • Advanced Technical Diploma in Plastic Arts and Design • Advanced Technical Diploma in Sport	Short cycle – EQF 5

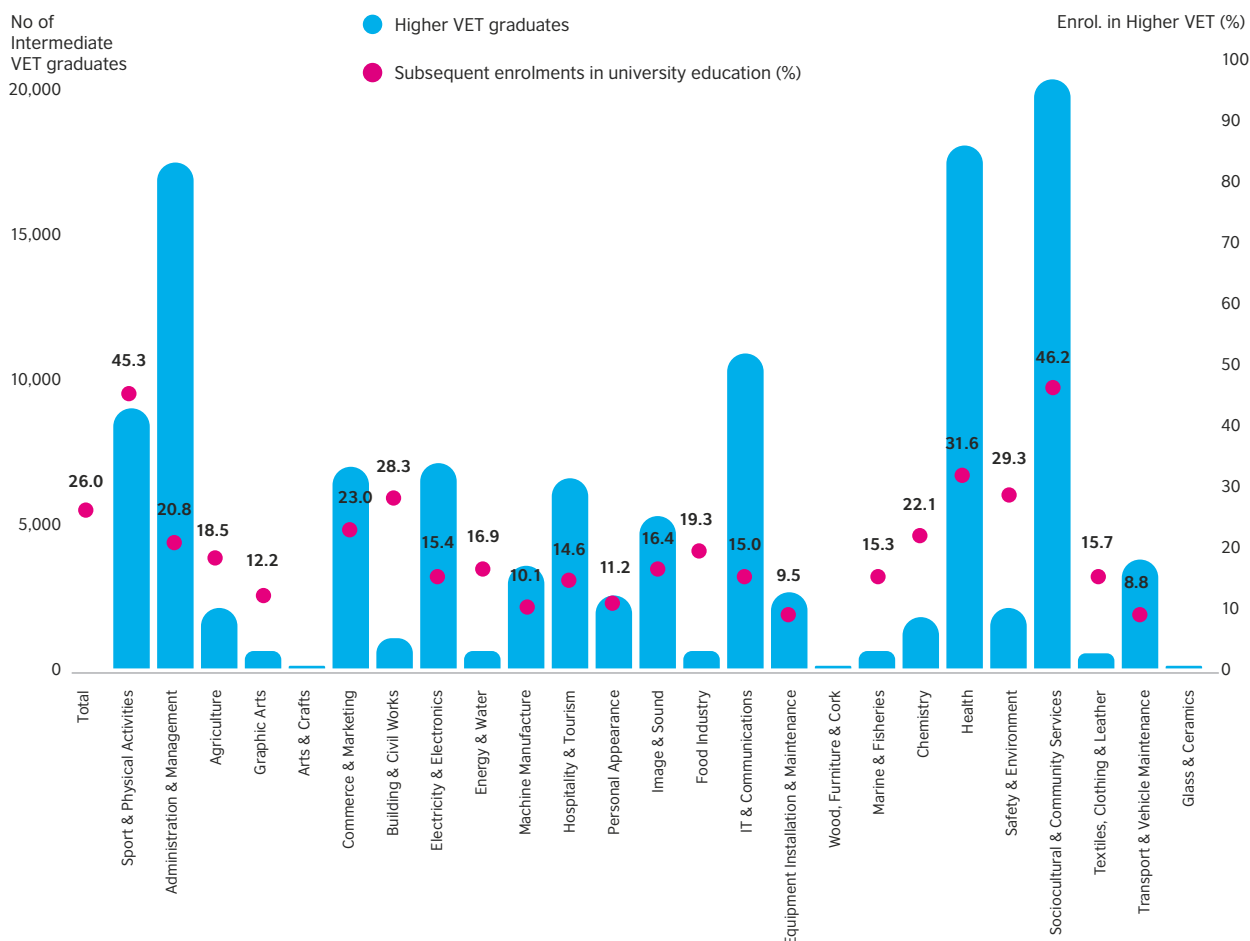
The growing trend in Level 5 vocational qualifications is shown in the graph below, with a 43.3% increase in the last 5 years compared to an increase of only 14.7% in Level 3 vocational qualifications. This shows a shift in students' preferences after completing the baccalaureate; they are increasingly considering higher VET as an alternative to university.



The average rate of incorporation into the labour market three years after course completion was 58.6%, with the rate for the IT and Communications group standing at 73.2% versus 46.3% for the Image and Sound group.

In the three years after receiving their qualifications, 26.0% of these graduates continued their studies at university, this percentage being 8.9 percentage points higher for women (30.5%) than for men (21.6%).

The following graph shows the rate of progression to the university system three years after completing a CFGS qualification in 2018.



Finally, it is important to mention the **quality control** systems. As competencies in the field of education have been devolved to the autonomous communities, the responsibility for VET provider inspection lies with local education authorities. The inspectors, who report to their respective authorities, ensure that the powers attributed to these communities are exercised. Although there is also a state-level inspectorate, it does not directly oversee VET providers (as mentioned above). This state-level inspectorate is responsible for ensuring compliance with the requirements laid down by the State in terms of the general organisation of modalities, stages, cycles and specialisms, and for their transposition and specific application in each autonomous community.

In practice, inspectors generally lack specific knowledge of the specialisms taught. Their role focuses on compliance with regulations from a documentary point of view, such as assessment records and the organisation of the centre according to the organisational document. This often results in a lack of supervision in terms of the content taught and the assessment methodology, which again creates the

potential risk of lack of standardisation of the teaching process. This is something that the equivalent UK studies address by assigning External Examiners/Standard Verifiers specialised by subject area. Their task is to supervise not only the VET provider's documentary processes, but also the delivery, assessment and quality control procedures of each course through regular sampling of student assignments, student work and the marks received. This is done to ensure that they are in line with the specifications of each programme in terms of learning outcomes, assessment criteria and grading methodology. Evaluation of continuous improvement and training are also an integral part of inspection.

2.2 VET in the UK

Despite the UK's exit from the European Union, it remains part of the EHEA, fruit of the Sorbonne Declaration. The UK was a driving force behind this declaration, along with Germany, Italy and France, in 1998.

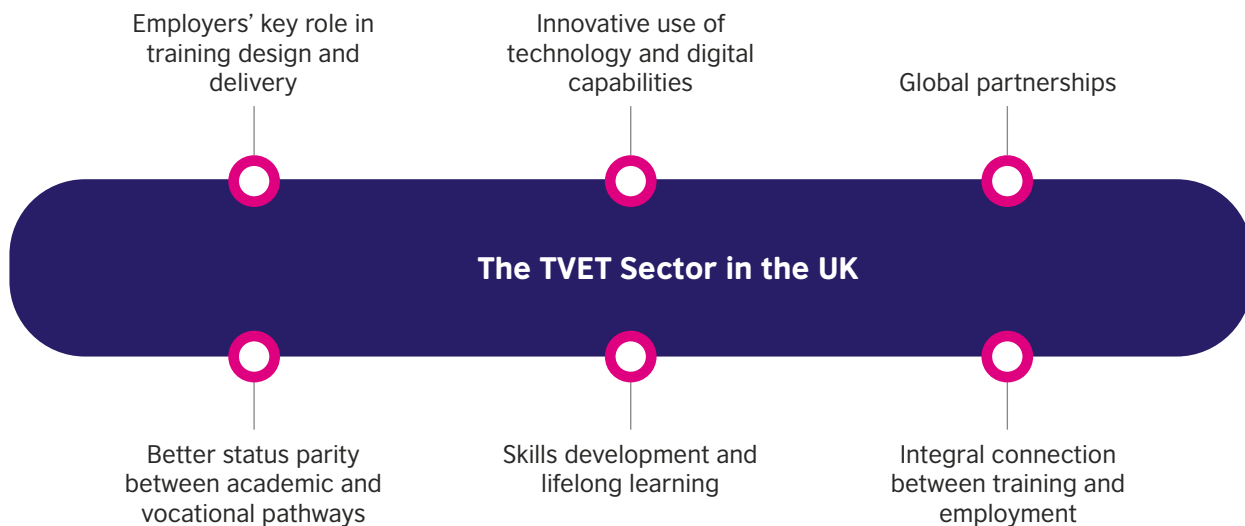
Qualifications frameworks, regulated by the Quality Assurance Agency (QAA), set out the different levels of higher education qualifications and the requirements for each. There is one framework for England, Wales and Northern Ireland and a separate one for Scotland.

The crucial areas targeted by the UK education sector are boosting the economy, expanding participation and opportunities and improving skills. VET plays a key role in the UK in promoting the skills, knowledge, attitudes and behaviours that support employment and social mobility. The UK Department for Education has increasingly focused on VET in recent years, placing it at the heart of education reform.

The sector is pursuing the following key objectives:

- High-quality training and development of qualifications that meet current and future demand for skills.
- Better collaboration between business and educators.
- Support for lifelong learning and guaranteed flexible and affordable access to training and upskilling.
- Provision of an alternative route to a university degree.

The table below provides examples of vocational qualifications available in the UK:



Qualification	EQF level
Apprenticeship	3–7
Degree Apprenticeship	5–7
Certificate	1–8
Higher National Diploma (HND)	5
National Diploma	3–4
National Vocational Qualification	2–7
Foundation Degree	5
T Level	4

Employer-centred

- Employers play a key role in VET design, delivery and assessment.
- Employers provide equipment, expertise and training venues.
- Training success is measured by both academic outcomes and employability.

Global

- The international services provided include training and certification, joint qualifications, international student enrolment and technical assistance.
- The system promotes a wide range of international development projects and initiatives.
- The UK Skills Partnership represents the national sector globally.

Flexible

- Training providers have relative autonomy over delivery within a regulated framework.
- This is an innovative and multi-faceted sector that is responsive to change and meets the diverse needs of stakeholders.
- The VET system rigorously safeguards the interests of students and employers.
- Its liberalised system allows stakeholders free choice and uses competitiveness to improve student outcomes.

Accessible and inclusive

- The system provides access to personalised training for all students of all ages and skills.
- It also provides comprehensive student support, fostering community participation and the acquisition of digital skills.
- Specific objectives and requirements are set for equal access to training programmes and marketing campaigns target different social groups and minorities.

High-quality

- The system is committed to delivery of high-quality programmes backed by sound quality control systems and sharing of effective practices.
- Providers have robust internal quality control processes.
- National quality monitoring agencies have the legal authority to penalise providers that do not meet standards.
- Quality inspection reports are public, thereby incentivising and rewarding high performance.

Focused on economic development

- The system in the UK contributes to business growth and innovation.
- It works with local development agencies to improve approaches to business growth and competitiveness.
- It provides programmes designed to update and improve skills in SMEs to increase their productivity.

UK TVET providers

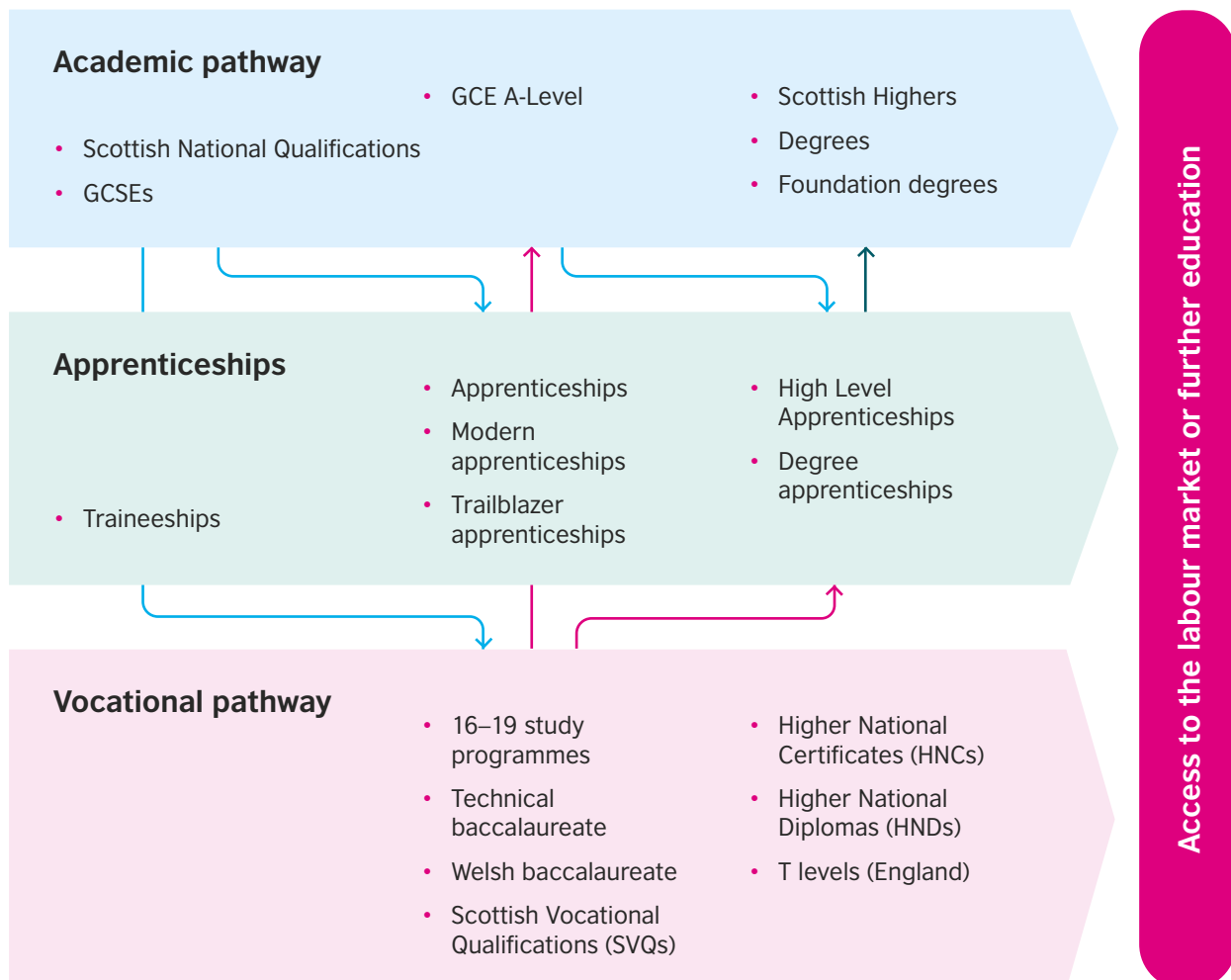
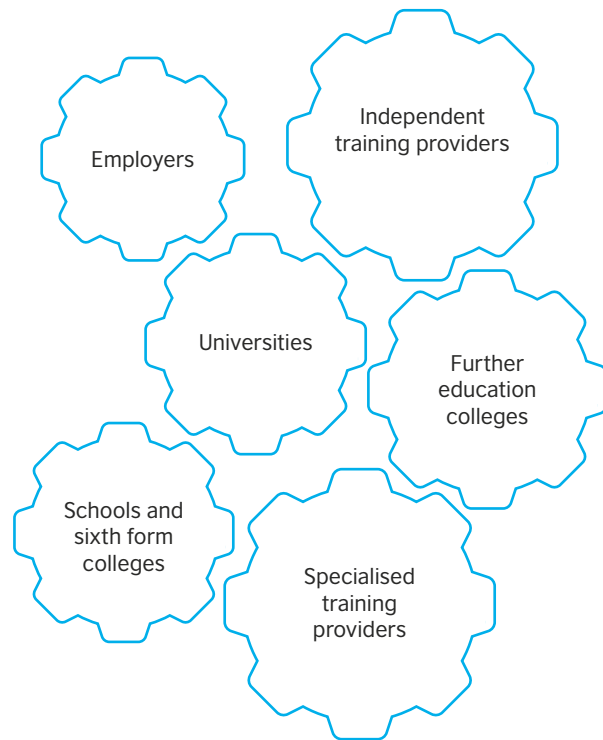
Vocational programmes are offered by a wide variety of providers in the UK, including the following:

- Schools
- Further education colleges
- Employers
- Universities
- Independent training providers

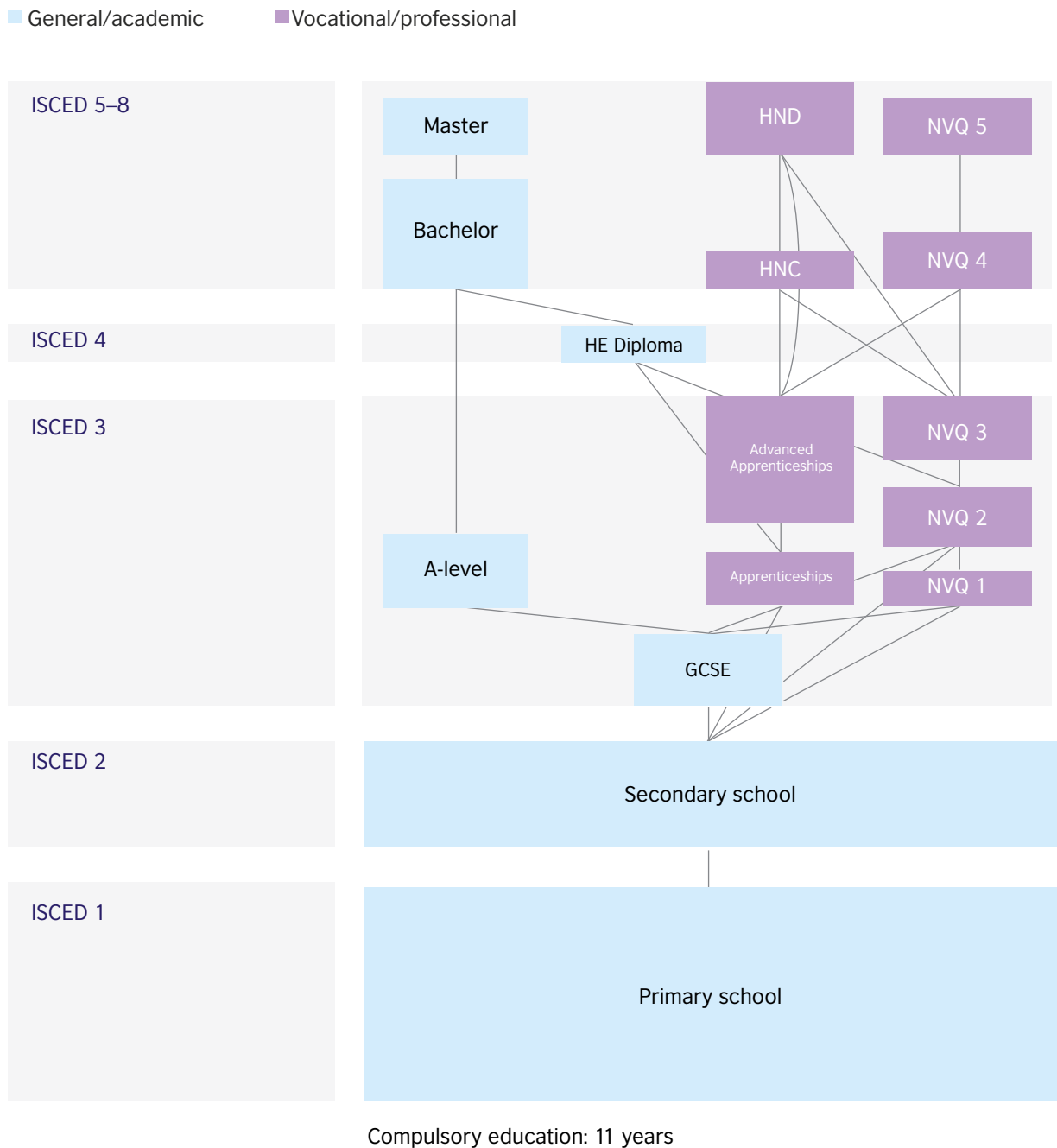
The main characteristics of the model are its strong relationship with industry, the extensive flexibility and modularity of its programmes, the quality control processes and its clear international vocation, with many of its qualifications also taught outside the UK. All of this is reflected in the qualification chosen for the double higher VET diploma model: the HND. These qualifications have also achieved university recognition and there is a good academic progression programme for many of them.

It is also important to highlight the variety of gateways linking the different training pathways:

Who delivers VET in the UK?



The following diagram maps UK qualifications onto the ISCED framework:



UNESCO-UNEVOC: Education system diagram – <https://unevoc.unesco.org/home/TVET+Country+Profiles>

The table below shows the different UK qualifications under the QF-EHEA.

FHEQ level	FQHEIS level	Qualification	Equivalent EHEA cycle
8	12	<ul style="list-style-type: none"> PhD/DPhil Professional doctorates 	Third cycle
7	11	<ul style="list-style-type: none"> Master's degree Integrated master's degree Primary qualifications (first degrees) in medicine, dentistry and veterinary science 	Second cycle
		<ul style="list-style-type: none"> PGCE PGDip PGCert 	N/A
	10	<ul style="list-style-type: none"> Bachelor's degree with honours 	First cycle
	9	<ul style="list-style-type: none"> Bachelor's degree (ordinary or pass degree) 	
6		<ul style="list-style-type: none"> Graduate Certificate Graduate Diploma Professional Graduate Certificate in Education 	N/A
	N/A	<ul style="list-style-type: none"> Foundation degree 	
5	8	<ul style="list-style-type: none"> DipHE 	Short cycle
	N/A	<ul style="list-style-type: none"> HND (awarded by a degree-awarding body) 	
4	N/A	<ul style="list-style-type: none"> Higher National Certificate (awarded by a degree-awarding body) 	N/A
	7	<ul style="list-style-type: none"> Certificate of Higher Education 	

In terms of quality control processes, VET centres must comply with the quality requirements and standards of the Quality Assurance Agency (QAA) for Higher Education, which carries out this work for the Office for Students (OfS), in addition to the controls set by the awarding body (the organisation that develops the qualification). The QAA is an independent body responsible for monitoring and advising on standards and quality in UK higher education, including UK qualifications awarded outside the UK.

The QAA has developed a Quality Code in collaboration with the higher education sector. This code sets out the expectations that all UK higher education providers must meet.

The purpose of the Quality Code is as follows:

- Safeguard the academic standards of UK higher education
- Ensure the quality of learning opportunities
- Promote continuous and systematic improvement in UK higher education
- Ensure that information about UK higher education is publicly available

Following a review of the various UK Level 5 qualifications, we have focused on the qualifications framework in England, Wales and Northern Ireland, as it is well aligned with the European higher education

framework. The Scottish framework has specific traits that would distort practical analysis.

Specifically, we **have identified the Higher National Diploma as the qualification that is most similar to the Spanish CFGS**, both for its characteristics (level, structure and content) and for its international recognition and presence in Spain, as well as for its high degree of flexibility.

Higher Nationals are higher VET qualifications internationally recognised at levels 4 (HNC) and 5 (HND). They are equivalent to the first and second year of a bachelor's degree in the UK, which means they provide progression both to university and to the labour market.

These qualifications have international variants that allow them to be contextualised to the local environment. There are already institutions in Spain that successfully offer these qualifications, whose track record allows us to draw conclusions regarding their usefulness in the process of internationalising Spanish CFGSs. These qualifications are regulated by Ofqual in the RQF and are supervised by the QAA. Pearson is the awarding body.

In terms of quality control, in addition to the QAA checks, the awarding body carries out another level of supervision of its programmes, including assigning **external verifiers**. These verifiers visit the VET centres twice a year to examine a sample of the activities

undertaken by learners and their appropriateness to each unit of the programme, as well as the grades obtained. All of this is to ensure that assessment is carried out in accordance with the relevant assessment criteria. These verifiers are experts in the subject and education programme they are inspecting.

After the students have been in the programme for two years, the verifiers issue a report detailing both good practices and any incidents found. This report determines whether said students graduate (release) or whether corrective action is required (block). Inspection not only audits the teaching and learning process but also the staff's continuous improvement, training and education.

Higher Nationals are delivered in universities, colleges of further education and training providers in 60 countries through 784 approved centres and are flexible enough to provide content that meets local needs in each region. These courses attract 50,000 international students a year. The catalogue and qualifications are wide-ranging (25 subject areas) and are similar to CFGSs. The training is modular and entails project-based learning. Its students show a high degree of satisfaction with their studies and good employability.

- 92% think it is useful for achieving their objectives.
- 90% believe it improves their employability.
- 85% think that the learning and assessment methods are suited to their future occupation.
- 87% know how to put their learning into practice in the workplace.

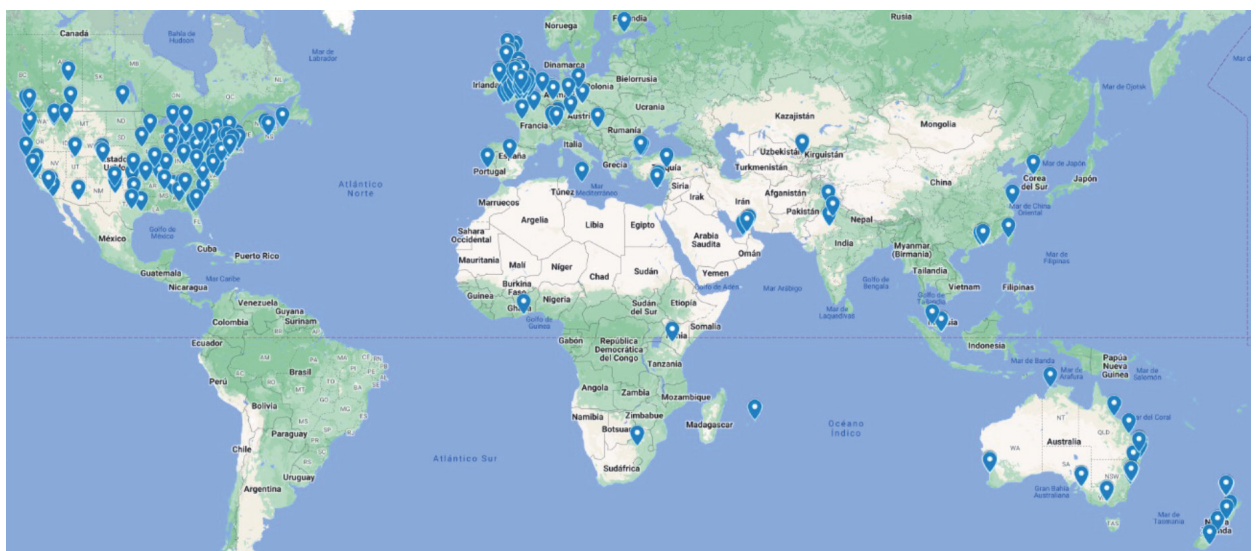
Their international presence and recognition are extensive, a very positive aspect and reason for considering them a good tool for internationalising VET in Spain using a methodology and curricula conceived from a global perspective.

Higher Nationals have formal recognition and progression agreements with over 300 universities worldwide, as well as close links with employers and national and international professional bodies, providing students with the confidence and security that their qualifications are up-to-date with the demands of the sector and are recognised, enabling them to achieve their goals.

Almost all UK universities accept HNDs as an alternative or complement to A-Levels, particularly appreciating the cross-cutting and research skills and initiative shown by students in progressing independently with their learning.

A large number of universities worldwide, including almost all UK higher education institutions (95%) explicitly accept these qualifications for advanced entry at Level 6, i.e. with full recognition of prior learning owing to the academic parity.

It is common for HND graduates to directly enter the final year of a bachelor's degree via what is called a top-up course. At present, these top-ups give access to 1519 university degrees globally. In addition to those listed here, many other higher education institutions also accept these qualifications under their standard recognition procedures.

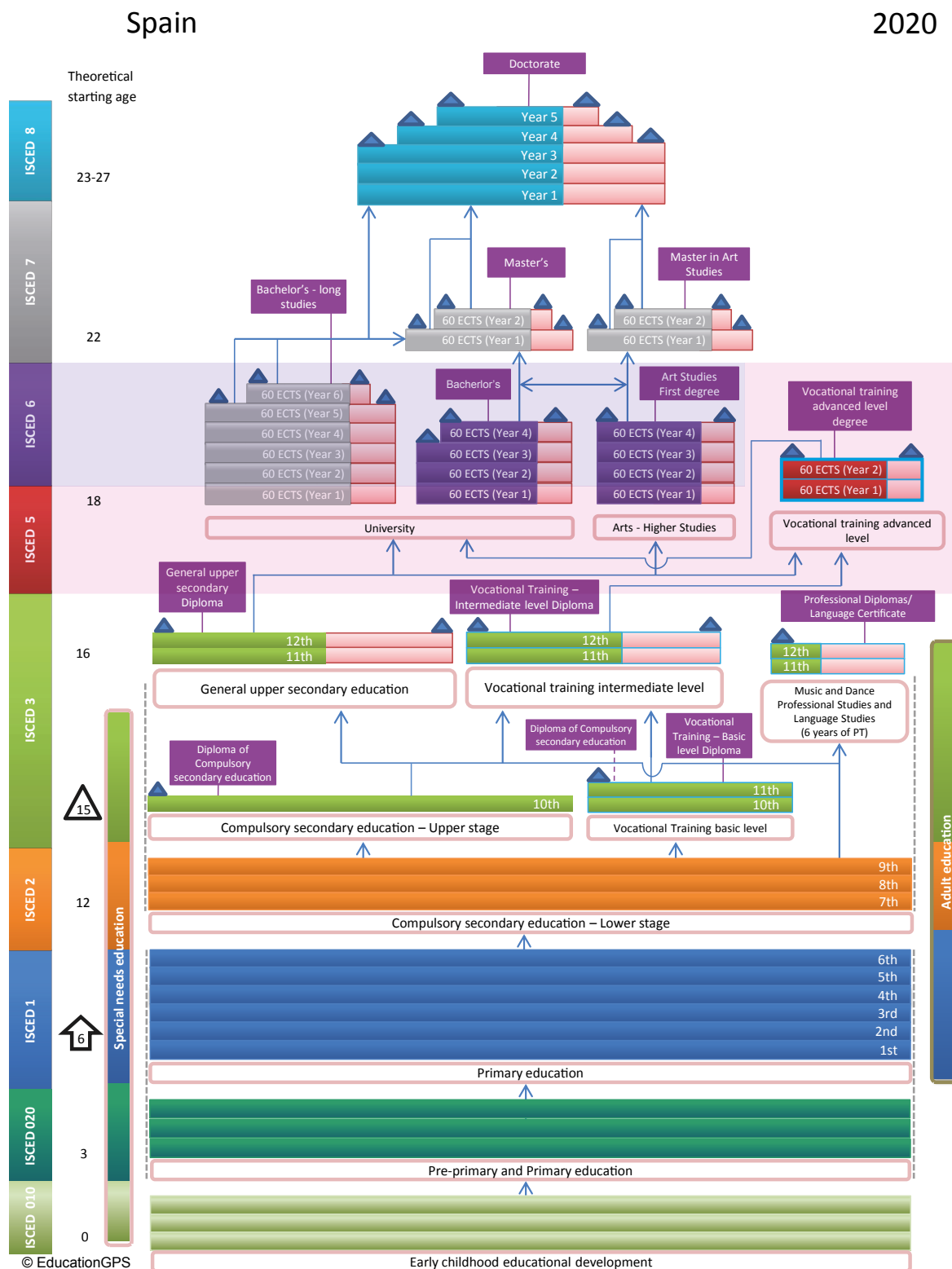


Global map of universities that include HNDs in their university pathways (source: Pearson Degree Finder)

3 Comparative study

This section discusses the structure, assessment methodology and, in particular, the learning outcomes of HNDs, UK Level 5 VET qualifications and the relationship with their counterparts in Spain, the CFGS. Here we highlight common factors, essential differences and their potential complementarity in double diploma pathways.

Since this report essentially addresses the Spanish education sector, we will not go into the structure and methodology of the Spanish programmes, focusing instead on identifying the affinities and differences between the two qualifications.

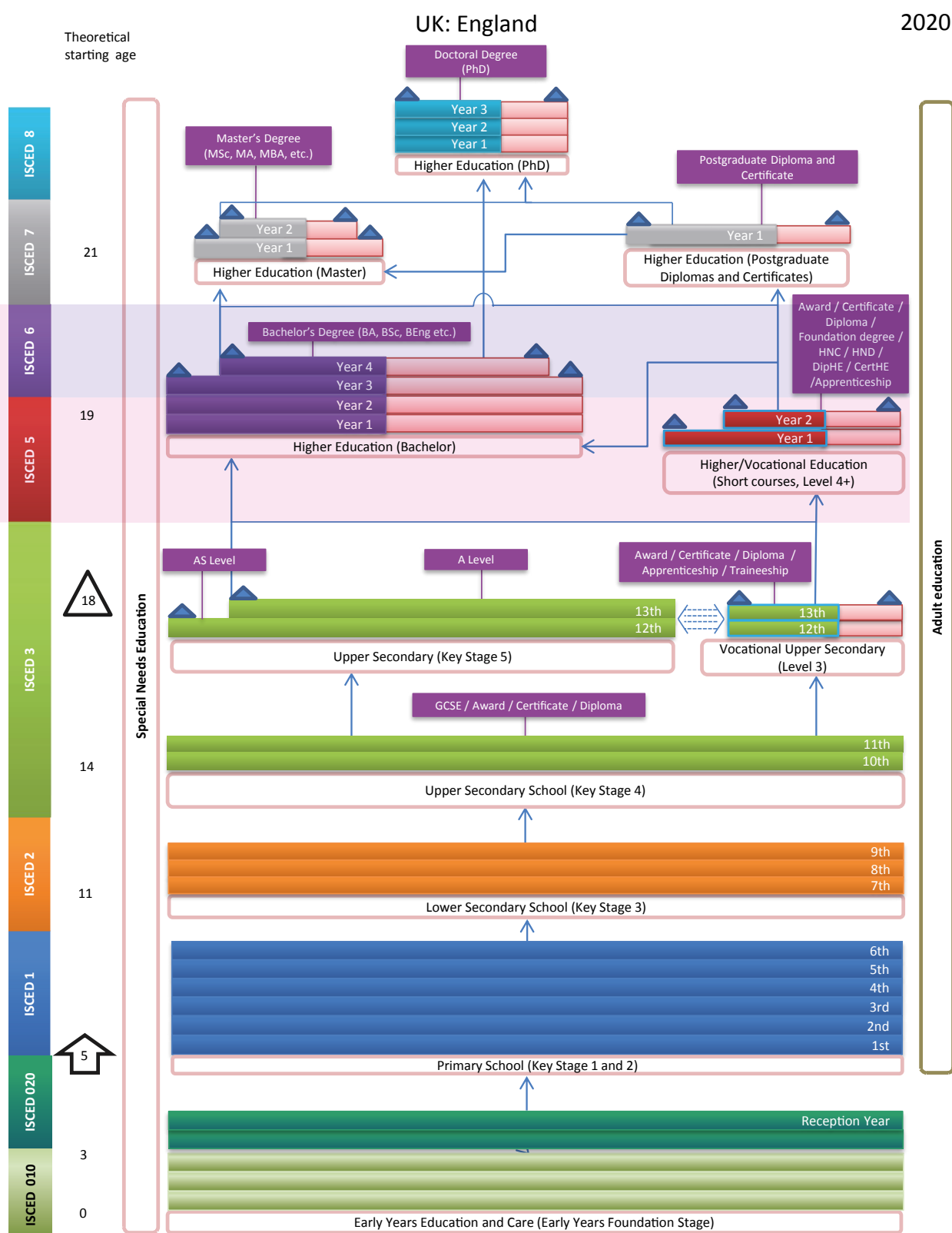


Key

- Starting/ending age of compulsory education
- Recognized exit point of the education system
- Typical student flow
- Transfer from a programme to another
- Programme designed for part-time attendance
- Vocational/Professional orientation (according to national definition at the tertiary level)

- Single structure education (integrated ISCED levels)
- May be provided within one school structure
- Transfer at crossing lines is not possible
- Diploma
- ECTS European Credit Transfer and Accumulation System
- 2020 Reference year (school year 2019/2020 in the northern hemisphere)

* Theoretical starting ages refer to the ages as established by law and regulation for the entry to a programme, actual starting ages may vary depending on the programme.



The following table shows the relative position of the two qualifications in their respective education systems. Here we can see the parity between the two in terms of level, duration and interrelation with the rest of their academic framework:

UK ACADEMIC EDUCATION	UK VET	SPANISH FORMAL VET	SPANISH ACADEMIC EDUCATION
PH.D.			DOCTORATE (MECES 4)
MASTER'S DEGREE			MASTER (MECES 3)
YEAR 4 OF BACHELOR'S DEGREE (WHERE APPLICABLE)			YEAR 4 OF DEGREE (MECES 2)
YEAR 3 OF BACHELOR'S DEGREE (TOP-UP COURSE)			YEAR 3 OF DEGREE
YEAR 2 OF BACHELOR'S DEGREE (YEAR 2 OF FOUNDATION DEGREE)	YEAR 2 OF HND (HIGHER NATIONAL DIPLOMA)	YEAR 2 OF HIGHER VET (MECES 1)	YEAR 2 OF DEGREE
YEAR 1 OF BACHELOR'S DEGREE (YEAR 1 OF FOUNDATION DEGREE)	YEAR 1 OF HND (HNC)	YEAR 1 OF HIGHER VET	YEAR 1 OF DEGREE
HIGHER EDUCATION			
YEAR 2 OF GCE A-LEVELS	YEAR 2 OF EXTENDED DIPLOMA	YEAR 2 OF INTERMEDIATE VET	YEAR 2 OF BACCALAUREATE
YEAR 1 OF GCE A-LEVELS	YEAR 1 OF EXTENDED DIPLOMA	YEAR 1 OF INTERMEDIATE VET	YEAR 1 OF BACCALAUREATE

Within the European qualification frameworks, the correlation between CFGS and HND Level 5 VET qualifications is shown below:

EQF		MECES		QF-EHEA					MECU-CNCP	
Level	Level	Current qualifications	Past qualifications	Germany	UK	France	Portugal		Level	Accreditation
1									1	Operator
2										
3									2	Intermediate Technician
4										
5	1	<ul style="list-style-type: none"> Título de Técnico Superior de F. Profesional Título de Técnico Superior de Artes Plásticas y Diseño Título de Técnico Deportivo Superior 	Short cycle	Meister	HND	BTS	CTSP		3	Advanced Technician
6	2	<ul style="list-style-type: none"> Título de Graduado Título de Enseñanzas Artísticas Superiores 	<ul style="list-style-type: none"> Diplomatura Ing. Técnica 	First cycle	Bachelor	Bachelor	Licence	Grado	4	Degree
7	3	<ul style="list-style-type: none"> Título de Máster universitario Título de Grado de 300 ECTS (60 con nivel Máster) Título de Master en Enseñanzas Artísticas 	<ul style="list-style-type: none"> Licenciaturas Ingenierías Arquitectura 	Second cycle	Master	Master	Master	Mestrado	5	Master
8	4	Doctor		Third cycle	Doctoral Degrees	Doctoral Degrees	Doctorate	Doutorado	6	Doctorate

EQF: European Qualifications Framework

MECES: Spanish Higher Education Qualifications Framework.

QF-EHEA: Qualifications Framework of the European Higher Education Area

MECU: Spanish Qualifications Framework.

CNCP: National Catalogue of Vocational Qualifications.

In order to make this comparative study as representative as possible, we have chosen four different qualifications from a variety of occupational groups (Business, Computing, Media Production and Design) belonging to the HND catalogue.

The year of approval of the programmes mentioned allows us to place the study in its temporal context.

Spanish qualification	British qualification
CFGS Desarrollo de Aplicaciones Multiplataforma 2010	BTEC Level 5 HND in Computing 2017*
CFGS Animaciones 3D, Juegos y Entornos Interactivos 2013	BTEC Level 5 HND in Creative Media Production 2018
CFGS Artes Plásticas y Diseño/Gráfica Impresa 2012**	BTEC Level 5 HND in Art and Design 2017
CFGS Marketing y Publicidad 2012	BTEC Level 5 HND in Business 2021

In the UK, HNDs undergo major review every 5 years, with timely improvements being made in the interim in line with changes identified through consultation with the sector.

Since the introduction of the RQF in 2015, these qualifications are structured into a set of Level 4 units taught in the first year and a set of Level 5 units delivered in the second year. Each unit is assigned 15 UK credits (half the value of ECTS credits), the only exception being one specific 30-credit unit.

These units aim to develop both transferable skills that facilitate employability and academic knowledge in five categories:

- Cognitive and problem-solving skills: critical thinking, approaching non-routine problems by applying expert and creative solutions, use of systems and digital technology, generating and communicating ideas creatively.
- Intra-personal skills: self-management, adaptability and resilience, self-monitoring and self-development, self-analysis and reflection, planning and prioritising.
- Interpersonal skills: effective communication and articulation of information, working collaboratively, negotiating and influencing, self-presentation.
- Commercial skills: sector awareness, sales, marketing/promotion, budget management/monitoring
- Business skills: awareness of types of companies, company formation, invoicing, calculating fees, business management.

The HND is a Level 5 qualification made up of 240 UK credits, 120 in the first year and 120 in the second year. Therefore, given the 2-to-1 ratio between these and ECTS credits, an HND awards 120 ECTS credits, the same as a Spanish CFGS. It is usually studied full time for two years or part time for four years.

*

The HND in Computing has recently been updated, but in order to maintain temporal coherence with the rest of the qualifications we have decided to use the 2017 programme as reference.

**

This cycle falls under vocational arts studies, which have a specific regime and particular characteristics of their own. However, for the purposes of the study, it serves to give more scope to the comparison given the general features it has in common with the rest of the qualifications.

An HND student is expected to have earned at least 90 credits at Level 4 before progressing to Level 5. This allows students to complete the 30 remaining Level 4 credits while undertaking their Level 5 studies. Students taking an HND who do not successfully complete the full qualification may be awarded a Level 4 HNC if their number of credits allows, giving the curriculum modularity.

BTEC Higher Nationals consist of core units, specialised units and elective units:

- Core units are compulsory.
- Specialised units are designed to give the qualification a specific occupational focus and are aligned with the standards set by professional bodies.
- The required combinations of elective units are clearly stated in the qualification specifications and include the different pathways via which students can specialise.

These pathways consist of specific subsets of the qualification's unit catalogue and are supplemented by the permitted combinations that enable the HND to be awarded in that specific specialism.

For example, the HND in Computing has the following possible pathways:

- General
- Software Engineering
- Network Engineering
- Data Analytics
- Security
- Intelligent Systems
- Applications Development

In short, there are a large number of units in each qualification programme, but the qualification curriculum specifies which combinations of units are valid for achieving the qualification. This allows the VET provider to choose the variants of these combinations that best suit its curricular and didactic objectives while maintaining mandatory combination rules.

In addition, it is possible to add further flexibility through the Meeting Local Needs (MLN) procedure, whereby institutions can apply, with justification and under certain conditions, to import a maximum of two Level 4 units and two Level 5 units from another qualification programme to meet specific labour market needs.

This does not affect the core units or compliance with the rules of admissible combinations.

The units have been designed from a learning time perspective and are expressed in terms of Total Qualification Time (TQT). TQT is an estimate of the total amount of time a student could reasonably be expected to take to achieve and demonstrate the level of knowledge required for award of a qualification. TQT includes the completion of each of the guided learning and supervised assessment activities. Each 15-credit unit is equivalent to a total of approximately 150 hours, with 60 hours of guided learning. The TQT for an HND is 2,400 hours, of which 960 hours are tutor- or teacher-led learning.

Spain's CFGS courses are divided into VET modules. Each academic year consists of a series of modules and passing all of them results in award of the corresponding qualification. Modules vary in length, meaning they do not all comprise the same number of hours. Passing an individual module is definitive, so students who do not pass all the modules needed to progress to the next academic year only have to retake the modules they failed.

CFGS courses include at least the following VET modules:

- Modules associated with competence units listed in the CNCP, in which the student acquires the knowledge necessary to practice the chosen profession.
- Vocational Training and Guidance Module, in which students are made aware of the education and employment opportunities available and learn about the organisation of work, employee–employer relations, employment legislation and their employment rights and obligations.
- Enterprise and Entrepreneurship Module, in which students are taught the basics of business creation and management and learn about self-employment.
- Project module (only for CFGS qualifications), which aims to integrate the skills and knowledge acquired from all the VET modules taken.
- Workplace Training Module (compulsory to award of the qualification). This is not a form of employment and therefore does not entail a contractual relationship. This model completes acquisition of the vocational skills specific to each qualification.

This module is taken at the end of the second year once the student has passed all the other modules that make up the course. Total or partial exemption from taking this module is possible if the student can provide evidence of at least one year's full-time employment in a job related to the VET qualification.

Students who drop out after the first year without completing the workplace training module are not awarded a qualification.

Spain's qualifications framework does not allow students to combine modules from different courses even though it is common to find the same learning modules under several different syllabuses within the same occupational group. However, students who wish to change pathway can have the modules they passed on the previous course recognised as counting towards the new qualification.

Spain's Specific VET qualifications are both academically and professionally accredited and are officially recognised at national and EU level.

Students can request accreditation of passed VET modules in the form of a certificate that can be used in both academic and employment settings. Passing all the VET modules on a course accredits that the student has acquired the corresponding vocational skills and qualifies them for a particular profession.

Under the distance VET option, students can choose between enrolling part-time and doing fewer modules per year or signing up for more modules than contemplated on the syllabus and taking on a more intense workload.

Although it is not one of the main objectives of this report, it is worth devoting a few lines to the differences in assessment and grading methodologies to highlight the possible pros and cons of the integrated syllabuses.

This consideration is necessary insofar as the assessment methodology at Spanish VET providers needs to take into account the aforementioned differences in syllabuses and, particularly, in the VET modules' teaching programmes. This will result in lower workloads for teaching staff and consistent learning structures for students.

The Spanish model specifies a series of qualitative assessment criteria that are subservient to the discretionary grading frameworks implemented in VET colleges' teaching programmes. Conversely, the British model details those criteria both qualitatively and quantitatively, specifying not only the assessment criteria associated with each learning outcome but also the grade obtained if those objectives are achieved.

The grade on each HND unit depends on whether or not the specific assessment criteria for each of the three possible marks — Pass, Merit and Distinction (similar to *Aprobado*, *Notable* and *Sobresaliente* in Spain) — are achieved. To obtain a Pass, the student must demonstrate evidence of achieving all the unit's learning outcomes defined by the assessment criteria at that level. To pass with Merit, the student must meet the corresponding criteria plus all of those of a Pass. Finally, to pass with Distinction, the student must meet all the criteria set at that level plus all of those for the Merit and Pass grades.

Two key features of the HND assessment methodology are its staging and its holistic approach. The assessment criteria's staging is a consequence of the quantitative nature of their structure. Meeting the minimum necessary threshold to pass the unit earns a Pass, while the extent by which the student exceeds that threshold determines whether they are awarded a Merit or a Distinction.

The chart below shows the correlation between learning outcomes and assessment criteria. As can be seen, each learning outcome is associated with specific assessment criteria at each award level. These criteria are also indicated by the key verbs used (explain, evaluate, compare, describe, justify, etc.).

Assessment criteria

Pass ¹	Merit ²	Distinction ²
LO1 Describe the key technologies, uses and platforms for web and app development		
P1 Explain key technology platforms and applications used to develop web app solutions	M1 Compare the merits of websites, web service and apps for different types of distribution and consumption of content	LO1 LO2 D1 Evaluate the relationship between technology selection and the potential for a web or app development to meet user and client needs
P2 Discuss the features and differences of websites, web service and apps, in relation to their development and use		
LO2 Evaluate client, user requirements, and market context, for a web or app development project, in response to a given brief		
P3 Explain the business case for a web or app development approach, based on a given brief	M2 Justify a development approach, for a website or app, based on meeting client and user requirements	
P4 Evaluate user requirements for a given brief, based on market research and analysis		
LO3 Explain the project management approaches of web and app development		
P5 Describe how the principles of project management may support web or app development	M3 Evaluate the testing and feedback phases for a web or app development project, and how they may inform the overall project process	LO3 LO4 D2 Present a development plan that reflects critical evaluation of project management methodologies, client and user needs and technical requirements
P6 Illustrate the key stages of a project development process, in response to a given brief		
LO4 Present a web and app development plan, in response to a given brief		
P7 Prepare a development plan for a website or app, highlighting key deadlines, milestones, and technology specifications, in relation to a given brief	M4 Justify a development plan, with regard to meeting technical, user and client requirements	
P8 Present a web/app development plan that integrates project management principles, technical, user and client requirements		

¹
Pass: clearly defines the threshold necessary to pass the unit

²
Merit/Distinction: determine the extent of the pass

The progression from one grade to the next follows the scaffolding principle in which each level builds on the one below. This principle also reinforces a holistic assessment methodology.

The scaffolding principle is clearly shown below. Pass sets a clear threshold, then Merit and Distinction acknowledge added depth and breadth, with each grade being a modular extension of the one underneath it.

		Assessment criteria		
		Pass	Merit	Distinction
Grade	Pass	X		
	Merit	X	X	
	Distinction	X	X	X

To obtain a grade, the student must meet all of that grade's assessment criteria plus those of the grades below.

Assessment is also carried out holistically.

Holistic assessment seeks to treat the unit's content as a whole rather than separating the activities according to the assessment criteria. It is therefore advisable to design the learning activities so that students can, ideally, meet all the criteria in an integrated way, thus facilitating students' acquisition of competences based on their interrelationships and an overall understanding of the course subject.

This methodology is based on the following core elements:

- The tasks associated with the units are considered as a whole.
- Assessment includes both academic and analytical criteria (based on the assessment criteria).
- The assessment criteria are intended to be achieved within integrated projects rather than through independent activities.
- The task students perform should be designed holistically and should offer the potential for students to meet all the assessment criteria.

In contrast to a Spanish CFGS, where the average grade for the course is calculated as the arithmetic mean of the marks obtained in all the VET modules (except in the case of workplace training), in an HND the average grade — known as the overall qualification grade — is calculated solely from the Level 5 units (the highest) using a points system based on the mark obtained in each unit as per the table below:

	Points per credit		Total points
Pass	4	Pass	420–599
Merit	6	Merit	600–839
Distinction	8	Distinction	840+

Consequently, the average grade for the qualification reflects the **final** level of competence achieved, removing the potentially distorting influence that substantial changes in performance can have from one year to another.

On a Spanish VET course, the teaching programmes are the instruments used to plan, deliver and assess each of the modules that make up the qualification and demand individual coordination and joint work mechanisms, particularly if the aim is to assess development of students' competences. Under these programmes the teaching staff decide how the learning outcomes will be assessed and how the grades will be awarded based on each VET module's assessment criteria.

These criteria are graded on a scale of 1 to 10, with no decimal points, and the overall average grade is the arithmetic mean of all the course modules (except workplace training, for which the grade is simply Pass or Fail).

In any case, the grading criteria are largely decided by the staff when drawing up the teaching programme and are therefore less standardised and more prone to arbitrariness than a system like that of the HNDs in which the grade awarded is determined by the extent to which the student meets the specific assessment criteria.

It should be acknowledged, however, that some of Spain's autonomous communities have introduced proprietary procedures that address this and other aspects in greater depth than provided for in the national legislation.

The comparative table below summarises the main features of the two qualifications.

Table comparing main CFGS and HND features		
Qualification	CFGS	HND
Level	5	5
Duration	2 years	2 years
Hours	2000 hours 1600 GLH + 400 WBT	2400 hours TQT 960 GLH
Equivalent ECTS credits	120	120
Structure (fixed or flexible)	Fixed	Flexible, with rules governing the combination of units
Progression to Level 6	Yes	Yes
Recognition of Level 6 credits in national education system	30–60 ECTS credits recognised	120 ECTS credits
Compulsory work placement	Yes	No
Qualitative/quantitative assessment criteria	Qualitative	Qualitative and quantitative
Standardised internal verification	No	Yes
Inspection	Yes	Yes
Specialisation itineraries and elective units	No (limited offering, and only post-qualification)	Yes
Modularity	Yes	Yes
Intermediate qualification	No	Yes, HNC (Level 4)

3.1 Comparative study of learning outcomes

The learning outcomes of the four selected CFGS courses are mapped against the corresponding Level 5 HNDs in the annexes.

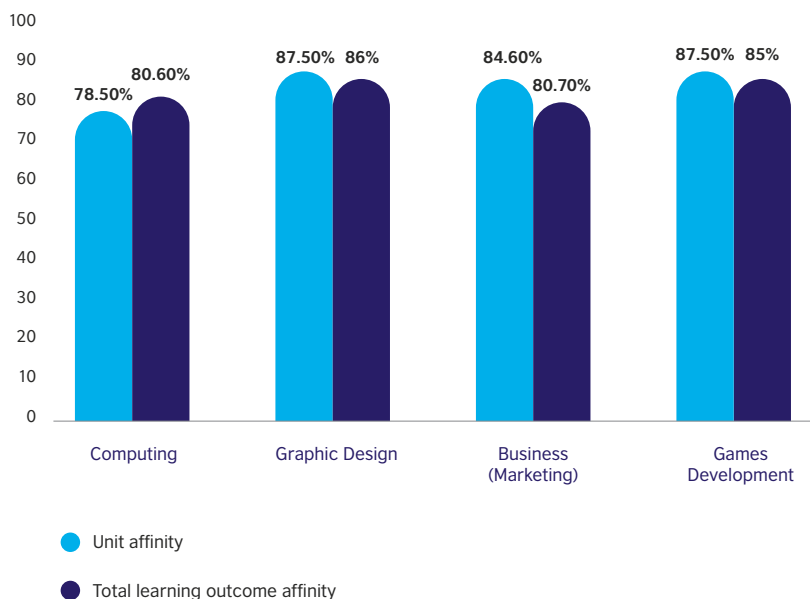
To understand this comparison, it should be noted that:

- The degree of affinity between the qualifications is indicated by colour code:
Green: More than 90% affinity
Amber: More than 60% affinity
Red: Less than 60% affinity
- Affinity was quantified using a points system in which the green VET modules received 1 point, the amber modules received 0.5 points and the red modules received 0 points. The resulting sum was divided by the total number of modules to derive the percentage of affinity. In addition to this score, which indicates the degree of correlation at syllabus and subject level, the percentage of affinity of the overall learning outcomes was also calculated so as to measure the correlation between the academic workloads.
- The mapping was based on identifying a reasonable level of consistency between learning content and outcomes and between the rules for combining units eligible for award of an HND, taking all units (core, specialisation and elective) into account. To this end, unit selection was optimised to ensure that the number was manageable in terms of teaching requirements and that the structure was valid for each particular qualification. In addition, the subset of units leading to the award of an HND was structured in such a way as to make the parallel teaching of the two qualifications efficient without overloading the students.
- The academic level of the units was also taken into account. Thus, Level 4 and Level 5 units were associated with Year 1 and Year 2 CFGS modules, respectively, wherever possible. There are, nevertheless, several differences in academic level that could produce changes in the initial mapping if this were considered appropriate.
- Although it is possible to map the qualifications using the general HND pathway, the decision was made to use the specialisation pathway for the sake of consistency between the spirit of the qualifications and their associated professional profiles.
- For CFGS modules that cannot be directly mapped to HND units or for which the mapping is insufficient, there is the option of importing units from another HND under the RQF using the MLN procedure while conserving their essential structure, thereby allowing even greater flexibility.
- Mapping effectiveness will always be greater when the areas and activities subject to assessment (assignments) are designed to meet the learning outcomes of both qualifications.

If a VET provider wishes to offer an HND with a view to later integrating it into a Spanish qualification it is advisable that the teaching staff understand the joint curriculum structure before making adaptations and drawing up teaching syllabuses. Poor choice of HND units may result in the course lacking the competences needed for future recognition under a CFGS qualification. Working in the other direction presents fewer problems because the Spanish qualifications do not include specialisation units.

The percentages of affinity between learning outcomes in the four qualifications examined in this study are as follows:

CFGS–HND affinity



Comparative study and analysis reveal the following:

- The affinity between learning outcomes is over 80%.
- It is possible to offer the two qualifications while maintaining or only slightly increasing the course hours.
- This double diploma is compatible with both workplace training and Spain's Dual VET model as the British qualification allows sufficient hours for the work placement.
- The HNDs include higher-level skills and competences in critical analysis, leadership and teamwork, presentation techniques, research and documentation, lateral thinking and reflection on practice, enhancing the learning and value of the CFGS qualifications.
- The assessment methodologies complement each other. The two systems' assessment processes can be carried out in parallel if the teaching syllabus is designed appropriately. The HND assessment model is based on real learning scenarios that strengthen the assessment process and allow it to be extended, by means of standardised procedures, to workplace training.

4 Regulatory framework

4.1 The regulatory framework in Spain

In Spain, it is the VET system that provides all education and training for employability, reskilling and upskilling. The system's principal aim is to provide lifelong enhancement of the knowledge and skills of present and future workers.

Spain's regulatory framework is comprised of the law on education (LOE, *Ley Orgánica de Educación*) and the royal decree and new law on vocational education and training (*Real Decreto de Ordenación de la Formación Profesional* and *Ley Orgánica de Integración y Ordenación de la Formación Profesional*).

There are two types of VET in Spain: VET within the education system and VET for Employment.

The CNCP is the instrument used by the National System of Qualifications and Vocational Education and Training (SNCFP, *Sistema Nacional de las Cualificaciones y Formación Profesional*) to assess and accredit vocational skills acquired either on the job or through training. Valid throughout Spain, the catalogue sets out the main vocational qualifications of Spain's productive system by occupational groups and levels based on EU criteria, and serves as the basis for establishing the range of vocational training qualifications and occupational certificates that are available.

The Ministry of Education and VET's National Qualifications Institute (INCUAL, *Instituto Nacional de las Cualificaciones*) and Subdirectorate-General for VET Planning and Innovation (SGOIFP, *Subdirección General de Ordenación e Innovación de la Formación Profesional*) are responsible for overseeing implementation of the SNCFP. They develop, review and update the content of both the VET system and catalogue.

Historical overview of educational legislation in Spain

Building on and partially amending the 2006 LOE, the law for the improvement of educational quality (LOMCE, *Ley Orgánica para la Mejora de la Calidad Educativa*) was adopted in 2013 and came into force in the 2014/2015 academic year. A new law (LOMLOE) introduced further changes in 2020, although the LOE remains in force for all aspects not modified by the above two laws.

The LOE sets out the general structure of Spain's education system and defines vocational education and training as that which provides students with the necessary skills for a particular occupation. VET is considered a right and duty of all Spanish citizens and is open to all young people and adults without any discrimination.

The structure of VET and the qualifications included in the VET catalogue are set out under Royal Decree 1147/2011. The Ministry of Education is responsible for 55% of the basic curricular content, with each autonomous community being responsible for the remaining 45%.

Progression to university is dealt with in Law 4/2011, which charges the government with fostering collaboration between higher vocational training and university education. However, the recognition of VET qualifications depends on individual universities, which are free to determine the credits recognised from higher VET to bachelor's degree, under the oversight of the competent bodies.

Even when there is complete affinity between a CFGS and a university degree, not all VET subjects taken can be validated: they count towards a maximum of 60% of the ECTS credits of the relevant university degree syllabus. The minimum number of degree credits that a higher VET qualification counts towards is 30, provided that there is a direct relationship between the two qualifications. In general, the maximum number of credits recognised in progressing from a higher vocational qualification to a bachelor's degree is 60.

The law on vocational education and training (*Ley Orgánica de Integración y Ordenación de la Formación Profesional*) that came into force in April 2022 includes important new features such as the introduction of Dual VET at educational institutions and the creation of gateways between VET and university education.

The law provides for important changes, including the following that facilitate the introduction of joint training programmes and have already been implemented in the UK, which means that the experience with the British qualifications will support the implementation of this new law. Most notably:

1. The **integration** of VET for Employment and Specific VET in a single system under which all training can be accredited, accumulated and capitalised, thereby facilitating the creation of training pathways that lead to qualifications, certifications and accreditations that are recognised both nationally and in Europe.
2. The courses available are to be arranged in units that take into account **progression** to other levels.
3. **Modularity** is an essential part of this law that has yet to be implemented. A single system integrating educational training and occupational certificates is to be set up and arranged in five grades, each with five levels according to the knowledge acquired and the hours of learning.

These new VET grades are as follows:

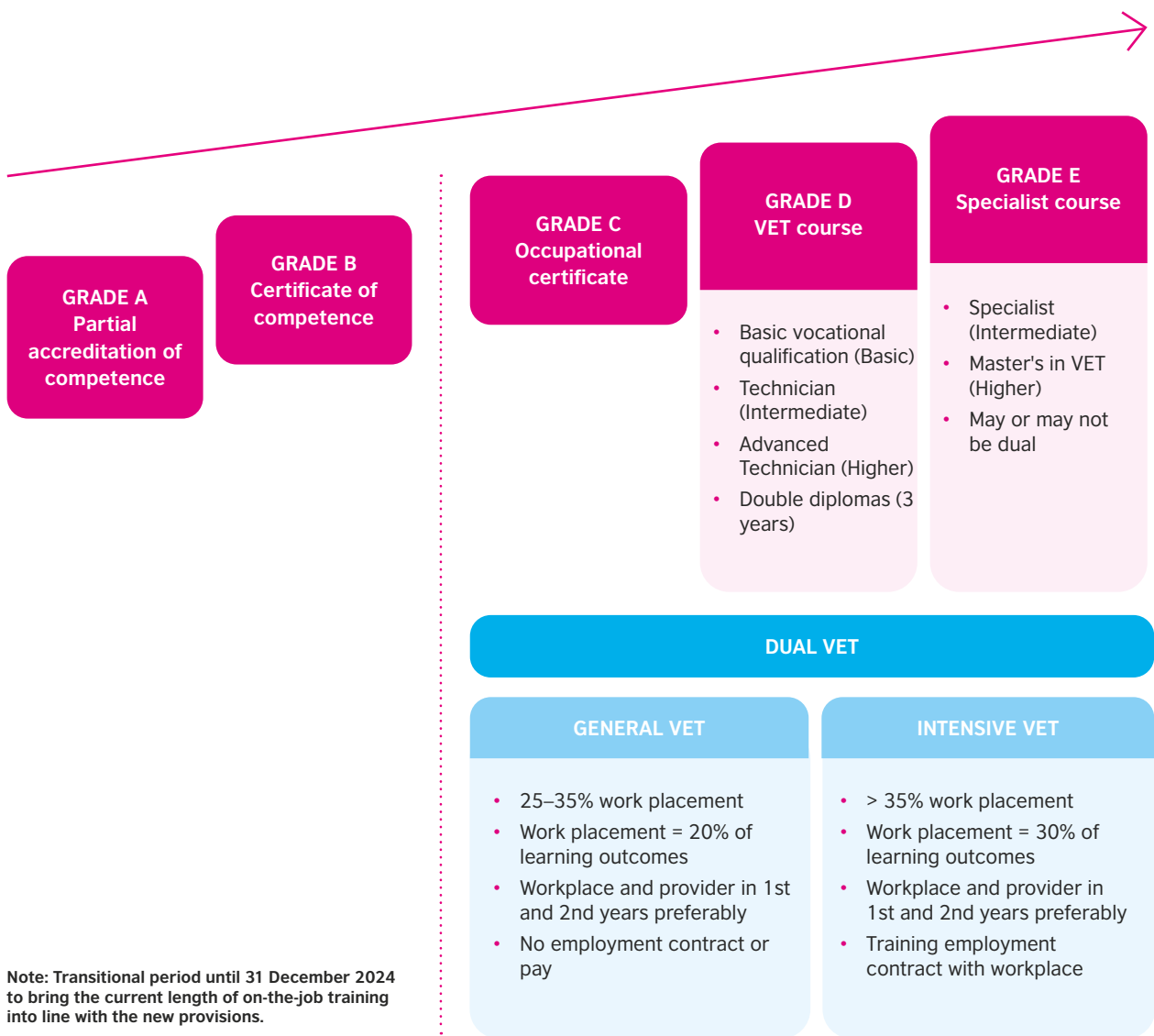
- Grade A: Partial accreditation of competence
 - Grade B: Certificate of competence
 - Grade C: Occupational certificate (requires compulsory work placement)
 - Grade D: VET qualification (requires compulsory work placement)
 - Grade E: Intermediate or higher specialisation courses, not open to those under 16.
4. Employer-provided training actions for employees who left the education system without any qualifications, to assist in their educational reintegration.
5. **A firm commitment to internationalisation** by promoting:
- **double diplomas** via international agreements to enable the simultaneous acquisition of a Spanish and a second-country qualification.
 - Bilingual training.
 - Alliances for stays abroad during training.
6. **Enhancement of the relationship between VET and university education** by authorising jointly designed elective modules both to facilitate progression along the training pathways of students who wish to study at university and to recognise training completed previously (applicable in both directions).

Of the regulatory changes introduced under the new law and the recent royal decree that implements it, our proposal would contribute to accomplishing the six objectives mentioned above, while not interfering with any of the others, such as training in the workplace (Dual VET) as standard, the varying length of higher training courses or others.

A large number of legislative measures are required before the many changes envisaged in the law can be implemented, and we do not yet know how this will be done.

A feature of all of the changes is the flexibilisation of VET so that it is more responsive in training the skilled workforce that a constantly changing labour market demands.

New VET grades



4.2 The regulatory framework in the UK

The TVET system in the UK has been the focus of educational reform in recent years. The sector has been impacted by numerous reviews of standards, skills and funding.

Vocational qualifications are regulated by the Office of Qualifications and Examinations Regulation (Ofqual) and are registered in the Regulated Qualifications Framework (RQF).

The role of the RQF is to ensure the consistency of the information given to the public about all qualifications by requiring awarding bodies to describe the challenge, duration, admission requirements and career or educational pathways for each qualification. Qualifications are therefore arranged by level and number of training hours/credits (from beginner and just a few hours up to postgraduate level and several years). The register also provides details of admission requirements and subsequent progression.

The RQF has nine levels: entry level and levels one to eight. Two qualifications at the same level will be similar in terms of challenge, but their content, duration and assessment methodology may be very different.

For example, HND qualifications are ranked at level 5 and are of a similar length to university foundation degrees, but their course content and assessment methodology are different. In the RQF, the course level is indicated in the name of the qualification to ensure clarity and consistency with other qualifications. There are many other qualifications at the same level.

In the RQF, the duration of a qualification is expressed as Total Qualification Time (TQT) and, when relevant, as Guided Learning (GL) hours and credits. The TQT is essentially the total number of hours that a student is expected to take to complete a course to the level required. Broadly speaking, one credit is equivalent to 10 hours of guided learning.

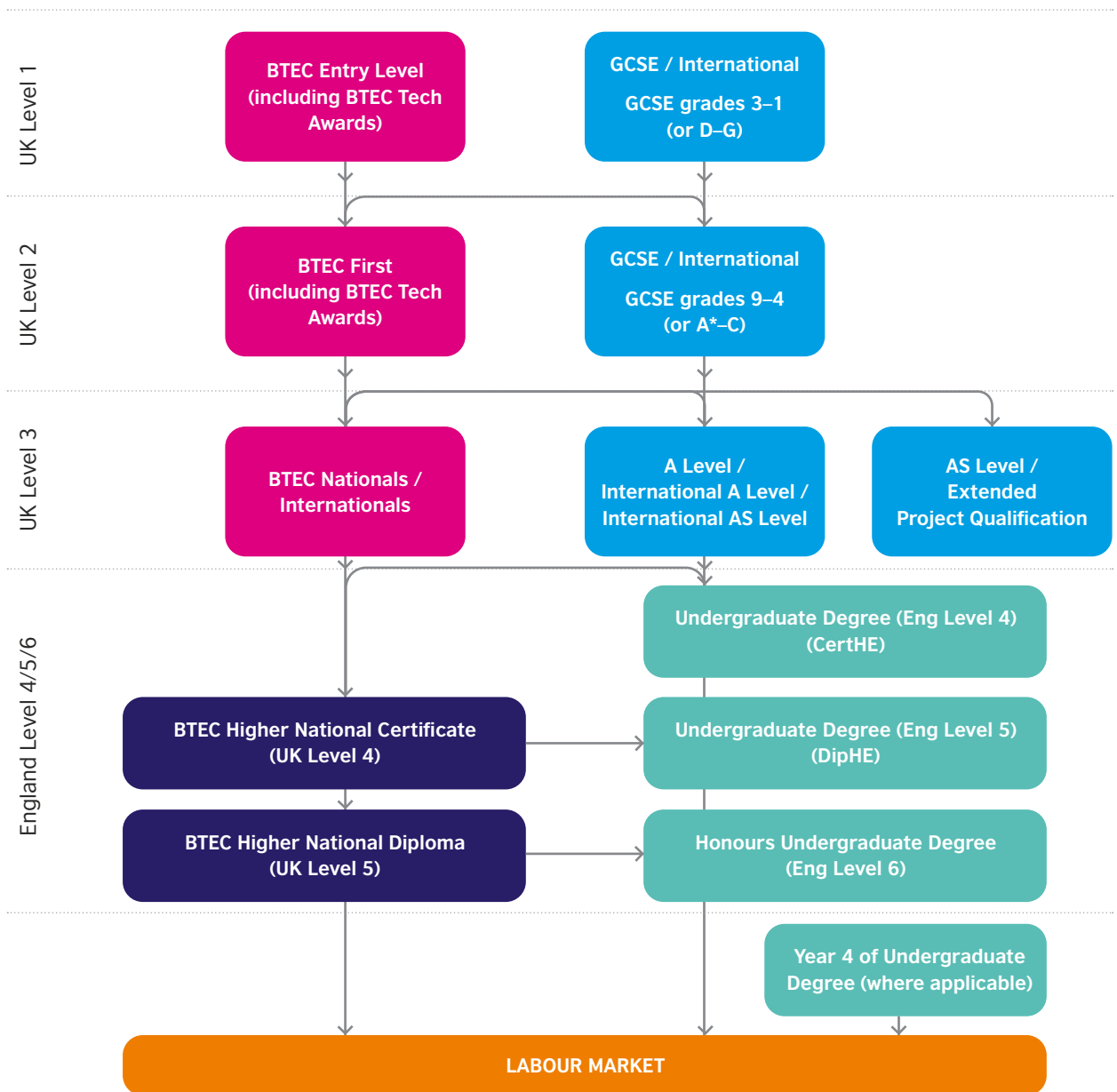
The *Qualifications can cross boundaries leaflet** is a helpful illustration of how qualification frameworks align across the United Kingdom and in various parts of the world.

The Higher National Diplomas under consideration in this report are aligned with the Framework for Higher Education Qualifications (FHEQ), which guarantees that they meet the necessary academic standard for progression to university education. They are also included under level 5 of the RQF. As in Spain, it is universities that have the power of recognition for admission to their courses.

HNDs are recognised (with validation of most of their 120 credits) for admission to more than 100 UK universities and to a further 300+ universities in 34 countries. In general, a student with an HND can either access the labour market or progress to the third and final year of a bachelor's degree in England, Northern Ireland and Wales.

Universities also often offer HNDs among their courses, either as a means of recognising the productive sector or of diversifying their offering or of attracting a diverse student body.

* <https://www.qaa.ac.uk/docs/qaas/news-and-events/qualifications-can-cross-boundaries-guide-to-comparing-qualifications-in-the-uk-and-ireland.pdf>



Like Spain, the UK is making substantial changes to the VET system. Below is a very brief summary:

Review of Level 4 and 5 education

In October 2017, the UK Department for Education commenced a comprehensive review of Levels 4 and 5 of Higher Technical Education (HTE) in England in response to employer demand due to the lack of qualified job candidates. Employers took a very active role in the review under the leadership of the Institute for Apprenticeships & Technical Education (IfATE). As a result, new **Level 4 and 5 Higher Technical Qualifications (HTQs)** were added to those already approved by IfATE to meet the demand for knowledge and skills of the various sectors (in line with the national occupational standards*).

HTQs are specially designed to provide access to highly skilled and highly paid jobs in a range of sectors, including construction, health and science, digital, engineering, administration and business, education and childcare.

In each sector there is a specific occupational standard that has been identified as a skillset by the industry, e.g. in IT the defined roles are software developer, network engineer, data analyst, etc.

Due to industry's close involvement in the design of HNDs, the IfATE is reviewing a number of programmes with a view to issuing them with special quality accreditation in recognition of their alignment with industry.

*

<https://www.gov.uk/government/publications/national-occupational-standards>

Review of post-16 skills

This review included the introduction of **RQF Level 3 T-Levels**. These are technical qualifications closely linked to employability and they include a compulsory work placement.

The Augar Review

The Augar Post-18 Education Review (carried out by an independent panel chaired by Sir Philip Augar) proposes a restructuring of all post-upper secondary programmes. The review recommends specialised vocational training, considering it a more valuable option than short university courses due to its direct relationship with industry and the practical skills acquired, as well as recommending other educational options at the same level as short university courses. A reform is still pending, but approval has been given for significant investment in TVET.

Further Education Colleges (FECs)

FECs are the UK's main providers of TVET. They offer programmes ranging from entry level up to higher education in all sectors. They usually play an important role within their local community by providing Level 2 training and a talent pool of students for universities. They also work in close collaboration with local industry and are sizeable employers. They provide a high standard of vocational education and training for young people, adults and businesses that seek to provide their staff with opportunities for development and training.

FEC facilities are often used by local businesses and vice versa, and it is common for there to be cooperation in teaching, assessment or use of resources.

Institutes of Technology (IoTs)

These are collaborations between further education (FE) providers, universities (HE) and employers, with employers at the heart of decision-making, curriculum development and delivery. They specialise in delivering higher technical education across England and are part of the government's plans to reform technical training to help employers get the skilled workforce they need and offer local people rewarding and well paid careers. Working collaboratively across FE, HE and employer partnerships, IoTs focus on delivering higher level technical skills (mainly at Levels 4 and 5) in science, technology, engineering and mathematics (STEM) where employer demand is greatest. They are designed to significantly increase the number of students with higher technical qualifications, attract more students, and enhance the skills of both employed and unemployed workers.

Although the initiative is in its early stages, there are already 21 IoTs up and running, and the number is expected to gradually increase*.

* <https://www.gov.uk/government/publications/institutes-of-technology--2/institutes-of-technology>

5 Stakeholder opinions

Stakeholders are all those who play a fundamental role in the success and sustainability of the system: employers, employees, regulators, awarding bodies and VET providers, among others.

In general, the importance of stakeholders in VET lies in their ability to contribute to the development and improvement of training programmes and ensure that training meets the needs and expectations of all involved.

In preparing this report, interviews were conducted with a variety of stakeholders involved in implementing, developing, accepting and overseeing these qualifications in Spain.

Their opinions can be summarised as follows.

VET providers

They are familiar with this methodology either because they have implemented it or have considered doing so. They take a very positive view of the model and are generally the most in favour of it. Adopting joint pathways adds value to their courses, giving them both an academic and a financial competitive advantage.

They voice concern about the future of the regulatory framework and the channel for recognition of the qualifications they provide.

They sometimes reach progression agreements with British universities via a Level 6 top-up year to obtain a British bachelor's degree by taking advantage of the equivalence of an HND with the first two years of a degree course. Realising that language support is necessary for true internationalisation, some centres are embarking on bilingual initiatives. An outstanding issue they face, however, is how to bridge the gap with Spanish universities and provide added value in the form of real benefits for progressing to Level 6 at the national level.

One of the problems most frequently cited in our talks with these providers is the need for greater flexibility in the requirements for offering double national/second-country VET qualifications when already providing Spanish qualifications. The current system basically separates courses into two parallel qualifications and requires centres to hold authorisation under two systems (Spanish and international).

Lastly, the absence of specific regulations governing double VET qualifications means there is no standardisation and centres adopt the structure of their choice. In some cases, students studying for a double diploma undertake additional activities, in others curriculum design has been integrated, and this leads to disparity in course workloads.

Universities

In the private sector particularly, there are universities setting up VET centres linked to their campuses. There is limited awareness of British VET qualifications because university admissions offices rarely encounter students applying for entry via this pathway.

The fact that their activities relate mainly to Levels 6, 7 and 8 means that any interest in Level 5 qualifications focuses on the potential for such students to progress to the university's degrees.

Some institutions offer or are planning to offer double VET qualifications to give their courses added value as well as to facilitate greater recognition of credits within their own progression pathways.

Offering HNDs as well as Spain's CFGS qualifications is a way to give students the opportunity to undertake their training in stages. It allows them to acquire skills and knowledge of more technical tools and subsequently continue with bachelor's degree studies in Spain or the UK.

Internationalisation is key for these institutions, so they encourage students to go abroad, focusing part of their work on finding destinations that allow progression to a bachelor's degree via a top-up year and recognised qualifications. Credit recognition is a vital component here, and universities therefore consider that government support is essential for establishing simpler and more efficient gateways between higher VET qualifications and bachelor's degrees that depend as little as possible on subjective criteria and offer a reasonable degree of flexibility.

What higher education institutions need is clear frameworks for recognition of credits and between qualifications, so that students and their families can be clear as to what is on offer. These frameworks would also be a key tool in enabling them to offer combined programmes.

Brexit has added further uncertainty by raising doubt about the validity of British qualifications in the EU. Also, the appeal of an HND as a way of studying or working in the UK has diminished because of rising prices and visa requirements.

Counsellors and brokers

With their focus on international mobility they are aware that more value is now being placed on VET in Spain, particularly in some occupational sectors. The only UK qualifications they are familiar with are the HNC and the HND. What they consider of greatest interest about British education is that it is easier to progress from VET to university than in the Spanish system, in which the validation of credits is lower.

They believe that Spain should increase the recognition of VET qualifications at university level, particularly in some degree courses. The perception is that UK universities are generally more autonomous and in particular are freer to recognise/validate other qualifications.

They believe that many VET students would wish to continue studying if there were speedier progression pathways. In this regard, the British top-up course is seen as providing clear added value. The greatest challenges now are the cost of studying in the UK and students' English-language skills. They also think that VET should receive the same support for international collaboration and transnational programmes as that given to universities.

Their primary concern is the post-Brexit increase in British university fees and the withdrawal from the Erasmus+ programme, which makes mobility more difficult, although the UK is still a favoured destination for Spanish students.

Business

There is little awareness of the huge volume of Spanish investment in the UK and vice versa, with Spanish businesses forming an important part of the British productive sector and also British companies being well established in Spain. Joint VET would make it possible to hire skilled labour with qualifications that are not only recognised in both countries but also in Asia, the Middle East and Africa, where the HND is recognised. The value that Spanish businesses place on this qualification varies considerably depending on the sector. Those that are more internationalised attribute greater value to such job candidates because the language skills they have acquired enable them to communicate fluently in transnational environments, particularly in English.

Educational policymakers

Regardless of where they are on the political spectrum, there is a consistent will to foster the internationalisation of education in Spain, particularly with regard to VET qualifications.

There is a clear awareness that providing training that is valid globally is one of the best tools for combatting unemployment and further developing Spain's productive sector. The differences lie in how to do this. The strong impetus in favour of Dual VET, which is working so well in Germany, is hindered in Spain by the fact that in many sectors there are not enough companies that can provide work placements, nor is there a learning and assessment methodology in place that prevents imbalances arising during this period.

There is a willingness to consider the various options and prioritise those that can best meet the real needs from a forward-looking standpoint.

Students and their families

Students have a very positive view of international double diplomas because they broaden their employability horizons and enable them to adapt their academic profiles to international standards, giving them greater mobility. Their families also appreciate the supplementary bilingual content that is available with double diplomas because they see language skills as one of the best means of entry to the world of employment. Both highlight the need to contextualise both content and language support to fit the specific characteristics of VET qualifications so that they reflect as far as possible the job opportunities in each specialism.

6 Mutual recognition

The UK ENIC agency was set up to meet the UK's continuing treaty obligations under the Lisbon Recognition Convention. For university entrance, the UCAS agency has a tariff points table to measure not only the recognition of qualifications but also exam marks.

In Spain, the UNED (national university for distance learning) Unedasiss service handles international applications for admission to Spanish universities. Students can obtain the necessary UNED accreditation using a system that equates their HND mark with a specific number of UCAS tariff points and gives a grade for admission to a Spanish university. However, the maximum possible mark for an HND using this system is currently 8.4 (corresponding to 168 UCAS tariff points) which, paradoxically, can be lower than that for a British Level 3 VET qualification, such as a BTEC Extended Diploma.

Those in charge of this accreditation are aware that the system could be improved, via either a new calculation system or a bilateral agreement enabling explicit recognition of the respective qualifications. The extensive work done by the UNED over many years in this respect is currently the only route to recognition of these qualifications in Spain.

This asymmetry is also evident in the opposite direction: ENIC currently recognises Spanish CFGSs as similar to a Level 4 HNC in the United Kingdom (the first year of an HND). However, ENIC is only an advisory body, which means that universities can, and do, accept CFGSs as equivalent to an HND (Level 5). Double diplomas would render such recognition procedures unnecessary because students would hold both qualifications and could gain access to both the academic and the business worlds in Spain and the UK without needing any future type of recognition or accreditation.

This is all highly dependent on how the UK and Spain's educational relations develop and whether considerations about appropriate reciprocity lead to a bilateral agreement. Together with the educational reforms under way in both countries, it opens the door to an improvement in the medium term that would provide students with more and better opportunities, albeit always subject to the political will on both sides.

Beyond the bilateral context, internationally recognised qualifications would equip students with a globally recognised occupational profile.

7 Opportunities & challenges

Our analysis of the qualifications discussed in this report from both the educational and the occupational standpoints and in terms of their compatibility and affinity within the Spanish VET framework reveals clear areas of opportunity.

7.1. Opportunities

We have identified nine specific improvements that could be accomplished by using HNDs to internationalise Spanish CFGSs.

1. Facilitation of bilingualism in VET classrooms

Given that language skills are essential in many areas of the work environment, it seems illogical to deprive VET students of this tool for global employability. There can be no real internationalisation without the basic ability to communicate in transnational environments. Developing joint syllabuses with academic structures that are recognised in the English-speaking world makes it simpler to incorporate English language skills because the processes and resources are already in English.

2. Greater competences

The structure of these qualifications is clearly compatible in number of hours, content and learning outcomes and therefore implementing double diplomas is feasible. Double diplomas would facilitate the inclusion of higher-level skills, particularly in terms of critical analysis, presentation techniques, lateral thinking and reflection on own practice, making it easier for CFGS students to acquire cognitive and intellectual skills that can be applied in both their work environments and any subsequent education and training. Also, because they have fewer hours of guided learning, HNDs can even be integrated with CFGSs under the Dual VET model.

3. Greater syllabus relevance

More frequent updates of syllabuses make the resulting profiles a better fit for increasingly dynamic business requirements.

4. Improved progression pathways to university

The model facilitates development of new gateways to bachelor's degrees in which competences are afforded greater recognition. Moreover, given that there already are UK universities offering bachelor's degrees with integrated vocational pathways (e.g. the University of Coventry), a channel exists for developing innovative training proposals.

5. Enhancement of the status of VET

Higher-level skills, greater language fluency and easier progression to Level 6 could attract more ambitious students to VET who currently see it as a single-destination pathway from which it is difficult to cross

over to university. This could be of interest to students who are intending to obtain a university degree but can see the advantages of intermediate qualifications that provide them with work experience to supplement the later stages of their higher education in a modular and flexible manner. This type of structure would also be consistent with the VET courses offered by many Spanish universities.

6. Synergies with the Dual VET model

Implementing a systematic learning methodology that draws on real-life situations and project-based learning is also a valuable tool for extending the model in a way that is consistent with work placements. This could help to strengthen these procedures in the Dual VET model and meets one of the recent challenges posed by the March 2022 law.

7. More transnational agreements

By working with syllabuses that are widely recognised internationally, centres could embark on other associated initiatives, such as collaboration with educational institutions in other countries, increased international mobility and communication with businesses outside the local arena. This would be taking internationalisation to its fullest expression.

8. Modularity

The arrangement of HNDs in units focusing on specific skills means they can be grouped together and mapped by competence unit in order to increase their modularity and integrate them with the VET for Employment system, as per the new law, at Grades A, B and C.

9. More diverse courses and increased added value

Increased flexibility, added value and options available to students. Institutions can fine-tune the benefits obtained from a double diploma or from integrating certain UK procedures into a Spanish qualification with the aim of internationalising it (thereby increasing its scope in terms of both competences and recognition by students) by choosing which parts of the educational process they wish to prioritise. Being able to tailor their strategies in this way also enables institutions to choose their defining features and therefore the value proposal and competitive advantage for their students. For example, the modular structure of HNDs and the existence of pathways makes it possible to adapt the choice of units to each institution according to the design of their curriculum under the Spanish system.

7.2 Challenges

Developing and then implementing a joint offering is not without significant challenges. We have identified six of them.

1. Effort required for implementation

One of the biggest challenges posed in implementing double diploma models is the effort required to integrate both syllabuses: a) in correctly mapping the British units and their learning outcomes to those of the Spanish programme, and b) in adapting the marking methodology to the assessment criteria of both systems so that the teaching, learning and assessment procedures are combined as transparently as possible for students. This effort is concentrated mainly in the first two years of implementation. Fortunately, the financial costs of implementation are very low and do not represent a significant obstacle.

2. Training of teaching staff

In the same way, teaching staff must understand the new procedures and know how to apply them. The fact that courses are usually introduced gradually means there is sufficient margin, provided that there is proper planning on the part of the institution.

3. Lack of regulation

The lack of an appropriate regulatory framework governing and overseeing the establishment of international double VET qualifications in line with the new law means that only a few institutions are undertaking initiatives in this field. Government support would encourage more institutions to embark on internationalisation, which means that we have to wait for Spain's autonomous communities to develop their own interpretation of the law or to address the issue by enacting their own specific provisions.

4. Difficulties in adapting administrative procedures

In line with point 3 above, the legislation on the licensing of institutions offering international qualifications when they are already licensed for Spanish ones should be relaxed to facilitate the creation of joint pathways in the same areas already being used for Spanish VET courses.

5. Curriculum adaptation

Making the curriculum adaptation procedure more flexible when integrating foreign qualifications as part of internationalisation so that it is less complex for institutions and there are fewer duplications or inconsistencies for students. Whether or not a specific framework is put in place will depend on how the law is implemented.

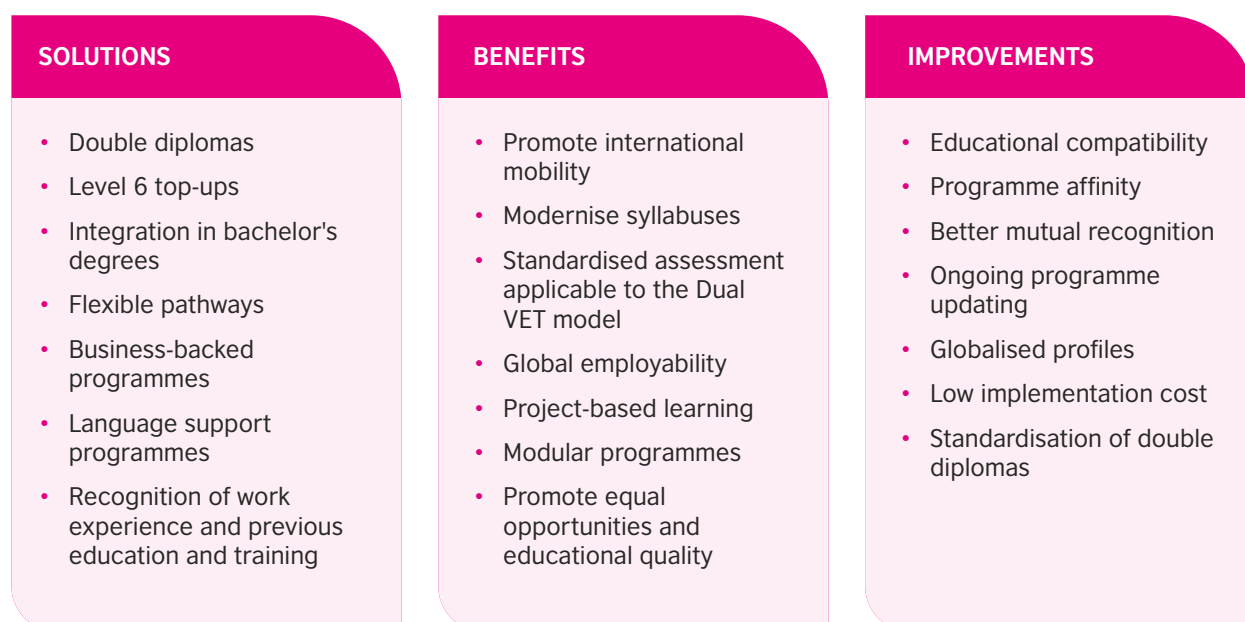
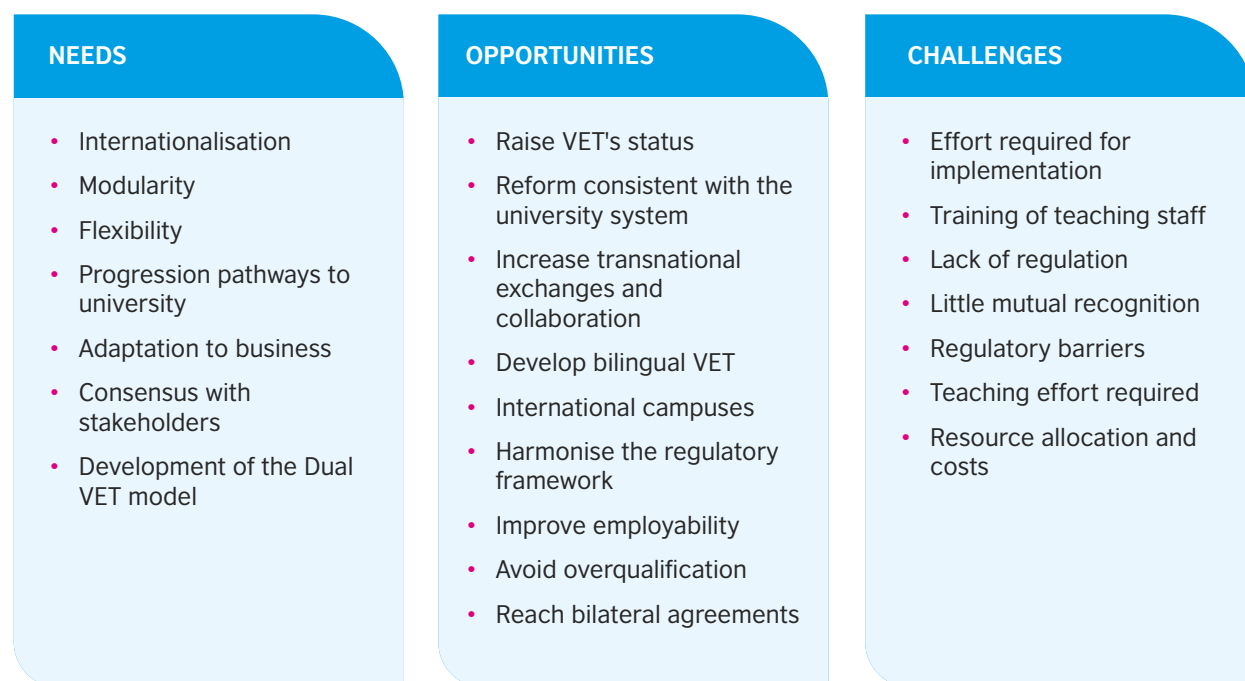
6. Recognition of qualifications

The existence of a regulatory framework linked to a bilateral agreement would avoid the need for additional formalities. Students would receive either two individual qualifications or one joint one, eliminating the need for subsequent top-up courses since the full curriculum of both qualifications would have been taught.

There needs to be an administrative procedure to facilitate double diploma courses without requiring the institution to register twice, once for Spanish qualifications and again for international ones.

It is clear from these lists that the opportunities outnumber the challenges and that the model is not only feasible but also meets many of the needs of the VET sector.

(See the value proposal diagram, which shows the potential contribution of British Level 5 vocational training to the objectives of internationalising higher VET in Spain).



As this chart shows, although there is no single strategy for applying this model and the approaches proposed must be tailored to each specific educational/business context, there are objective benefits in integrating British and Spanish higher VET pathways.

It is not just a question of internationalisation per se; integrating them would also make it possible to achieve other objectives pursued by Spain's VET legislation, such as modularity, flexibility, progression to university and the swift adaptation of education and training to the needs of the productive system, with its attendant enhancement of employability.

8 Final conclusions

This study shows that CFGS and HND qualifications are highly compatible in terms of content, learning outcomes, academic level and duration. Moreover, it also shows the enormous extent to which the two qualifications complement one another and how they offer a series of opportunities to exploit these synergies. Finally, it proposes a way to adapt CFGS qualifications to the law of March 2022 to facilitate attainment of many of its objectives:

1. Internationalisation and bilingualism

The fact that HNDs are taught in 60 countries worldwide makes them a powerful means of internationalising Spanish VET and one that can be easily contextualised by exploiting those aspects that genuinely enhance the syllabuses. They also offer assessment and verification methods that facilitate international employability and emphasise the overall competences acquired, thereby transcending any particular educational context or specific regional academic framework, provided they are appropriately adapted when incorporated. In other words, internationalisation should be considered as an additional means to an end rather than as an end in itself.

Furthermore, given that internationalising students and their vocational competences should be unequivocally accompanied by linguistic support that allows them to thrive in collaborative environments, it is also evident that working in English, improving linguistic competences and even developing English-language learning modules will enhance students' competences and employability.

The introduction of bilingualism as a tool complementing internationalisation could be based on the methodology already in place at baccalaureate level, though it should be customised and contextualised to learning situations that enable the acquisition of language skills in the sector in which the student will eventually work. This contextualisation is essential to achieving student engagement.

2. Flexibility and modularity

Alongside alternative content pathways and dynamic curriculum updates adapted to market needs, flexibility and modularity offer a major advantage when it comes to internationalising Spanish qualifications.

VET providers' independence in drawing up their syllabuses can enrich the academic landscape by offering a wide range of contents that blend operational vocational competences with the theoretical fundamentals and conceptual development typical of research positions, spanning both individual and double diplomas with different levels of integration depending on the syllabus at each institution. The proportions between operational skills focusing on empirical practice and fundamentals based on cultural, scientific or technological competences can be balanced according to the centres' employability or

innovative leadership priorities and could even give rise to cross-cutting and multi-disciplinary syllabuses that not only adopt the academic philosophy of each university but also offer diversity to students keen to find value-added alternatives outside of the generalist pathways. This approach offers a way of respecting universities' governance strategies without, like the tortuous Bologna Process, injuring sensibilities.

Eventually, university curricula that offer greater compatibility with Level 5 VET qualifications, considering them as part of a natural progression and opening gateways to degrees, could even emerge.

3. Frictionless crossover and access to university curricula

Recognition of HNDs by universities in the United Kingdom and 60 other countries by default extends the training and professional pathways open to students who take these double diplomas in the future.

4. The assessment system

Based on real-world experience, and in line with recent Spanish educational legislation, this assessment system further enriches CFGS qualification curricula, especially as regards learning competences. In addition to the advantages that CFGS qualifications already enjoy, this approach complements Spain's recent education laws by creating real learning opportunities for students, generating project-based evidence of learning, increasingly supporting assessment process standardisation and extending it to work placements and integrating the curricula with international university pathways, thereby outlining a scenario in which students, VET providers and employers all benefit greatly. In the case of project-based learning, the advantage this entails is evident as it standardises a process that could otherwise be hostage to assessor subjectivity and potentially create inequalities between students taking the same courses. Once again, standardisation of the teaching and assessment processes is one of the main advantages of incorporating this VET model into the Spanish system.

These aspects complement and extend existing VET curricula and will undoubtedly play a key role if the aim is not only to enhance students' competences through internationalised curricula but also to increase their employability in a global labour market.

The fact that the correlation between the specialisations selected is so positive makes crystal clear the benefits to VET providers, students and employers of developing an internationalisation methodology that both globalises profiles and standardises the project-based assessment process that lies at the heart of the VET model. There will naturally also be differences between the assessment criteria in each syllabus and, according to their individual teaching methodology and

philosophy, VET providers may also influence the extent to which integration is possible and to which the internationalisation of students' professional profiles constitutes *de facto* curriculum adaptation.

It should be borne in mind that the evident advantages in terms of course and assessment methodology standardisation, quality assurance and British VET syllabus update frequency do not in any way detract from the Spanish assessment system. Rather, the proposal is to generate synergies that will enhance the relevance of the learning profiles and, therefore, their local and global employability.

It is always vital that any model be placed in the context of the current and future labour market and the specific needs of each business sector. This should be done consensually with stakeholders, who must provide input before, during and after the training process, extracting from that input every element that can be used to improve the academic and professional opportunities available to our young people. Fortunately, the flexibility mentioned above as regards combining the competence units leading to a British qualification are fully compatible with the CFGS modules, thereby allowing whatever adaptation is required.

In line with the joint initiatives that the European Union is implementing to create a consolidated mobility and recognition model through tools like Europass, it is clear that since the ultimate goal of this training is to offer students improved employment opportunities aligned with business demands, the United Kingdom's labour market dynamics, alongside its position as a global hub in numerous sectors, meet one of the fundamental requirements for this type of qualification. It is no surprise that the United Kingdom remains attractive to students and higher education institutions seeking transnational agreements. It is the regulatory restrictions and barriers introduced by the UK's new immigration laws following its withdrawal from the European Union that end up frustrating many students' ambitions. An eventual bilateral agreement that opens direct gateways to the UK's labour market could improve that interrelationship and increase the numbers of both students and workers in sectors where demand for labour remains unmet.

This report is a response to the desire and need to internationalise Spain's VET by demonstrating the viability of a form of educational collaboration and legislative flexibility that could place Spain at the forefront of applied talent development and achieve synergies between the two countries' economies and workforces. This would be a further contribution, and an important one, to the set of initiatives designed to position Spain and its young people in their rightful place as heirs to the sustainable future that society demands.

This paradigm shift seeks to significantly raise the status of intermediate-level qualifications, acknowledging them as the force driving the new production models stemming from recent technological, economic and social trends such as mass generational renewal and the commitment to sustainable digitalisation that avoids overqualification and maximises available resources.

It represents a form of higher education adapted to society's real needs, in which there is harmonisation between the pathways that, on the one hand, lead to acquisition of the vocational competences business requires and, on the other, shape the people who determine a country's cultural, intellectual and research output, thereby making a fundamental contribution to its human development and long-term sustainability. Proper application of this model requires an effort by all the stakeholders involved and a clear implementation strategy in pursuit of the essential goal: improvement of teaching and learning processes to better match the competences acquired to the demands of the real world.

References and links

Datos y cifras. Curso escolar 2021-2022
Ministerio de Educación y Formación Profesional,
2022

The UK Skills System. An introduction.
British Council, 2015

*Panorama de la educación. Indicadores de la OCDE
2021. Informe español*
Ministerio de Educación y Formación Profesional ,
2021

Sancha, I.; Gutiérrez, S. (2019). *La Formación Profesional
en España 2018.*
Fundae, 2019

*El impulso de la FP Dual desde las organizaciones
empresariales*
CEOE and Fundación Bertelsmann, 2021

*Observatorio de la Formación Profesional en España
Informe 2021*
CaixaBank Dualiza, 2021

*Referencing the Qualifications Frameworks of England
and Northern Ireland to the European Qualifications
Framework*
OFQUAL, CCEA Regulation and QAA, 2019

*The UK Technical and Vocational Education and Training
Systems. An Introduction*
British Council, 2021

[https://qualifications.pearson.com/content/dam/pdf/
Support/Quality%20Assurance/btec-centre-guide-to-
quality-assurance.pdf](https://qualifications.pearson.com/content/dam/pdf/Support/Quality%20Assurance/btec-centre-guide-to-quality-assurance.pdf)

[https://www.qaa.ac.uk/docs/qaas/news-and-events/
qualifications-can-cross-boundaries-guide-to-
comparing-qualifications-in-the-uk-and-ireland.
pdf?sfvrsn=3715c981_4](https://www.qaa.ac.uk/docs/qaas/news-and-events/qualifications-can-cross-boundaries-guide-to-comparing-qualifications-in-the-uk-and-ireland.pdf?sfvrsn=3715c981_4)

<https://www.todofp.es/>

<https://qualifications.pearson.com/>

<https://www.highernationals.com/>

Annexes

Mapping of CFGS–HND learning outcomes (LOs): Computing/Applications Development

CFGS learning outcomes

Affinity level	VET module	Credits	Module No	Code	GLH	LO1	LO2	LO3
Green	IT systems	10	0011	0483	170	1. Evaluate IT systems, identifying their components and characteristics.	2. Install operating systems, planning the process and interpreting technical documentation.	3. Administer the system information, identifying the storage structures and applying measures to ensure the integrity of the data.
Green	Databases	11	0012	0484	170	1. Recognise the elements of databases, analysing their functions and critically evaluating the usefulness of the management systems.	2. Create databases, defining their structure and the characteristics of their elements according to the relational model.	3. Query the information stored in a database using wizards, graphic tools and the data manipulation language.
Green	Programming	14	0013	0485	230	1. Recognise the structure of a software program, identifying and relating the elements specific to the programming language used.	2. Write and test simple programs, recognising and applying the fundamentals of object-oriented programming.	3. Write and debug code, analysing and using the language's control structures.
Amber	Markup languages and information management systems	7	0014	0373	120	1. Recognise the characteristics of markup languages, analysing and interpreting pieces of code.	2. Use markup languages to transmit information via the web, analysing the structure of the documents and identifying their elements.	3. Create content channels, analysing and using syndication technologies.
Green	Development environments	6	0015	0487	90	1. Recognise the elements and tools involved in developing a software program, analysing their characteristics and the phases in which they are used until the software is operational.	2. Evaluate integrated development environments, analysing their characteristics in order to edit source code and generate executables.	3. Verify operation of the programs, designing and performing tests.
Red	Vocational training and guidance	5	0016	0493	90	1. Select employment opportunities, identifying the different routes into the labour market and the opportunities for lifelong learning.	2. Apply teamwork strategies, critically evaluating their effectiveness and efficiency in achieving the objectives of the organisation.	3. Exercise the rights and fulfil the obligations arising from employment relationships, identifying them in the different types of employment contract.
Green	Data access	9	0021	0486	125	1. Develop applications that manage information stored in files, identifying their field of application and using specific classes.	2. Develop applications that manage information stored in relational databases, identifying and using connection mechanisms.	3. Manage data persistence, identifying object-relational mapping (ORM) tools and developing applications that use them.
Green	Interface development	9	0022	0488	125	1. Create graphical user interfaces using the functionalities of visual editors and adapting the code generated.	2. Create XML-based graphical user interfaces using specific tools and adapting the XML document generated.	3. Create visual components, critically evaluating and employing specific tools.
Green	Mobile devices and multimedia programming	7	0023	0489	85	1. Apply development technologies for mobile devices, evaluating their characteristics and capabilities.	2. Develop applications for mobile devices, analysing and employing specific technologies and libraries.	3. Develop programs that integrate multimedia content, analysing and employing specific technologies and libraries.
Green	Service and process programming	5	0024	0490	70	1. Develop applications comprising various processes, recognising and applying parallel programming principles.	2. Develop applications comprising various execution threads, analysing and applying specific programming language libraries.	3. Program networking mechanisms using sockets, analysing the execution scenario.
Amber	Enterprise management systems	6	0025	0491	95	1. Identify enterprise resource planning and customer relationship management systems (ERP–CRM), recognising their characteristics and verifying the configuration of the IT system.	2. Implement ERP–CRM systems, interpreting the technical documentation and identifying the various options and modules.	3. Perform information management and querying operations, following the design specifications and using the tools provided by the ERP–CRM systems.
Green	Cross-platform application development project	5	0026	0492	40	1. Identify the needs of the productive sector, relating them to model projects capable of meeting them.	2. Design projects related to the skills inherent in the qualification, explicitly carrying out the constituent phases.	3. Plan the implementation of the project, defining the programme plan and related documentation.
Red	Business and entrepreneurship	4	0027	0494	60	1. Recognise the capabilities associated with entrepreneurship, analysing the requirements derived from employment positions and business activities.	2. Determine the opportuneness of creating an SME, critically evaluating its impact on the environment in which it operates and incorporating ethical values.	3. Perform the tasks required to create and launch a new business, selecting the appropriate legal form and identifying the corresponding legal obligations.
Green	Training in the workplace	22	0028	0495	400	1. Identify the structure and organisational form of the enterprise, relating them to the development and marketing of its products.	2. Practice the profession, adopting ethical and professional habits as per the characteristics of the employment position and the procedures established by the enterprise.	3. Organise the work required, identifying the tasks assigned under the project plan and interpreting specific documentation.

LO4	LO5	LO6	LO7	LO8	LO9
4. Administer operating systems, using commands and graphic tools and evaluating system requirements.	5. Interconnect systems on a network, configuring devices and protocols.	6. Operate networked systems, administering their resources and identifying the security constraints in place.	7. Prepare documentation, critically evaluating and using general-purpose IT applications.		
4. Modify the information stored in the database using wizards, graphic tools and the data manipulation language.	5. Develop stored procedures, evaluating and using the language statements included in the database management system.	6. Design standard relational models, interpreting entity relationship diagrams.	7. Manage the information stored in object-relational databases, evaluating and using the options provided by the management system.		
4. Develop class-based programs, analysing and applying the principles of object-oriented programming.	5. Perform data entry and output operations, using language-specific procedures and class libraries.	6. Write programs that manipulate information, selecting and using advanced data types.	7. Develop programs, applying the advanced characteristics of object-oriented languages and the programming environment.	8. Use object-oriented databases, analysing their characteristics and applying techniques to ensure data persistence.	9. Manage information stored in relational databases, maintaining the integrity and consistency of the data.
4. Establish validation mechanisms for XML documents using syntax and structure definition methods.	5. Convert XML documents using processing techniques and tools.	6. Manage information in XML format, analysing and using storage technologies and query languages.	7. Operate enterprise information management systems, importing, integrating, verifying and extracting information.		
4. Optimise code using the tools available in the development environment.	5. Generate class diagrams, critically evaluating their importance in application development and using the tools available in the environment.	6. Generate behaviour diagrams, critically assessing their importance in application development and using the tools available in the environment.			
4. Determine the protection provided by the social security system under the various contingencies covered and identify the different types of benefits.	5. Evaluate the risks stemming from his/her activity, analysing the working conditions and risk factors present in the work environment.	6. Participate in preparing a risk prevention plan at a small business, identifying the responsibilities of all the parties involved.	7. Implement prevention and protection measures, analysing hazard situations within the work environment of a cross-platform applications developer.		
4. Develop applications that manage the information stored in object-relational and object-oriented databases, critically evaluating their characteristics and using the incorporated access mechanisms.	5. Develop applications that manage the information stored in native XML databases, evaluating and using specific classes.	6. Program data access components, identifying the characteristics that a component should possess and using development tools.			
4. Design graphical interfaces, identifying and applying usability criteria.	5. Create reports, evaluating and using graphic tools.	6. Document applications, selecting and using specific tools.	7. Prepare applications for distribution, evaluating and using specific tools.	8. Evaluate application operation, designing and performing tests.	
4. Select and test games engines, analysing 2D and 3D game architectures.	5. Develop simple 2D and 3D games using games engines.				
4. Develop applications that offer network services, using class libraries and applying efficiency and availability criteria.	5. Protect applications and data, defining and applying security criteria to data access, storage and transmission.				
4. Adapt ERP-CRM systems, identifying the requirements of a business case and using the tools provided by the systems.	5. Develop components for an ERP-CRM system, analysing and using the built-in programming language.				
4. Define the procedures to monitor and review project implementation, justifying the variables selected and the tools used.					
4. Perform the administrative and financial tasks associated with managing an SME, identifying the main accounting and tax obligations and completing the necessary documentation.					
4. Manage and use IT systems and development environments, evaluating their requirements and characteristics based on their intended use.	5. Participate in development of applications that access data, planning the structure of the database and evaluating the scope and repercussions of the transactions.	6. Participate in development of games, multimedia applications and mobile device applications using specific tools and languages and following the script and specifications provided.	7. Contribute to the development and testing of cross-platform applications, from the interface to process and service programming, including their packaging and distribution and generation of the associated help files and documentation.	8. Participate in the process of implementing and adapting enterprise resource planning and customer relationship management systems (ERP-CRM), analysing their characteristics and critically evaluating the changes made.	

HND learning outcomes

Unit type	Unit	LO1	LO2	LO3	LO4	Level	UK credits	GLH
Core	Unit 1: Programming	Define basic algorithms to carry out an operation and outline the process of programming an application.	Explain the characteristics of procedural, object-orientated and event-driven programming.	Implement basic algorithms in code using an IDE.	Determine the debugging process and explain the importance of a coding standard.	Level 4	15	60
Core	Unit 2: Networks	Examine networking principles and their protocols.	Explain networking devices and operations.	Design efficient networked systems.	Implement and diagnose networked systems.	Level 4	15	60
Core	Unit 3: Professional Practice	Demonstrate a range of interpersonal and transferable communication skills to a target audience.	Apply critical reasoning and thinking to a range of problem-solving scenarios.	Discuss the importance and dynamics of working within a team and the impact of team working in different environments.	Examine the need for Continuing Professional Development (CPD) and its role within the workplace and for higher level learning.	Level 4	15	60
Core	Unit 4: Database Design & Development	Use an appropriate design tool to design a relational database system for a substantial problem.	Develop a fully functional relational database system, based on an existing system design.	Test the system against user and system requirements.	Produce technical and user documentation.	Level 4	15	60
Core	Unit 5: Security	Assess risks to IT security	Describe IT security solutions	Review mechanisms to control organisational IT security.	Manage organisational security.	Level 4	15	60
Core	Unit 6: Managing a Successful Computing Project	Establish project aims, objectives and timeframes based on the chosen theme.	Conduct small-scale research, information gathering and data collection to generate knowledge to support the project	Present the project and communicate appropriate recommendations based on meaningful conclusions drawn from the evidence findings and/or analysis.	Reflect on the value gained from conducting the project and its usefulness to support sustainable organisational performance.	Level 4	15	60
Optional	Unit 8: Computer Systems Architecture	Explain the relationships between hardware components and the subsystems used in a computer system	Categorise the key features and services provided by different computer operating systems and hardware.	Use network communication technology and the associated services to connect computer systems.	Demonstrate diagnostic and troubleshooting skills to solve hardware, software and networking related issues.	Level 4	15	60
Optional	Unit 9: Software Development Lifecycles	Describe different software development lifecycles.	Explain the importance of a feasibility study	Undertake a software development lifecycle	Discuss the suitability of software behavioural design techniques.	Level 4	15	60
Optional	Unit 10: Website Design & Development	Explain server technologies and management services associated with hosting and managing websites.	Categorise website technologies, tools and software used to develop websites.	Utilise website technologies, tools and techniques with good design principles to create a multipage website.	Create and use a Test Plan to review the performance and design of a multipage website.	Level 4	15	60
Core	Unit 13: Computing Research Project	Examine appropriate research methodologies and approaches as part of the research process.	Conduct and analyse research relevant to a computing research project.	Communicate the outcomes of a research project to identified stakeholders.	Reflect on the application of research methodologies and concepts.	Level 5	30	120
Core	Unit 14: Business Intelligence	Discuss business processes and the mechanisms used to support business decision-making.	Compare the tools and technologies associated with business intelligence functionality.	Demonstrate the use of business intelligence tools and technologies.	Discuss the impact of business intelligence tools and technologies for effective decision-making purposes and the legal/regulatory context in which they are used.	Level 5	15	60
Specialist (App Development Pathway)	Unit 28: Prototyping	Explore forms of prototypes appropriate for various functionality and end user testing requirements.	Plan a prototype for specific target end users and planned tests.	Develop multiple iterations of the prototype using appropriate tools.	Evaluate user feedback and test results from multiple iterations of the prototype and end user testing.	Level 5	15	60
Specialist (App Development Pathway)	Unit 29: Application Program Interfaces	Examine what an API is, the need for APIs and types of APIs.	Apply the knowledge of API research to design an application that incorporates relevant APIs for a given scenario or a substantial student chosen application.	Implement an application in a suitable development environment.	Document the testing of the application, review and reflect on the APIs used.	Level 5	15	60
Specialist (App Development Pathway)	Unit 30: Application Development	Produce a Software Design Document by analysing a business-related problem and deduce an appropriate solution including a set of initial requirements.	Use design and development methodologies with tools and techniques associated with the creation of a business application.	Work individually and as part of a team to plan and produce a functional business application with support documentation.	Evaluate the performance of a business application against its Software Design Document and initial requirements	Level 5	15	60

Unit type	Unit	LO1	LO2	LO3	LO4	Level	UK credits	GLH
Optional	Unit 31: Games Engine & Scripting	Analyse the evolution, impact and possible future of games engines with regards to game development and expectation.	Evaluate the features and architecture of different games engines	Use an existing Game Design Document (with assets) to synthesise key features of a selected games engine into a playable game.	Assess and plan improvements to a playable game by evaluating its performance against its Game Design Document and user expectation.	Level 5	15	60
Optional	Unit 38: Database Management Systems	Analyse different types of database management systems	Design a database management system using a relational model to meet client requirements.	Develop a database management system using a suitable platform.	Demonstrate the system administration and management tools available on the chosen platform	Level 5	15	60
Optional	Unit 39: E-Commerce & Strategy	Examine the strategies employed and the impact of E-Commerce on business organisations	Analyse the hardware, software, web-based and database technologies involved in setting up a secure E-Commerce site	Design an E-Commerce strategy based on a given end user requirement or specification.	Implement an E-Commerce strategy based on a given end user requirement or specification	Level 5	15	60
Optional	Unit 40: User Experience and Interface Design	Research what aspects of User Experience and Interface Design are necessary and appropriate to satisfy end user emotions, desires and attitudes when using a user interface concept.	Plan an appropriate User Experience map and Interface Design for a User Interface concept with a specific target end user in mind and also outline the tests you mean to conduct.	Build a User Interface concept and test it with users to see if it satisfies their emotions, desires and attitudes as planned.	Evaluate user feedback, test results and insights gained from end users interacting with your User Interface concept to determine success or failure and steps to improve in future versions.	Level 5	15	60
Optional	Unit 47: Games Development	Develop a Game Design Document by evaluating and synthesising game ideas into an original video game concept.	Use different design and development methodologies with tools and techniques associated with the creation of a video game.	Work individually and as part of a team to plan and produce a functional video game, including support documentation.	Evaluate the performance of a video game against its Game Design Document and original concept.	Level 5	15	60

Mapping of modules 0011–0013

	MODULE	UNIT
IT systems	IT systems	HND in Computing (various units)
	ECTS 10	
	General affinity Green	
	Learning outcomes	HND learning outcomes Remarks
	1. Evaluate IT systems, identifying their components and characteristics.	Green Unit 8 LO1 Unit 10 LO1
	2. Install operating systems, planning the process and interpreting technical documentation.	Green Unit 8 LO2
	3. Administer the system information, identifying the storage structures and applying measures to ensure the integrity of the data.	Green Unit 8 LO2
	4. Administer operating systems, using commands and graphic tools and evaluating system requirements.	Green Unit 8 LO2
	5. Interconnect systems on a network, configuring devices and protocols.	Green Unit 8 LO3 Unit 2 LO1, LO2 Unit 39 LO1, LO2
	6. Operate networked systems, administering their resources and identifying the security constraints in place.	Green Unit 8 LO3 Unit 2 LO3, LO4 Unit 5 LO1, LO2, LO3, LO4 Unit 39 LO3, LO4
	7. Prepare documentation, critically evaluating and using general-purpose IT applications.	Green Unit 8 LO4
Databases	Databases	HND in Computing (various units)
	ECTS 11	
	General affinity Green	
	Learning outcomes	HND learning outcomes Remarks
	1. Recognise the elements of databases, analysing their functions and critically evaluating the usefulness of the management systems.	Green Unit 4 LO1
	2. Create databases, defining their structure and the characteristics of their elements according to the relational model.	Green Unit 4 LO1, LO2
	3. Query the information stored in a database using wizards, graphic tools and the data manipulation language.	Green Unit 4 LO2
	4. Modify the information stored in the database using wizards, graphic tools and the data manipulation language.	Green Unit 4 LO2
	5. Develop stored procedures, evaluating and using the language statements included in the database management system.	Green Unit 4 LO2, LO3
	6. Design standard relational models, interpreting entity relationship diagrams.	Green Unit 4 LO1, LO2, LO3, LO4
	7. Manage the information stored in object-relational databases, evaluating and using the options provided by the management system.	Green Unit 4 LO2, LO3, LO4
Programming	Programming	HND in Computing (various units)
	ECTS 14	
	General affinity Green	
	Learning outcomes	HND learning outcomes Remarks
	1. Recognise the structure of a software program, identifying and relating the elements specific to the programming language used.	Green Unit 1 LO1, LO2
	2. Write and test simple programs, recognising and applying the fundamentals of object-oriented programming.	Green Unit 1 LO2, LO3
	3. Write and debug code, analysing and using the language's control structures.	Green Unit 1 LO3, LO4
	4. Develop class-based programs, analysing and applying the principles of object-oriented programming.	Green Unit 1 LO3, LO4
	5. Perform data entry and output operations, using language-specific procedures and class libraries.	Green Unit 1 LO3, LO4
	6. Write programs that manipulate information, selecting and using advanced data types.	Green Unit 1 LO3, LO4
	7. Develop programs, applying the advanced characteristics of object-oriented languages and the programming environment.	Green Unit 1 LO3, LO4
	8. Use object-oriented databases, analysing their characteristics and applying techniques to ensure data persistence.	Green Unit 4 LO2, LO3, LO4
	9. Manage information stored in relational databases, maintaining the integrity and consistency of the data.	Green Unit 4 LO2, LO3, LO4

Mapping of modules 0014–0016

	MODULE	UNIT
Markup languages and information management systems	Markup languages and information management systems	
	ECTS	7
	General affinity	Amber
	Learning outcomes	HND learning outcomes Remarks
	1. Recognise the characteristics of markup languages, analysing and interpreting pieces of code.	Amber Unit 10 L02 Unit 1 L02, L04 The express reference to markup languages specifies HTML, although it is possible to contextualise the use of other languages.
	2. Use markup languages to transmit information via the web, analysing the structure of the documents and identifying their elements.	Amber Unit 10 L02, L03 The express reference to markup languages specifies HTML, although it is possible to contextualise the use of other languages.
	3. Create content channels, analysing and using syndication technologies.	Red Unit 10 L02 Syndication technologies like RSS are not expressly covered.
	4. Establish validation mechanisms for XML documents using syntax and structure definition methods.	Amber Unit 10 L04 XML is not explicitly referenced, although its use is implicitly necessary in the context of the units.
	5. Convert XML documents using processing techniques and tools.	Amber Unit 10 L03, L04 Unit 39 L01 XML is not explicitly referenced, although its use is implicitly necessary in the context of the units.
Development environments	Development environments	
	ECTS	6
	General affinity	Green
	Learning outcomes	HND learning outcomes Remarks
	1. Recognise the elements and tools involved in developing a software program, analysing their characteristics and the phases in which they are used until the software is operational.	Green Unit 1 L02 Unit 9 L01 Unit 29 L01, L02
	2. Evaluate integrated development environments, analysing their characteristics in order to edit source code and generate executables.	Green Unit 1 L02 Unit 29 L02, L03
	3. Verify operation of the programs, designing and performing tests.	Green Unit 1 L03 Unit 9 L02, L03 Unit 29 L03
	4. Optimise code using the tools available in the development environment.	Green Unit 1 L04 Unit 29 L04
	5. Generate class diagrams, critically evaluating their importance in application development and using the tools available in the environment.	Green Unit 9 L03, L04 Unit 29 L02
Vocational training and guidance	Vocational training and guidance	
	ECTS	5
	General affinity	Red
	Learning outcomes	HND learning outcomes Remarks
	1. Select employment opportunities, identifying the different routes into the labour market and the opportunities for lifelong learning.	Green Unit 3 L04
	2. Apply teamwork strategies, critically evaluating their effectiveness and efficiency in achieving the objectives of the organisation.	Green Unit 3 L03
	3. Exercise the rights and fulfil the obligations arising from employment relationships, identifying them in the different types of employment contract.	Red Employment legislation and regulations are highly locale-specific and it is therefore difficult to find parallels without substantial contextualisation.
	4. Determine the protection provided by the social security system under the various contingencies covered and identify the different types of benefits.	Red Employment legislation and regulations are highly locale-specific and it is therefore difficult to find parallels without substantial contextualisation.
	5. Evaluate the risks stemming from his/her activity, analysing the working conditions and risk factors present in the work environment.	Red Employment legislation and regulations are highly locale-specific and it is therefore difficult to find parallels without substantial contextualisation.
	6. Participate in preparing a risk prevention plan at a small business, identifying the responsibilities of all the parties involved.	Red Employment legislation and regulations are highly locale-specific and it is therefore difficult to find parallels without substantial contextualisation.
	7. Implement prevention and protection measures, analysing hazard situations within the work environment of a cross-platform applications developer.	Red Employment legislation and regulations are highly locale-specific and it is therefore difficult to find parallels without substantial contextualisation.

Mapping of modules 0021–0023

	MODULE	UNIT
Data access	Data access	
	ECTS	9
	General affinity	Green
	Learning outcomes	HND learning outcomes Remarks
	1. Develop applications that manage information stored in files, identifying their field of application and using specific classes.	Green Unit 38 LO1, LO2
	2. Develop applications that manage information stored in relational databases, identifying and using connection mechanisms.	Green Unit 38 LO2, LO3, LO4
	3. Manage data persistence, identifying object–relational mapping (ORM) tools and developing applications that use them.	Green Unit 38 LO2, LO3, LO4
	4. Develop applications that manage the information stored in object–relational and object-oriented databases, critically evaluating their characteristics and using the incorporated access mechanisms.	Green Unit 38 LO2, LO3, LO4
	5. Develop applications that manage the information stored in native XML databases, evaluating and using specific classes.	Green Unit 38 LO2, LO3, LO4
	6. Program data access components, identifying the characteristics that a component should possess and using development tools.	Green Unit 38 LO2, LO3, LO4
Interface development	Interface development	
	ECTS	9
	General affinity	Green
	Learning outcomes	HND learning outcomes Remarks
	1. Create graphical user interfaces using the functionalities of visual editors and adapting the code generated.	Green Unit 40 LO3
	2. Create XML-based graphical user interfaces using specific tools and adapting the XML document generated.	Amber Unit 40 No reference is made to use of XML, although the new programme under development includes it in units 17 and 39.
	3. Create visual components, critically evaluating and employing specific tools.	Green Unit 40 LO2
	4. Design graphical interfaces, identifying and applying usability criteria.	Green Unit 40 LO1, LO2
	5. Create reports, evaluating and using graphic tools.	Green Unit 40 LO2, LO3
	6. Document applications, selecting and using specific tools.	Green Unit 28 LO4 Unit 40 LO2
Mobile devices and multimedia programming	Mobile devices and multimedia programming	
	ECTS	7
	General affinity	Green
	Learning outcomes	HND learning outcomes Remarks
	1. Apply development technologies for mobile devices, evaluating their characteristics and capabilities.	Green Unit 8 LO2 Unit 29 LO1, LO2
	2. Develop applications for mobile devices, analysing and employing specific technologies and libraries.	Green Unit 8 LO2 Unit 28 LO2, LO3 Unit 29 LO1, LO2, LO3
	3. Develop programs that integrate multimedia content, analysing and employing specific technologies and libraries.	Green Unit 8 LO1, LO2, LO3 Unit 29 LO2, LO3
	4. Select and test games engines, analysing 2D and 3D game architectures.	Green Unit 31 LO1, LO2, LO3, LO4
	5. Develop simple 2D and 3D games using games engines.	Green Unit 47 LO1, LO2, LO3, LO4

Mapping of modules 0024–0026

	MODULE	UNIT
Service and process programming	Service and process programming	
	ECTS 5	HND in Computing (various units)
	General affinity Green	
	Learning outcomes	HND learning outcomes Remarks
	1. Develop applications comprising various processes, recognising and applying parallel programming principles.	Amber Unit 19 L01, L02, L04
	2. Develop applications comprising various execution threads, analysing and applying specific programming language libraries.	Amber Unit 19 L03, L04
	3. Program networking mechanisms using sockets, analysing the execution scenario.	Green Unit 2 L03, L04 Unit 10 L01 Unit 36 L01
	4. Develop applications that offer network services, using class libraries and applying efficiency and availability criteria.	Green Unit 36 L02, L03
Enterprise management systems	Enterprise management systems	
	ECTS 6	HND in Computing (various units)
	General affinity Amber	
	Learning outcomes	HND learning outcomes Remarks
	1. Identify enterprise resource planning and customer relationship management systems (ERP–CRM), recognising their characteristics and verifying the configuration of the IT system.	Green Unit 14 L01 Unit 39 L03
	2. Implement ERP–CRM systems, interpreting the technical documentation and identifying the various options and modules.	Green Unit 14 L02, L03 Unit 39 L03
	3. Perform information management and querying operations, following the design specifications and using the tools provided by the ERP–CRM systems.	Green Unit 14 L03 Unit 39 L04
	4. Adapt ERP–CRM systems, identifying the requirements of a business case and using the tools provided by the systems.	Green Unit 14 L03 Unit 39 L04
Cross-platform application development project	Cross-platform application development project	
	ECTS 5	HND in Computing (various units)
	General affinity Green	
	Learning outcomes	HND learning outcomes Remarks
	1. Identify the needs of the productive sector, relating them to model projects capable of meeting them.	Green Unit 13 L01, L02 Unit 28 L01 Unit 30 L01
	2. Design projects related to the skills inherent in the qualification, explicitly carrying out the constituent phases.	Green Unit 13 L03 Unit 28 L02 Unit 30 L02
	3. Plan the implementation of the project, defining the programme plan and related documentation.	Green Unit 13 L03 Unit 28 L02 Unit 30 L03
	4. Define the procedures to monitor and review project implementation, justifying the variables selected and the tools used.	Green Unit 13 L04 Unit 28 L04 Unit 30 L04

Mapping of modules 0027–0028

	MODULE	UNIT
Business and entrepreneurship	Business and entrepreneurship	HND in Computing (various units)
	ECTS 4	
	General affinity Red	
	Learning outcomes	HND learning outcomes Remarks
	1. Recognise the capabilities associated with entrepreneurship, analysing the requirements derived from employment positions and business activities.	Red
	2. Determine the opportuneness of creating an SME, critically evaluating its impact on the environment in which it operates and incorporating ethical values.	Red
	3. Perform the tasks required to create and launch a new business, selecting the appropriate legal form and identifying the corresponding legal obligations.	Red
	4. Perform the administrative and financial tasks associated with managing an SME, identifying the main accounting and tax obligations and completing the necessary documentation.	Red
Training in the workplace	Training in the workplace	HND in Computing (various units)
	ECTS 22	
	General affinity Green	
	Learning outcomes	HND learning outcomes Remarks
	1. Identify the structure and organisational form of the enterprise, relating them to the development and marketing of its products.	Red
	2. Practice the profession, adopting ethical and professional habits as per the characteristics of the employment position and the procedures established by the enterprise.	Green
	3. Organise the work required, identifying the tasks assigned under the project plan and interpreting specific documentation.	Green
	4. Manage and use IT systems and development environments, evaluating their requirements and characteristics based on their intended use.	Green
	5. Participate in development of applications that access data, planning the structure of the database and evaluating the scope and repercussions of the transactions.	Green
	6. Participate in development of games, multimedia applications and mobile device applications using specific tools and languages and following the script and specifications provided.	Green
	7. Contribute to the development and testing of cross-platform applications, from the interface to process and service programming, including their packaging and distribution and generation of the associated help files and documentation.	Green
	8. Participate in the process of implementing and adapting enterprise resource planning and customer relationship management systems (ERP–CRM), analysing their characteristics and critically evaluating the changes made.	Green

Mapping of CFGS–HND learning outcomes (LOs): Business/Marketing

CFGS learning outcomes

Affinity level	VET module	Credits	Module No	Code	GLH	LO1	LO2	LO3
Green	Economic and financial management of the enterprise	12	0011	0623	170	1. Compile information on entrepreneurial initiatives and opportunities to create businesses, critically evaluating their impact on the operating environment and incorporating ethical values.	2. Establish the legal form of the enterprise, adapting it to the applicable legislation.	3. Coordinate the formalities involved in obtaining the resources needed to finance the investments and supplies, evaluating the various financial alternatives available.
Green	Marketing policies	12	0012	0930	180	1. Evaluate market opportunities to launch a product, enter new markets or improve the positioning of the product or service, analysing the marketing mix variables and market trends and developments.	2. Define the product policy, analysing the characteristics, attributes and benefits of the product or service in order to tailor it to the needs and profiles of the customers at which it is aimed.	3. Define the pricing policy for the products or services, analysing the costs, demand, competition and other factors involved in calculating and setting prices.
Green	Digital marketing	11	0013	0931	170	1. Manage access and connection to public, semi-public and private networks, using browsers and search engines specialising in the public Internet.	2. Manage various Internet services and protocols, working with e-mail and file transfer programs, among others.	3. Perform invoicing and other administrative tasks telematically, using specific software in each case.
Green	Business research	8	0014	1010	130	1. Analyse the variables in the market and environment in which the enterprise or organisation operates, critically evaluating their influence on the business of the enterprise and on the application of the various business strategies.	2. Set up a marketing information system (MIS) adapted to the enterprise's information needs, defining the sources of information, the procedures followed and the techniques used to organise the data.	3. Prepare the business research plan, defining the objectives and purpose of the study, the sources of information and the methods and techniques applicable to data collection, processing and analysis.
Red	Vocational training and guidance	5	0015	1014	90	1. Select employment opportunities, identifying the different routes into the labour market and the opportunities for lifelong learning.	2. Apply teamwork strategies, critically evaluating their effectiveness and efficiency in achieving the objectives of the organisation.	3. Exercise the rights and fulfil the obligations arising from employment relationships, identifying them in the different types of employment contract.
Green	Design and production of communication material	9	0021	1007	160	1. Prepare the content of the communication and advertising material on a comprehensive range of media using the information available.	2. Produce advertising and news material, using graphic design, audiovisual and art production techniques.	3. Apply persuasive communication techniques, identifying the enterprise's particular marketing and news communication styles.
Green	Communication means and media	6	0022	1008	80	1. Compile relevant references and data from different information sources, coordinating the advertising media plan.	2. Describe the various online/offline communication media, identifying their differentiating characteristics and typologies.	3. Assist in drawing up the advertising media plan, selecting the communication media most appropriate to the objectives set.
Red	Public relations and organisation of marketing events	6	0023	1009	80	1. Establish the enterprise's public relations objectives and tools, implementing the communication strategy set out in the marketing plan.	2. Characterise organisation of marketing events, determining the timing and manner of implementation based on the brief, criteria and budget set out in the marketing plan.	3. Define the plan for relations with suppliers, stakeholders and participants in a marketing event, meeting the conditions, deadlines and budget set.
Green	Fieldwork in business research	6	0024	1011	80	1. Plan the fieldwork of the surveyors/interviewers, establishing the necessary means and resources and setting the guidelines as per the research plan.	2. Determine the characteristics of the field staff and the criteria for selecting the surveyors, taking into account the needs and requirements of the business research plan.	3. Draw up the training, development and reskilling plans for a team of surveyors, taking into account the needs identified and the specifications received, in order to improve team members' skills, efficiency and effectiveness.
Green	Launching of products and services	6	0025	1109	80	1. Compile the information needed to launch a product or service, compiling the information available in the enterprise's MIS, the product or service brief, the sales network and customer data.	2. Prepare the sales pitch for the product or service for the sales network, contributing to improving the positioning of the product on the market, enhancing customer loyalty and increasing sales.	3. Define the marketing and promotional actions necessary to launch a product or service onto the market or prolong its presence on the market, strengthening its position and brand image versus the competition.
Green	Customer, consumer and user service	5	0026	1110	80	1. Set up the customer service department, defining its functions and structure and its relationship with other departments, so as to convey the desired perception of the enterprise or organisation.	2. Use communication techniques in customer, consumer or user service situations, providing them with the information requested.	3. Set up a customer information system that optimises processing and access times and costs, applying both manual and automated organisation and filing techniques.
Green 1 2 6	Marketing and advertising project	5	0027	1012	40	1. Identify the needs of the productive sector, relating them to model projects capable of meeting them.	2. Design projects related to the skills inherent in the qualification, including and carrying out the constituent phases.	3. Plan the implementation of the project, defining the programme plan and related documentation.
Green	Training in the workplace	22	0028	1013	400	1. Identify the structure and organisational form of the enterprise, relating them to the type of service it provides.	2. Adopt ethical and professional habits in the practice of the profession, as per the characteristics of the employment position and the procedures established by the enterprise.	3. Participate in the design, implementation and monitoring of the enterprise's marketing policies, analysing the information available in the MIS, the information obtained from the sales network and the business studies conducted.

LO4	LO5	LO6	LO7	LO8
4. Determine the formalities involved in the purchase and/or rental of vehicles and other assets, analysing the investments, supplies and financial resources required.	5. Prepare invoices, receipts and collection and payment documents for the products and services provided, adhering to the commercial and tax rules applicable to invoicing.	6. Manage the enterprise's accounting and tax procedures, adhering to the applicable commercial and tax rules and the principles and rules of the Spanish General Chart of Accounts.	7. Determine the profitability of the investments and the solvency and efficiency of the enterprise, analysing the financial data and accounting information available.	
4. Select the most appropriate form of distribution and channel for each product, service or product range, analysing the distribution alternatives available.	5. Select the most appropriate communication actions with which to launch new products and services or prolong their presence on the market, thereby strengthening the corporate and brand image, assessing the various alternatives available.	6. Prepare product, service or branding briefs for the execution or outsourcing of communication actions, establishing links between the marketing mix variables, the marketing goals and customer profiles.	7. Prepare the marketing plan, selecting the basic product, pricing, distribution and communication information and establishing links between the marketing mix variables.	8. Monitor and review the marketing policies and actions set out in the marketing plan, assessing their implementation and the degree of achievement of the goals set.
4. Determine the strategy to be followed in interrelations with other network users, utilising specific software, communication forums and business-related social media.	5. Create websites attractive to Internet users, applying positioning, ease of use and persuasiveness criteria.	6. Design the digital marketing plan for the online market, defining strategic solutions based on implementation of specific actions intended to develop the brand.	7. Define the enterprise's e-commerce policy, determining the actions necessary to enable online sales.	
4. Coordinate the secondary information available based on the specifications and criteria set out in the business research plan, critically evaluating the adequacy of the data versus the research objectives.	5. Obtain primary information based on the specifications and criteria established in the business research plan, applying qualitative and/or quantitative research procedures and techniques to obtain data.	6. Determine the characteristics and size of the research population sample, applying sampling techniques to select it.	7. Process and analyse the data obtained and prepare reports on the findings, applying statistical analysis techniques and software tools.	8. Manage relational databases based on the objectives of the research, determining the most appropriate formats to ensure rapid and accurate data entry, retrieval and presentation.
4. Determine the protection provided by the social security system under the various contingencies covered and identify the different types of benefits.	5. Evaluate the risks stemming from his/her activity, analysing the working conditions and risk factors present in the work environment.	6. Participate in preparing a risk prevention plan at a small business, identifying the responsibilities of all the parties involved.	7. Implement prevention and protection measures, analysing the hazard situations encountered in the work environment of a holder of a higher qualification in Marketing and Advertising.	
4. Prepare advertising and news material, using software specific to each medium.	5. Coordinate the dissemination plan for the advertising and news material, respecting the corporate identity.			
4. Review execution of the advertising media plan, monitoring fulfilment of it.	5. Assist in preparation of news coverage reports in various media, processing the data acquired using appropriate software tools.			
4. Determine the rules of protocol and ceremony for marketing and communication events, scheduling the participation of the attendees and determining the forms of address applied during the event.	5. Determine the attitudes and skills that need to be adopted in attending, coordinating and supervising marketing events, complying with the rules of protocol and hierarchical differentiation.	6. Evaluate the outcomes of various types of marketing events, producing review reports.		
4. Establish a system of motivation and remuneration for the team of surveyors/interviewers that facilitates fulfilment of the research plan.	5. Interpret the questionnaire and instructions received regarding the conducting of the survey, making effective use of the means available to ensure the accuracy and validity of the responses.	6. Establish the system for evaluating and reviewing fieldwork and the performance of team members, applying supervisory and monitoring techniques to ensure the quality of the process.		
4. Programme the launch and establishment of the product or service on the market, applying the marketing techniques and strategies established.	5. Establish the measures to track and review the launch and establishment of the product or service, evaluating the degree of achievement of the goals set.			
4. Identify the various consumer and user protection bodies and institutions, analysing the powers of each of them.	5. Manage customer, consumer and user complaints and claims, applying communication and negotiation techniques to achieve consensus-based outcomes.	6. Describe the consumer arbitration and mediation processes used to resolve consumer-related disputes, applying current legislation.	7. Prepare a customer, consumer or user service quality or process improvement plan, applying service effectiveness review and evaluation techniques.	
4. Define the procedures to monitor and review project implementation, justifying the variables selected and the tools used.				
4. Contribute to the launch and establishment of products/services on the market, participating in management of sales and distribution via traditional and/or electronic channels.	5. Contribute to the planning and conducting of market research, obtaining, analysing and presenting the information necessary for such research.	6. Contribute to the coordination and monitoring of the media and communications plan and to the preparation of promotional and news material, following the instructions received.	7. Participate in the economic and financial management of the enterprise, following the instructions received.	8. Participate in the implementation of the enterprise's public relations policy and in the organisation and management of marketing and communication events, following the criteria and protocols established.

HND learning outcomes

Unit type	Unit	LO1	LO2	LO3	LO4	Level	UK credits	GLH
Core	Unit 1: Business and the Business Environment	Explain the different types, size and scope of organisations	Demonstrate the interrelationship of the various functions within an organisation and how they link to organisational structure	Use contemporary examples to demonstrate both the positive and negative influence/impact the macro environment has on business operations	Determine the internal strengths and weaknesses of specific businesses and their interrelationship with external macro factors	Level 4	15	60
Core	Unit 2: Marketing Processes and Planning	Explain the role of marketing and how it interrelates with other business units of an organisation	Compare ways in which organisations use elements of the marketing mix to achieve overall business objectives	Produce a marketing plan for an organisation that meets marketing objectives	Develop a media plan to support a marketing campaign for an organisation	Level 4	15	60
Core	Unit 3: Human Resource Management	Explain the impact of the role of HRM in creating sustainable organisational performance and contributing to business success	Assess the contribution of HRM in recruiting and retaining talent and skills to achieve business objectives	Examine how external and internal factors can affect HRM decision making in relation to organisational development	Apply HRM practices in a work-related context for improving sustainable organisational performance	Level 4	15	60
Core	Unit 4: Leadership and Management	Examine leadership and management theories and principles, and their impact on the effectiveness of an organisation	Review the influence of different leadership and management styles on the culture of organisations	Develop a motivational strategy to optimise organisational performance	Apply leadership and management approaches to managing performance to ensure continuous improvement	Level 4	15	60
Core	Unit 5: Accounting Principles	Examine the context and purpose of accounting	Prepare basic financial statements for unincorporated and small business organisations in accordance with accounting principles, conventions and standards	Interpret financial statements	Prepare budgets for planning, control and decision making using spreadsheets	Level 4	15	60
Core	Unit 6: Managing a Successful Business Project	Explain the key stages of the project lifecycle that should be considered when project managing	Produce a Project Management Plan (PMP) for a business project using primary and secondary research methods	Implement the Project Management Plan (PMP) to communicate results from the research and make conclusions from the evidence of findings	Reflect on value gained from implementing the project and the project management process	Level 4	15	60
Optional	Unit 10: Recording Financial Transactions	Record business transactions using double entry bookkeeping, books of prime entry, journals and ledger accounts	Prepare a trial balance for a given organisation from data provided	Perform bank reconciliations to ensure organisation and bank records are correct	Perform control account reconciliations for accounts receivable and accounts payable	Level 4	15	60
Optional	Unit 14: Digital Business in Practice	Examine the digital business environment, emerging trends and contemporary approaches	Investigate the effectiveness of the use of digital technologies to achieve business objectives	Develop a transformational digital strategy plan to support the implementation of digital technologies within an organisation	Present the design of a selected mobile application to support a digital strategy within an organisation	Level 4	15	60
Optional	Unit 16: Managing the Customer Experience	Explain the needs and expectations of market segments for products and/or services of a given business organisation	Produce a customer experience map to create business opportunities and optimise customer touch points	Investigate the impacts of digital technology on customer relationship management	Apply effective customer experience management within an organisational context to maximise customer engagement	Level 4	15	60
Optional	Unit 17: Professional Identity and Practice	Explore the importance of ongoing professional development and self-directed learning to enhance professional identity and career opportunities	Assess own skills, competences and the different learning and development approaches	Design a professional development plan in a specific work context	Demonstrate a range of competences and transferable skills for a job application	Level 4	15	60
Optional	Unit 18: Work Experience	Investigate the value and benefits of practical work experience for career and personal development	Plan suitable and relevant work experience in an appropriate sector organisation	Undertake appropriate work experience to develop professional skills and competences	Evaluate personal skills and competences developed during practical work experiences	Level 4	15	60
Core	Unit 19: Research Project	Examine appropriate research methodologies and methods to identify those appropriate to the research process	Develop a research proposal, including a supporting literature review	Analyse data using appropriate techniques to communicate research findings	Reflect on the application of research methodologies and process	Level 5	30	120
Core	Unit 20: Organisational Behaviour	Reflect on own personality and perceptions to understand how individual difference informs and influences management approaches	Apply content and process theories of motivation to create and maintain an effective workforce	Participate in a group/team activity for a given business situation to demonstrate effective team skills	Examine how power, politics and culture can be used to influence employee behaviour and accomplish organisational goals	Level 5	15	60

Unit type	Unit	LO1	LO2	LO3	LO4	Level	UK credits	GLH
Specialist (Marketing Pathway)	Unit 33: Marketing Insights and Analytics	Investigate characteristics and influences on consumer decision-making processes in different organisational contexts	Apply techniques to enhance the customer experience and develop customer relationships for marketing purposes	Evaluate measures and metrics that seek to improve customer experience for a range of products and services	Devise measures and metrics to improve customer experience within a given organisational context	Level 5	15	60
Specialist (Marketing Pathway)	Unit 34: Digital marketing	Investigate the influence of the digital environment for effective marketing of business organisations	Apply digital tools and techniques for an integrated marketing approach within a given business organisation	Design a digital marketing campaign using multimedia to optimise content that targets key audiences	Evaluate methods of monitoring and measuring a digital marketing campaign in line with marketing objectives to increase engagement and conversions	Level 5	15	60
Specialist (Marketing Pathway)	Unit 35: Integrated Marketing Communications	Evaluate marketing channels for achieving communication objectives as part of a communications strategy	Develop an integrated marketing communications plan to achieve specified communication objectives in a business context	Produce appropriate content for a marketing channel that meets specified communication objectives	Apply methods for monitoring an integrated marketing communications plan (IMC) to maximise reach and achieve positive return on investment (ROI)	Level 5	15	60
Optional	Unit 27: Identifying Entrepreneurial Opportunities	Explore the role of entrepreneurship and innovation for developing new entrepreneurial ideas	Investigate a potential entrepreneurial idea from a gap in the market for a small to medium sized (SME) enterprise	Analyse primary and secondary data to identify the market potential of an entrepreneurial idea	Pitch the potential viability of an entrepreneurial idea in the context of the market and competitors	Level 5	15	60
Optional	Unit 28: Launching a New Venture	Investigate the resources required to launch a new venture	Explore the skills and capabilities required to support the launch of a new venture	Develop promotional activities to support the launch of a new venture	Produce a budget for launching a new venture for a small business or social enterprise	Level 5	15	60
Optional	Unit 29: Managing and Running a Small Business	Explore how a small business or social enterprise plans and allocates resources to achieve objectives	Evaluate the customer relationship management process for a small business or social enterprise	Develop a cash flow forecast and break-even analysis for a small business or social enterprise	Discuss the financial statements, regulation and legislation that apply to a small business or social enterprise.	Level 5	15	60
Optional	Unit 40: Consumer and Intellectual Property Law	Analyse the main principles affecting the legal relationship between business organisations and their consumers	Examine the legal rules on consumer credit agreements	Evaluate the key provisions relating to intellectual property rights	Recommend appropriate legal solutions based on relevant legislation, case law and regulations	Level 5	15	60
Optional	Unit 52: Product Service and Development	Examine the processes involved in new product or service development	Assess the lifecycle stage of the products or services in a company's portfolio and evaluate whether innovation, adaptation or renovation are needed for the individual products or services	Pitch the design for a new or renovated product or service	Critically reflect on the skills of teamworking, creative development and presentation	Level 5	15	60
Optional	Unit 55: Planning Social Media Campaigns	Examine the key concepts and features of social media for different business activities	Discuss the uses of social media and their impact on market and audience	Plan a social media campaign for an organisation, based on client need, market and user research	Implement a social media campaign plan for an organisation to meet business objectives	Level 5	15	60

Mapping of modules 0011–0012

	MODULE		UNIT	
Economic and financial management of the enterprise	Economic and financial management of the enterprise			
	ECTS	12	HND in Business (various units)	
	General affinity	Green		
	Learning outcomes		HND learning outcomes	Remarks
	1. Compile information on entrepreneurial initiatives and opportunities to create businesses, critically evaluating their impact on the operating environment and incorporating ethical values.	Green	Unit 27 L01 Unit 1 L01, L02, L03	
	2. Establish the legal form of the enterprise, adapting it to the applicable legislation.	Amber	Unit 28 L01 Unit 29 L04	Local legal frameworks differ substantially depending on the country in which the enterprise is established.
	3. Coordinate the formalities involved in obtaining the resources needed to finance the investments and supplies, evaluating the various financial alternatives available.	Green	Unit 28 L01, L02 Unit 29 L01	
	4. Determine the formalities involved in the purchase and/or rental of vehicles and other assets, analysing the investments, supplies and financial resources required.	Green	Unit 29 L03	
	5. Prepare invoices, receipts and collection and payment documents for the products and services provided, adhering to the commercial and tax rules applicable to invoicing.	Amber	Unit 5 L01, L02, L03, L04 Unit 10 L01, L02, L03, L04	Accounting and tax rules are specific to each region and the appropriate legal framework should therefore be taken into account when preparing the assignment briefs.
	6. Manage the enterprise's accounting and tax procedures, adhering to the applicable commercial and tax rules and the principles and rules of the Spanish General Chart of Accounts.	Amber	Unit 5 L01, L02, L03, L04 Unit 10 L01, L02, L03, L04 Unit 29 L04	Accounting and tax rules are specific to each region and the appropriate legal framework should therefore be taken into account when preparing the assignment briefs.
Marketing policies	Marketing policies			
	ECTS	12	HND in Business (various units)	
	General affinity	Green		
	Learning outcomes		HND learning outcomes	Remarks
	1. Evaluate market opportunities to launch a product, enter new markets or improve the positioning of the product or service, analysing the marketing mix variables and market trends and developments.	Green	Unit 2 L01, L02	
	2. Define the product policy, analysing the characteristics, attributes and benefits of the product or service in order to tailor it to the needs and profiles of the customers at which it is aimed.	Green	Unit 2 L03 Unit 28 L03	
	3. Define the pricing policy for the products or services, analysing the costs, demand, competition and other factors involved in calculating and setting prices.	Green	Unit 2 L03	
	4. Select the most appropriate form of distribution and channel for each product, service or product range, analysing the distribution alternatives available.	Green	Unit 2 L04	
	4. Select the most appropriate form of distribution and channel for each product, service or product range, analysing the distribution alternatives available.	Green	Unit 2 L04 Unit 35 L01, L02	
	4. Select the most appropriate form of distribution and channel for each product, service or product range, analysing the distribution alternatives available.	Green	Unit 35 L03, L04	
	7. Prepare the marketing plan, selecting the basic product, pricing, distribution and communication information and establishing links between the marketing mix variables.	Green	Unit 2 L03	
	8. Monitor and review the marketing policies and actions set out in the marketing plan, assessing their implementation and the degree of achievement of the goals set.	Green	Unit 34 L04 Unit 35 L04	

Mapping of module 0013

MODULE		UNIT
Digital marketing	Digital marketing	
	ECTS 11	HND in Business (various units)
	General affinity Green	
	Learning outcomes	HND learning outcomes Remarks
	1. Manage access and connection to public, semi-public and private networks, using browsers and search engines specialising in the public Internet.	Green Unit 14 LO1
	2. Manage various Internet services and protocols, working with e-mail and file transfer programs, among others.	Green Unit 14 LO1
	3. Perform invoicing and other administrative tasks telematically, using specific software in each case.	Green Unit 14 LO1
	4. Determine the strategy to be followed in interrelations with other network users, utilising specific software, communication forums and business-related social media.	Green Unit 14 LO2 Unit 34 LO1, LO2 Unit 35 LO1, LO2 Unit 55 LO3, LO4
	5. Create websites attractive to Internet users, applying positioning, ease of use and persuasiveness criteria.	Green Unit 14 LO4 Unit 34 LO2 Unit 35 LO3
	6. Design the digital marketing plan for the online market, defining strategic solutions based on implementation of specific actions intended to develop the brand.	Green Unit 14 LO3 Unit 34 LO3 Unit 35 LO4
	7. Define the enterprise's e-commerce policy, determining the actions necessary to enable online sales.	Green Unit 14 LO2, LO3, LO4 Unit 35 LO3

Mapping of modules 0014–0015

	MODULE	UNIT
Business research	Business research	HND in Business (various units)
	ECTS 8	
	General affinity Green	
	Learning outcomes	HND learning outcomes Remarks
	1. Analyse the variables in the market and environment in which the enterprise or organisation operates, critically evaluating their influence on the business of the enterprise and on the application of the various business strategies.	Green Unit 33 L01, L02 Unit 27 L02
	2. Set up a marketing information system (MIS) adapted to the enterprise's information needs, defining the sources of information, the procedures followed and the techniques used to organise the data.	Green Unit 33 L03, L04 Unit 6 L01, L02
	3. Prepare the business research plan, defining the objectives and purpose of the study, the sources of information and the methods and techniques applicable to data collection, processing and analysis.	Green Unit 6 L02 Unit 27 L03 Unit 33 L04
	4. Coordinate the secondary information available based on the specifications and criteria set out in the business research plan, critically evaluating the adequacy of the data versus the research objectives.	Green Unit 6 L02 Unit 27 L03 Unit 33 L03, L04
	5. Obtain primary information based on the specifications and criteria established in the business research plan, applying qualitative and/or quantitative research procedures and techniques to obtain data.	Green Unit 6 L02 Unit 27 L03 Unit 33 L03, L04
	6. Determine the characteristics and size of the research population sample, applying sampling techniques to select it.	Green Unit 6 L02 Unit 33 L03, L04
Vocational training and guidance	7. Process and analyse the data obtained and prepare reports on the findings, applying statistical analysis techniques and software tools.	Green Unit 6 L03, L04 Unit 27 L04 Unit 33 L03, L04
	8. Manage relational databases based on the objectives of the research, determining the most appropriate formats to ensure rapid and accurate data entry, retrieval and presentation.	Amber Unit 6 L03 Unit 27 L04 Unit 33 L03, L04
	Vocational training and guidance	HND in Business (various units)
	ECTS 5	
	General affinity Red	
	Learning outcomes	HND learning outcomes Remarks
	1. Select employment opportunities, identifying the different routes into the labour market and the opportunities for lifelong learning.	Green Unit 17 L01, L02, L03, L04
	2. Apply teamwork strategies, critically evaluating their effectiveness and efficiency in achieving the objectives of the organisation.	Green Unit 17 L01, L02, L03, L04
	3. Exercise the rights and fulfil the obligations arising from employment relationships, identifying them in the different types of employment contract.	Red Employment legislation and regulations are highly locale-specific and it is therefore difficult to find parallels without substantial contextualisation.
	4. Determine the protection provided by the social security system under the various contingencies covered and identify the different types of benefits.	Red Employment legislation and regulations are highly locale-specific and it is therefore difficult to find parallels without substantial contextualisation.
	5. Evaluate the risks stemming from his/her activity, analysing the working conditions and risk factors present in the work environment.	Red Occupational health and safety regulations are highly locale-specific and it is therefore difficult to find parallels without substantial contextualisation.
	6. Participate in preparing a risk prevention plan at a small business, identifying the responsibilities of all the parties involved.	Red Occupational health and safety regulations are highly locale-specific and it is therefore difficult to find parallels without substantial contextualisation.
	7. Implement prevention and protection measures, analysing the hazard situations encountered in the work environment of a holder of a higher qualification in Marketing and Advertising.	Red Occupational health and safety regulations are highly locale-specific and it is therefore difficult to find parallels without substantial contextualisation.

Mapping of modules 0021–0023

	MODULE	UNIT
Design and production of communication material	Design and production of communication material	
	ECTS 9	HND in Business (various units)
	General affinity Green	
	Learning outcomes	HND learning outcomes Remarks
	1. Prepare the content of the communication and advertising material on a comprehensive range of media using the information available.	Green Unit 35 L01, L02 Unit 55 L01, L02
	2. Produce advertising and news material, using graphic design, audiovisual and art production techniques.	Green Unit 35 L03
	3. Apply persuasive communication techniques, identifying the enterprise's particular marketing and news communication styles.	Green Unit 35 L03
	4. Prepare advertising and news material, using software specific to each medium.	Green Unit 35 L03
Communication means and media	Communication means and media	
	ECTS 6	HND in Business (various units)
	General affinity Green	
	Learning outcomes	HND learning outcomes Remarks
	1. Compile relevant references and data from different information sources, coordinating the advertising media plan.	Green Unit 35 L01 Unit 55 L01
	2. Describe the various online/offline communication media, identifying their differentiating characteristics and typologies.	Green Unit 35 L01 Unit 55 L01, L02
	3. Assist in drawing up the advertising media plan, selecting the communication media most appropriate to the objectives set.	Amber Unit 35 L02 Unit 55 L01 References to Spain's general law on advertising belong to the local context and are not therefore covered.
	4. Review execution of the advertising media plan, monitoring fulfilment of it.	Green Unit 35 L04
Public relations and organisation of marketing events	Public relations and organisation of marketing events	
	ECTS 6	HND in Business (various units)
	General affinity Red	
	Learning outcomes	HND learning outcomes Remarks
	1. Establish the enterprise's public relations objectives and tools, implementing the communication strategy set out in the marketing plan.	Red Organisation of events and the corresponding protocol and public relations exercises are not included in the programme and should therefore be included as supplementary content.
	2. Characterise organisation of marketing events, determining the timing and manner of implementation based on the brief, criteria and budget set out in the marketing plan.	Red Organisation of events and the corresponding protocol and public relations exercises are not included in the programme and should therefore be included as supplementary content.
	3. Define the plan for relations with suppliers, stakeholders and participants in a marketing event, meeting the conditions, deadlines and budget set.	Red Organisation of events and the corresponding protocol and public relations exercises are not included in the programme and should therefore be included as supplementary content.
	4. Determine the rules of protocol and ceremony for marketing and communication events, scheduling the participation of the attendees and determining the forms of address applied during the event.	Red Organisation of events and the corresponding protocol and public relations exercises are not included in the programme and should therefore be included as supplementary content.
	5. Determine the attitudes and skills that need to be adopted in attending, coordinating and supervising marketing events, complying with the rules of protocol and hierarchical differentiation.	Red Organisation of events and the corresponding protocol and public relations exercises are not included in the programme and should therefore be included as supplementary content.
	6. Evaluate the outcomes of various types of marketing events, producing review reports.	Red Organisation of events and the corresponding protocol and public relations exercises are not included in the programme and should therefore be included as supplementary content.

Mapping of modules 0024–0025

	MODULE		UNIT	
Fieldwork in business research	Fieldwork in business research		HND in Business (various units)	
	ECTS	6		
	General affinity	Green		
	Learning outcomes		HND learning outcomes	Remarks
	1. Plan the fieldwork of the surveyors/ interviewers, establishing the necessary means and resources and setting the guidelines as per the research plan.	Green	Unit 19 L01 Unit 6 L01, L02	
	2. Determine the characteristics of the field staff and the criteria for selecting the surveyors, taking into account the needs and requirements of the business research plan.	Green	Unit 3 L01, L02, L03 Unit 19 L02 Unit 6 L02	
	3. Draw up the training, development and reskilling plans for a team of surveyors, taking into account the needs identified and the specifications received, in order to improve team members' skills, efficiency and effectiveness.	Amber	Unit 3 L01, L02, L03, L04 Unit 6 L02 Unit 20 L01, L03	The themes relating to human resource management are included in the respective units but do not specifically refer to the team of surveyors/ interviewers.
	4. Establish a system of motivation and remuneration for the team of surveyors/ interviewers that facilitates fulfilment of the research plan.	Amber	Unit 4 L01, L02, L03 Unit 6 L02 Unit 20 L02, L03	Although the motivational techniques are covered, they are not specific to the team of surveyors/interviewers.
	5. Interpret the questionnaire and instructions received regarding the conducting of the survey, making effective use of the means available to ensure the accuracy and validity of the responses.	Green	Unit 19 L03 Unit 6 L03	
	6. Establish the system for evaluating and reviewing fieldwork and the performance of team members, applying supervisory and monitoring techniques to ensure the quality of the process.	Green	Unit 4 L04 Unit 19 L03, L04 Unit 6 L03	
Launching of products and services	Launching of products and services		HND in Business (various units)	
	ECTS	6		
	General affinity	Green		
	Learning outcomes		HND learning outcomes	Remarks
	1. Compile the information needed to launch a product or service, compiling the information available in the enterprise's MIS, the product or service brief, the sales network and customer data.	Green	Unit 52 L01 Unit 28 L01	
	2. Prepare the sales pitch for the product or service for the sales network, contributing to improving the positioning of the product on the market, enhancing customer loyalty and increasing sales.	Green	Unit 52 L01	
	3. Define the marketing and promotional actions necessary to launch a product or service onto the market or prolong its presence on the market, strengthening its position and brand image versus the competition.	Green	Unit 52 L02, L03 Unit 28 L03	
	4. Programme the launch and establishment of the product or service on the market, applying the marketing techniques and strategies established.	Green	Unit 52 L03 Unit 28 L03	
	5. Establish the measures to track and review the launch and establishment of the product or service, evaluating the degree of achievement of the goals set.	Green	Unit 52 L04	

Mapping of module 0026

MODULE		UNIT	
Customer, consumer and user service	Customer, consumer and user service	HND in Business (various units)	
	ECTS 5		
	General affinity Green		
	Learning outcomes	HND learning outcomes	Remarks
	1. Set up the customer service department, defining its functions and structure and its relationship with other departments, so as to convey the desired perception of the enterprise or organisation.	Green	Unit 16 L01 Unit 29 L02
	2. Use communication techniques in customer, consumer or user service situations, providing them with the information requested.	Green	Unit 16 L01, L02 Unit 33 L02
	3. Set up a customer information system that optimises processing and access times and costs, applying both manual and automated organisation and filing techniques.	Green	Unit 16 L02 Unit 33 L02
	4. Identify the various consumer and user protection bodies and institutions, analysing the powers of each of them.	Amber	Unit 40 L01, L04 As consumer protection bodies and institutions are country-specific, the content needs to be contextualised to the environment addressed.
	5. Manage customer, consumer and user complaints and claims, applying communication and negotiation techniques to achieve consensus-based outcomes.	Green	Unit 33 L03
	6. Describe the consumer arbitration and mediation processes used to resolve consumer-related disputes, applying current legislation.	Amber	Unit 40 L02, L03, L04 As consumer protection legislation is country-specific, the content needs to be contextualised to the environment addressed.
	7. Prepare a customer, consumer or user service quality or process improvement plan, applying service effectiveness review and evaluation techniques.	Green	Unit 16 L04 Unit 33 L03, L04

Mapping of modules 0027–0028

	MODULE		UNIT	
Marketing and advertising project	Marketing and advertising project		HND in Business (various units)	
	ECTS	5		
	General affinity	Green		
	Learning outcomes		HND learning outcomes	Remarks
	1. Identify the needs of the productive sector, relating them to model projects capable of meeting them.	Green	Unit 1 LO1 Unit 6 LO1	
	2. Design projects related to the skills inherent in the qualification, including and carrying out the constituent phases.	Green	Unit 6 LO2	
Training in the workplace	3. Plan the implementation of the project, defining the programme plan and related documentation.	Green	Unit 2 LO3 Unit 6 LO2, LO3	
	4. Define the procedures to monitor and review project implementation, justifying the variables selected and the tools used.	Green	Unit 6 LO3, LO4	
	Training in the workplace		HND in Business (various units)	
	ECTS	22		
	General affinity	Green		
	Learning outcomes		HND learning outcomes	Remarks
	1. Identify the structure and organisational form of the enterprise, relating them to the type of service it provides.	Green	Unit 1 LO1, LO2 Unit 18 LO1	This is a cross-cutting module that, in the Spanish system, consists of a three-month placement in a company, in which the students have to put into practice much of the learning from the other modules and demonstrate the knowledge, procedures and skills acquired.
Training in the workplace	2. Adopt ethical and professional habits in the practice of the profession, as per the characteristics of the employment position and the procedures established by the enterprise.	Green	Unit 17 LO1 Unit 18 LO1	This is a cross-cutting module that, in the Spanish system, consists of a three-month placement in a company, in which the students have to put into practice much of the learning from the other modules and demonstrate the knowledge, procedures and skills acquired.
	3. Participate in the design, implementation and monitoring of the enterprise's marketing policies, analysing the information available in the MIS, the information obtained from the sales network and the business studies conducted.	Green	Unit 2 LO3 Unit 18 LO2, LO3, LO4	This is a cross-cutting module that, in the Spanish system, consists of a three-month placement in a company, in which the students have to put into practice much of the learning from the other modules and demonstrate the knowledge, procedures and skills acquired.
	4. Contribute to the launch and establishment of products/services on the market, participating in management of sales and distribution via traditional and/or electronic channels.	Green	Unit 18 LO2, LO3, LO4 Unit 52 LO2, LO3	This is a cross-cutting module that, in the Spanish system, consists of a three-month placement in a company, in which the students have to put into practice much of the learning from the other modules and demonstrate the knowledge, procedures and skills acquired.
	5. Contribute to the planning and conducting of market research, obtaining, analysing and presenting the information necessary for such research.	Green	Unit 18 LO2, LO3, LO4 Unit 6 LO2	This is a cross-cutting module that, in the Spanish system, consists of a three-month placement in a company, in which the students have to put into practice much of the learning from the other modules and demonstrate the knowledge, procedures and skills acquired.
	6. Contribute to the coordination and monitoring of the media and communications plan and to the preparation of promotional and news material, following the instructions received.	Green	Unit 18 LO2, LO3, LO4 Unit 35 LO2, LO3	This is a cross-cutting module that, in the Spanish system, consists of a three-month placement in a company, in which the students have to put into practice much of the learning from the other modules and demonstrate the knowledge, procedures and skills acquired.
	7. Participate in the economic and financial management of the enterprise, following the instructions received.	Green	Unit 5 LO2, LO3, LO4 Unit 10 LO1, LO2, LO3, LO4 Unit 18 LO2, LO3, LO4	This is a cross-cutting module that, in the Spanish system, consists of a three-month placement in a company, in which the students have to put into practice much of the learning from the other modules and demonstrate the knowledge, procedures and skills acquired.
	8. Participate in the implementation of the enterprise's public relations policy and in the organisation and management of marketing and communication events, following the criteria and protocols established.	Amber	Unit 18 LO2, LO3	Although the tasks relating to public relations and marketing events could be included in the activities performed by a student on work placement, these subjects are not explicitly covered in the programme and this should be contextualised in the assignment briefs.

Mapping of CFGS–HND learning outcomes (LOs): Media/Games Development

CFGS learning outcomes

Affinity level	VET module	Credits	Module No	Code	GLH	LO1	LO2	LO3
Green	Designing, sketching and modelling for animation	11	0011	1086	170	1. Design and create characters, scenes and props for animation, critically evaluating the use of different modelling and technological methods.	2. Define the final look of the animation, critically evaluating the use of the physical or virtual modelling tools needed.	3. Create the storyboards and animatics (Leica reels) for an animation project, analysing the action, rhythm and narrative requirements.
Green	Animation of 2D and 3D elements	16	0012	1087	250	1. Perform stop-motion or pixilation animation and capture, critically evaluating the potential for operational optimisation while meeting the requirements of the shooting script.	2. Perform 3D character setup, evaluating the usage options of all the elements that influence the design of the most appropriate animation interface.	3. Animate frames in 2D and 3D, either on a physical surface or on a screen, interpreting the script to achieve the required expressiveness and applying sketching and animation techniques and analysing the expressive characteristics.
Green	Colour, lighting and 2D and 3D finishes	11	0013	1088	160	1. Generate the UV maps of the models, analysing the potential for use of the most appropriate software tools for the operation.	2. Define and apply the virtual materials to the models, analysing all the parameters that influence the behaviour of the surfaces and interpreting the colour studies.	3. Generate virtual hair, paint effects, bitmaps and 2D and 3D procedural textures, animating them (as applicable) and analysing their potential for adjustment to the colour studies and the project dimensions.
Amber	Production of interactive multimedia projects	12	0014	1090	200	1. Construct the main navigation and control interface, critically evaluating the potential for applying ergonomic, accessibility, usability and design-for-all criteria to optimise product performance.	2. Generate and adapt multimedia information modules, integrating sources of still images (illustrations and photographs), moving images (videos and animations), sound and text, relating the multimedia projects' narrative mode to the technical and formal characteristics of the information modules and sources.	3. Catalogue the multimedia information modules and sources, analysing standardised source storage and exchange protocols and applying digital media management tools.
Red	Vocational training and guidance	5	0015	1094	90	1. Select employment opportunities, identifying the different routes into the labour market and the opportunities for lifelong learning.	2. Apply teamwork strategies, critically evaluating their effectiveness and efficiency in achieving the objectives of the organisation.	3. Exercise the rights and fulfil the obligations arising from employment relationships, identifying them in the different types of employment contract.
Green	2D and 3D audiovisual animation projects	7	0021	1085	100	1. Define the project's final technical characteristics, analysing and critically evaluating its dimensions and defining its working and final finish parameters.	2. Define the characteristics of the networking mode and the communication and interaction protocols necessary to produce an animation project, critically evaluating the technical and human resources involved in the various project types.	3. Perform layer separation and manage rendering effects, critically evaluating the potential for configuration of the parameters in the final image construction calculation.
Green	Game and interactive environment projects	7	0022	1089	100	1. Determine the objectives, narrative and graphic style, specifications and system requirements for an interactive multimedia project and prepare the necessary documentation.	2. Determine the production/development and target/deployment (end user) technology architectures for the interactive audiovisual multimedia projects, relating the technical specifications to the operating and security requirements.	3. Plan and monitor interactive audiovisual multimedia projects, critically evaluating resource, time and budget optimisation procedures.
Green	Development of multidevice interactive environments	11	0023	1091	160	1. Generate interactive multimedia project applications through to final compilation, relating the consequences of the decisions made during this stage to future product developments and updates.	2. Implement multidevice multimedia projects, taking into account the technical specifications of each type of device used to access the multimedia project.	3. Develop interactive entertainment applications that allow interaction with the 3D elements and simultaneous participation by multiple end users.
Green	Audiovisual editing and post-production	9	0024	0907	140	1. Configure and maintain the editing and post-production equipment, relating the characteristics of the different technical quality standards to the functional capability of the equipment.	2. Perform editing/post-production of audiovisual products, applying editing theories, codes of practice and techniques and evaluating the differences between the outcome and the project objectives.	3. Generate and/or insert the image effects during the editing process, critically evaluating the functional and operational characteristics of the standardised tools and technologies.
Green	Business and entrepreneurship	4	0025	1095	60	1. Recognise the capabilities associated with entrepreneurship, analysing the requirements derived from employment positions and business activities.	2. Determine the opportuneness of creating an SME, critically evaluating its impact on the environment in which it operates and incorporating ethical values.	3. Perform the tasks required to create and launch a new business, selecting the appropriate legal form and identifying the corresponding legal obligations.
Green	Training in the workplace	22	0026	1096	400	1. Identify the structure and organisational form of the company, relating them to the production and marketing of its products.	2. Adopt ethical and professional habits in the practice of the profession, as per the characteristics of the employment position and the procedures established by the enterprise.	3. Participate in the design and conceptualisation of an animation or multimedia project, relating its requirements and particular characteristics to the processes necessary to put it into production.
Green	3D, game and interactive environment animation project	5	0027	1093	40	1. Identify the needs of the productive sector, relating them to model projects capable of meeting them.	2. Design projects related to the skills inherent in the module, including and developing the constituent phases.	3. Plan the implementation of the project, defining the programme plan and related documentation.

LO4	LO5	LO6	LO7
4. Model definitive scenes, characters and scenery for stop-motion animations, critically evaluating the appropriateness of the necessary modelling and/or virtual tools selected.	5. Model characters, scenes, props and clothing in 3D, analysing the usage characteristics of different types of software.		
4. Create the 3D effects required by the script, applying physical laws to the virtual universe.	5. Create the layout and prepare the shots for the animation, analysing the characteristics of the shooting script and the animatics.	6. Place and move the cameras in 2D and 3D based on the interpretation of the shooting scripts, storyboard and animatics, analysing the audiovisual narrative and the characteristics of the point of view adopted.	7. Perform motion capture and rotoscoping in 2D and 3D, critically evaluating the use of the relevant physical or virtual tools.
4. Apply colour physically or by computer to stop-motion animation, adapting it to the colour chart and the original designs.	5. Define and list the lights needed for each scene, analysing the colour studies.	6. Apply, modify and animate the virtual lights and their parameters in each scene, critically evaluating the selection of appropriate software tools.	7. Light each animated shot, highlighting the characters defined and analysing the dramatic purpose.
4. Generate the interactive elements of a multimedia project, integrating animation, image, sound and text sources, analysing the different code input methods to ensure proper product performance and employing authoring tools.	5. Generate and synchronise the sequence of information modules on each screen, page, level and slide of the multimedia project, critically evaluating the different narrative modes and pacing specified in the script.		
4. Determine the protection provided by the social security system under the various contingencies covered and identify the different types of benefits.	5. Evaluate the risks stemming from the activity performed, analysing the working conditions and risk factors present in the work environment.	6. Participate in preparing a risk prevention plan at a small business, identifying the responsibilities of all the parties involved.	7. Implement prevention and protection measures, analysing the hazard situations encountered in the work environment of an employee holding a higher qualification in 3D Animation, Games and Interactive Environments.
4. Perform the final render by layer, evaluating the process supervision requirements and the application of corrective measures intended to obtain post-production material.	5. Complete the image project by designing the cinematographic effects required by the script, analysing the potential to adjust the resources and times to the dimensions of the project.		
4. Define a system for evaluating and managing the quality of an interactive audiovisual multimedia project, preparing the necessary documentation as per international standards.	5. Organise the various different sources required into information modules in preparation for production of the interactive audiovisual multimedia projects, analysing the technical, narrative and aesthetic requirements.		
4. Implement interactive multimedia projects that communicate with different external physical devices that act as information sources.	5. Implement a simulation and testing environment in which to review and validate the applications created, adopting a design-for-all and multiplatform and multidevice approach and ensuring proper operation under the initial pre-deployment project conditions specified.		
4. Prepare the materials intended for exchange with other platforms and external organisations, identifying the characteristics of the standardised audiovisual product and document exchange standards and protocols.	5. Perform the finishing processes in post-production of the audiovisual product, identifying the characteristics of the quality standards when applied to the different recording, distribution and broadcasting formats.	6. Adapt the characteristics of the audiovisual product master to the various formats and technologies employed in broadcasting, critically evaluating the technical solutions available to protect the rights to exploitation of the work.	
4. Perform the administrative and financial tasks associated with managing an SME, identifying the main accounting and tax obligations and completing the necessary documentation.			
4. Participate in planning the production process for an animation or multimedia project, specifying the activities and characteristics of the human and technical resources required.	5. Participate in production of an animation project, performing the stop-motion or pixilation capture, animating the 2D or 3D frames on a computer and designing the appropriate motion capture and/or rotoscoping system.	6. Participate in the operations required by production of a multimedia project through to attainment of the final product as per the schedule established.	7. Define an animation or multimedia project quality management and evaluation system, preparing the necessary documentation as per international standards.
4. Define the procedures to monitor and review implementation of the project, justifying the variables selected and the tools used.			

HND learning outcomes

Unit type	Unit	LO1	LO2	LO3	LO4	Level	UK credits	GLH
Core	Unit 1: Individual Project (Pearson-set)	Explain the specialisms within creative media production, based on research into historic and contemporary precedents	Develop individual creative solutions in response to a given brief	Present a resolved proposition to an identified audience	Evaluate a resolved proposition in response to audience feedback and personal reflection.	Level 4	15	60
Core	Unit 2: Creative Media Industry	Discuss the relationship between creative media production and the creative industries, based on historic and contemporary precedents	Explain the different forms of company and employment within the creative industries	Evaluate the roles and relationships within a specific area of creative media production	Analyse factors that may affect the future development of a specific area of creative media production.	Level 4	15	60
Core	Unit 3: Professional Practice	Explore the creative media production professions, through research into historic and contemporary precedent	Discuss personal career goals in relation to the range of roles and subjects in the creative industries	Define personal development plans, highlighting areas to support specific career goals and general skills	Critically reflect on the achievement of personal development goals and plan for the future	Level 4	15	60
Optional	Unit 15: Web Development	Analyse key technologies, standards, tools and processes used in web development and the creation of both websites and applications that use web technologies	Create website content using web development techniques in response to a brief	Utilise testing methodologies to review, refine and optimise website content	Evaluate outcomes and working practices to inform future development.	Level 4	15	60
Optional	Unit 20: 3D Modelling	Explain the uses of 3D models in different media production contexts	Plan and manage the development of 3D models to meet requirements of a brief	Apply texture maps and shaders to 3D models to meet the requirements of a specific media context	Present finished 3D models for a specific media context	Level 4	15	60
Specialist (Game Development Pathway)	Unit 21: Game Development Practices	Explain the key theories and practices used in the development of video games	Produce a project development plan for a computer game, using industry standard processes and procedures	Present an idea and development plan for a computer game, highlighting the development process and key milestones	Develop a computer game prototype, using industry-standard tools and techniques	Level 4	15	60
Specialist (Game Development Pathway)	Unit 22: 22 Games in Context	Discuss the development of the video game industry and the theories that underpin the medium, through historic and contemporary precedents	Evaluate the relationship between social, cultural, technological and economic factors that influence the games development industry, their products and audiences	Analyse a contemporary video game, highlighting the way technology, society and culture are reflected through the style, gameplay and promotion of the game	Present a body of research that reflects the theories and practices of contemporary video games development, culture and context.	Level 4	15	60
Specialist (Game Development Pathway)	Unit 23: Game design	Explore methods of idea-generation in support of game development	Create a game design proposal, including graphic material and documentation, in response to a brief	Develop a functional game prototype, through iterative testing and revision, using industry-standard tools and techniques	Present a functional game prototype, highlighting gameplay mechanisms, testing and development process.	Level 4	15	60
Optional	Unit 26: Editing for Film & Television	Explain the use of editing techniques for different production contexts	Organise moving image and audio assets in support of a specific production context, based on a given brief	Create an edited sequence, combining moving image and audio assets, in response to a given brief	Evaluate an edited sequence through audience feedback and personal reflection	Level 4	15	60
Optional	Unit 27: Storyboarding	Explore the use of storyboards for creative media production	Analyse a given brief, to define key features to be developed in a storyboard	Create storyboards, using industry-standard tools and techniques, for a creative media production in response to a given brief	Evaluate storyboards in their effectiveness in communicating the narrative of a creative media production.	Level 4	15	60
Optional	Unit 30: Principles of Animation	Explain the principles and practices of animation	Create animations, using industry-standard tools and techniques, in response to a given brief	Present a finished animation within a defined media product, in response to a brief	Evaluate audience feedback, based on presentation of an animation within a defined media product	Level 4	15	60
Optional	Unit 31: Art Development	Explore art development practices and processes through research and analysis	Develop preliminary artwork, using industry-standard tools and techniques, in response to a brief	Produce final artworks, for a given media production product, based on application of an iterative creative process	Present final artworks, in a format suitable for a given media production output	Level 4	15	60
Optional	Unit 35: Principles of User Experience & User Interface Design	Analyse the features and functions of user interfaces through research and experimentation	Develop a user experience strategy for a media interface, in response to a brief	Use industry-standard tools and techniques to create a user interface, in support of a user experience strategy	Critically analyse the outcomes of user-testing and evaluation to inform future development	Level 4	15	60
Core	Unit 36: Collaborative Project (Pearson-set)	Explain the importance of collaboration as part of creative media production	Plan and manage a collaborative project, based on a defined theme	Develop a finished creative media production, through collaborative working practices	Analyse the results of a collaborative process, highlighting the challenges and benefits in relation to project outcomes	Level 5	15	60

Unit type	Unit	LO1	LO2	LO3	LO4	Level	UK credits	GLH
Core	Unit 37: Personal Professional Development	Evaluate own skills and abilities in support of future employment or self-employment in creative media production	Develop material to support future employment or self-employment	Prepare a business plan, reflecting business structure, legal frameworks and legislation related to creative media production	Present own skills, abilities and work to a potential employer or client.	Level 5	15	60
Specialist (Game Development Pathway)	Unit 44: Advanced Game Development Studies	Evaluate an identified market, to define the concept for a video game, based on research and analysis	Plan and manage a game development process, applying industry-standard systems and practices for project planning and management	Develop a video game, using industry-standard tools and techniques, based on a defined project development plan	Present the marketing and promotion strategies for a video game for a specific market.	Level 5	30	120
Optional	Unit 46: Advanced Rendering & Visualisation	Evaluate a brief to establish the parameters for a rendering and visualisation project, in a defined media type	Develop and manage assets for rendering and visualisation	Apply industry-standard digital lighting and rendering techniques, for a defined media type	Present final visualisations, and development work, for a defined media type	Level 5	15	60
Optional	Unit 55: Project Management	Evaluate project management methodologies, based on their application to a creative media production brief	Develop a project strategy plan that defines the key procedures and priorities for a creative media production, in response to a given brief	Manage the needs of stakeholders in a creative media production, applying attributes and competencies of a project manager	Assess the effectiveness of the project management strategy, in meeting needs of stakeholders and a brief	Level 5	15	60
Optional	Unit 60: Advanced Animation	Analyse a client brief to define an animation strategy for a given media format	Use industry-standard tools and techniques to develop animation-ready characters in support of an animation strategy	Create animated characters that express emotion through facial expression and body language, in support of an animation strategy	Present finished animations, for a specific media production, gathering audience feedback and comment	Level 5	15	60
Optional	Unit 61: Advanced 3D modelling	Discuss the characteristics of assets, human and animal forms and how they are modelled in 3D software	Use industry-standard tools and techniques to model assets and characters for use in creative media productions, in response to a given brief	Apply lighting, materials, textures and shaders to 3D models in preparation for rendering, in response to a given brief	Present 3D modelled assets and characters, output in a format suitable to a final media production, based on a given brief	Level 5	15	60
Optional	Unit 62: Business Practices for Creative Media Production	Discuss the features of freelance employment in creative media production	Evaluate the financial practices of small businesses in creative media production	Explain the organisational practices of small companies in creative media production	Develop a business plan, for a product or service, in creative media production	Level 5	15	60
Optional	Unit 88: Advanced Editing for Film and Television	Create rhythm and pacing; using incidental music, within an edited work.	Apply colour grading of images for technical consistency and aesthetic effect.	Perform tracklaying, mixing of sound sources and setting levels for a final master sequence in meeting a brief	Present an edited work for film/television that uses a variety of visual and motion effects.	Level 5	15	60

Mapping of modules 0011–0013

	MODULE		UNIT	
Designing, sketching and modelling for animation	Designing, sketching and modelling for animation		HND in Creative Media Production (various units)	
	ECTS	11		
	General affinity	Green		
	Learning outcomes		HND learning outcomes	Remarks
	1. Design and create characters, scenes and props for animation, critically evaluating the use of different modelling and technological methods.	Green	Unit 31 L01, L02, L03, L04	
	2. Define the final look of the animation, critically evaluating the use of the physical or virtual modelling tools needed.	Green	Unit 31 L01, L02, L03, L04	
	3. Create the storyboards and animatics (Leica reels) for an animation project, analysing the action, rhythm and narrative requirements.	Green	Unit 27 L01, L02, L03, L04 Unit 30 L02	
Animation of 2D and 3D elements	4. Model definitive scenes, characters and scenery for stop-motion animations, critically evaluating the appropriateness of the necessary modelling and/or virtual tools selected.	Red	Unit 61 L02	Mapping strictly limited to the Traditional Sculpting section.
	5. Model characters, scenes, props and clothing in 3D, analysing the usage characteristics of different types of software.	Green	Unit 20 L01, L02, L04	
	Animation of 2D and 3D elements		HND in Creative Media Production (various units)	
	ECTS	16		
	General affinity	Green		
	Learning outcomes		HND learning outcomes	Remarks
	1. Perform stop-motion or pixilation animation and capture, critically evaluating the potential for operational optimisation while meeting the requirements of the shooting script.	Red		There are no units on specific stop-motion animation content.
Colour, lighting and 2D and 3D finishes	2. Perform 3D character setup, evaluating the usage options of all the elements that influence the design of the most appropriate animation interface.	Green	Unit 30 L01, L02	
	3. Animate frames in 2D and 3D, either on a physical surface or on a screen, interpreting the script to achieve the required expressiveness and applying sketching and animation techniques and analysing the expressive characteristics.	Green	Unit 30 L01, L02, L03, L04 Unit 60 L03	
	4. Create the 3D effects required by the script, applying physical laws to the virtual universe.	Green	Unit 60 L02	
	5. Create the layout and prepare the shots for the animation, analysing the characteristics of the shooting script and the animatics.	Green	Unit 27 L01, L03 Unit 60 L02	
	6. Place and move the cameras in 2D and 3D based on the interpretation of the shooting scripts, storyboard and animatics, analysing the audiovisual narrative and the characteristics of the point of view adopted.	Green	Unit 60 L04	
	7. Perform motion capture and rotoscoping in 2D and 3D, critically evaluating the use of the relevant physical or virtual tools.	Green	Unit 60 L02	
Colour, lighting and 2D and 3D finishes	Colour, lighting and 2D and 3D finishes		HND in Creative Media Production (various units)	
	ECTS	11		
	General affinity	Green		
	Learning outcomes		HND learning outcomes	Remarks
	1. Generate the UV maps of the models, analysing the potential for use of the most appropriate software tools for the operation.	Green	Unit 20 L03 Unit 61 L03	
	2. Define and apply the virtual materials to the models, analysing all the parameters that influence the behaviour of the surfaces and interpreting the colour studies.	Green	Unit 20 L01, L02, L03, L04	
	3. Generate virtual hair, paint effects, bitmaps and 2D and 3D procedural textures, animating them (as applicable) and analysing their potential for adjustment to the colour studies and the project dimensions.	Green	Unit 20 L03 Unit 61 L02	
	4. Apply colour physically or by computer to stop-motion animation, adapting it to the colour chart and the original designs.	Red		There are no units on specific stop-motion animation content.
	5. Define and list the lights needed for each scene, analysing the colour studies.	Green	Unit 61 L03	
	6. Apply, modify and animate the virtual lights and their parameters in each scene, critically evaluating the selection of appropriate software tools.	Green	Unit 61 L03	
	7. Light each animated shot, highlighting the characters defined and analysing the dramatic purpose.	Green	Unit 61 L03, L04	

Mapping of modules 0014–0015

	MODULE		UNIT	
Production of interactive multimedia projects	Production of interactive multimedia projects		HND in Creative Media Production (various units)	
	ECTS	12		
	General affinity	Amber		
	Learning outcomes		HND learning outcomes	Remarks
	1. Construct the main navigation and control interface, critically evaluating the potential for applying ergonomic, accessibility, usability and design-for-all criteria to optimise product performance.	Amber	Unit 1 L02, L03 Unit 15 L01, L02, L03 Unit 21 L01, L02, L03, L04 Unit 35 L01, L02, L03	Although there is no equivalent unit in the HND, the development of interactive and multimedia content management applications can be contextualised within the techniques, tools and processes involved in creating web applications and video games, both of which are essentially interactive applications that manage multimedia information. The project developed in Unit 1 can also be applied to this field. The design of the Assignment Brief is crucial to maximising correlation.
	2. Generate and adapt multimedia information modules, integrating sources of still images (illustrations and photographs), moving images (videos and animations), sound and text, relating the multimedia projects' narrative mode to the technical and formal characteristics of the information modules and sources.	Amber	Unit 1 L02, L03 Unit 15 L01, L02, L03 Unit 21 L01, L02, L03, L04 Unit 35 L01, L02, L03	Although there is no equivalent unit in the HND, the development of interactive and multimedia content management applications can be contextualised within the techniques, tools and processes involved in creating web applications and video games, both of which are essentially interactive applications that manage multimedia information. The project developed in Unit 1 can also be applied to this field. The design of the Assignment Brief is crucial to maximising correlation.
	3. Catalogue the multimedia information modules and sources, analysing standardised source storage and exchange protocols and applying digital media management tools.	Amber	Unit 1 L02, L03 Unit 15 L01, L02, L03 Unit 21 L01, L02, L03, L04	Although there is no equivalent unit in the HND, the development of interactive and multimedia content management applications can be contextualised within the techniques, tools and processes involved in creating web applications and video games, both of which are essentially interactive applications that manage multimedia information. The project developed in Unit 1 can also be applied to this field. The design of the Assignment Brief is crucial to maximising correlation.
Vocational training and guidance	4. Generate the interactive elements of a multimedia project, integrating animation, image, sound and text sources, analysing the different code input methods to ensure proper product performance and employing authoring tools.	Amber	Unit 1 L02, L03 Unit 15 L01, L02, L03 Unit 21 L01, L02, L03, L04	Although there is no equivalent unit in the HND, the development of interactive and multimedia content management applications can be contextualised within the techniques, tools and processes involved in creating web applications and video games, both of which are essentially interactive applications that manage multimedia information. The project developed in Unit 1 can also be applied to this field. The design of the Assignment Brief is crucial to maximising correlation.
	5. Generate and synchronise the sequence of information modules on each screen, page, level and slide of the multimedia project, critically evaluating the different narrative modes and pacing specified in the script.	Amber	Unit 1 L02, L03 Unit 15 L01, L02, L03 Unit 21 L01, L02, L03, L04	Although there is no equivalent unit in the HND, the development of interactive and multimedia content management applications can be contextualised within the techniques, tools and processes involved in creating web applications and video games, both of which are essentially interactive applications that manage multimedia information. The project developed in Unit 1 can also be applied to this field. The design of the Assignment Brief is crucial to maximising correlation.
	Vocational training and guidance		HND in Creative Media Production (various units)	
	ECTS	5		
	General affinity	Red		
	Learning outcomes		HND learning outcomes	Remarks
	1. Select employment opportunities, identifying the different routes into the labour market and the opportunities for lifelong learning.	Green	Unit 2 L02, L03, L04 Unit 3 L01, L02, L03, L04 Unit 37 L01	
	2. Apply teamwork strategies, critically evaluating their effectiveness and efficiency in achieving the objectives of the organisation.	Green	Unit 36 L01, L02, L03, L04	
	3. Exercise the rights and fulfil the obligations arising from employment relationships, identifying them in the different types of employment contract.	Amber	Unit 37 L02, L03	
	4. Determine the protection provided by the social security system under the various contingencies covered and identify the different types of benefits.	Red	Unit 37 L02, L03	Employment legislation and regulations are highly locale-specific and it is therefore difficult to find parallels without substantial contextualisation.
	5. Evaluate the risks stemming from the activity performed, analysing the working conditions and risk factors present in the work environment.	Red	Unit 37 L03	Employment legislation and regulations are highly locale-specific and it is therefore difficult to find parallels without substantial contextualisation. The HND does not include specific material on occupational health and safety, except in very isolated cases in some units.
	6. Participate in preparing a risk prevention plan at a small business, identifying the responsibilities of all the parties involved.	Red	Unit 37 L03	Employment legislation and regulations are highly locale-specific and it is therefore difficult to find parallels without substantial contextualisation. The HND does not include specific material on occupational health and safety, except in very isolated cases in some units.
	7. Implement prevention and protection measures, analysing the hazard situations encountered in the work environment of an employee holding a higher qualification in 3D Animation, Games and Interactive Environments.	Red	Unit 37 L03	Employment legislation and regulations are highly locale-specific and it is therefore difficult to find parallels without substantial contextualisation. The HND does not include specific material on occupational health and safety, except in very isolated cases in some units.

Mapping of modules 0021–0023

	MODULE		UNIT	
2D and 3D audiovisual animation projects	2D and 3D audiovisual animation projects			
	ECTS	7	HND in Creative Media Production (various units)	
	General affinity	Green		
	Learning outcomes		HND learning outcomes	Remarks
	1. Define the project's final technical characteristics, analysing and critically evaluating its dimensions and defining its working and final finish parameters.	Green	Unit 36 L02 Unit 55 L01, L02, L03, L04	
	2. Define the characteristics of the networking mode and the communication and interaction protocols necessary to produce an animation project, critically evaluating the technical and human resources involved in the various project types.	Green	Unit 36 L02 Unit 55 L01, L02, L03, L04	
	3. Perform layer separation and manage rendering effects, critically evaluating the potential for configuration of the parameters in the final image construction calculation.	Green	Unit 36 L02, L03 Unit 46 L01, L02, L03, L04	
	4. Perform the final render by layer, evaluating the process supervision requirements and the application of corrective measures intended to obtain post-production material.	Green	Unit 36 L03 Unit 46 L01, L02, L03, L04	
Game and interactive environment projects	Game and interactive environment projects			
	ECTS	7	HND in Creative Media Production (various units)	
	General affinity	Green		
	Learning outcomes		HND learning outcomes	Remarks
	1. Determine the objectives, narrative and graphic style, specifications and system requirements for an interactive multimedia project and prepare the necessary documentation.	Green	Unit 36 L02 Unit 23 L01, L02 Unit 55 L01, L02, L03, L04	
	2. Determine the production/development and target/deployment (end user) technology architectures for the interactive audiovisual multimedia projects, relating the technical specifications to the operating and security requirements.	Green	Unit 36 L02 Unit 55 L01, L02, L03, L04 Unit 23 L01, L02	
	3. Plan and monitor interactive audiovisual multimedia projects, critically evaluating resource, time and budget optimisation procedures.	Green	Unit 36 L02, L03 Unit 55 L01, L02, L03, L04 Unit 23 L01, L02	
	4. Define a system for evaluating and managing the quality of an interactive audiovisual multimedia project, preparing the necessary documentation as per international standards.	Green	Unit 36 L02, L03, L04 Unit 55 L01, L02, L03, L04 Unit 23 L01, L02	
Development of multidevice interactive environments	Development of multidevice interactive environments			
	ECTS	11	HND in Creative Media Production (various units)	
	General affinity	Green		
	Learning outcomes		HND learning outcomes	Remarks
	1. Generate interactive multimedia project applications through to final compilation, relating the consequences of the decisions made during this stage to future product developments and updates.	Green	Unit 23 L03, L04 Unit 36 L03 Unit 44 L01, L02, L03, L04	The LOs in this module are interconnected and distributed due to the differences in the implementation phase sequence and evaluation methodology.
	2. Implement multidevice multimedia projects, taking into account the technical specifications of each type of device used to access the multimedia project.	Green	Unit 23 L03, L04 Unit 36 L03 Unit 44 L01, L02, L03, L04	The LOs in this module are interconnected and distributed due to the differences in the implementation phase sequence and evaluation methodology.
	3. Develop interactive entertainment applications that allow interaction with the 3D elements and simultaneous participation by multiple end users.	Green	Unit 23 L03, L04 Unit 36 L03 Unit 44 L01, L02, L03, L04	The LOs in this module are interconnected and distributed due to the differences in the implementation phase sequence and evaluation methodology.
	4. Implement interactive multimedia projects that communicate with different external physical devices that act as information sources.	Green	Unit 23 L03, L04 Unit 36 L03 Unit 44 L01, L02, L03, L04	The LOs in this module are interconnected and distributed due to the differences in the implementation phase sequence and evaluation methodology.
	5. Implement a simulation and testing environment in which to review and validate the applications created, adopting a design-for-all and multiplatform and multidevice approach and ensuring proper operation under the initial pre-deployment project conditions specified.	Green	Unit 23 L03, L04 Unit 36 L03 Unit 44 L01, L02, L03, L04	The LOs in this module are interconnected and distributed due to the differences in the implementation phase sequence and evaluation methodology.

Mapping of modules 0026–0027

	MODULE		UNIT	
Training in the workplace	Training in the workplace		HND in Creative Media Production (various units)	
	ECTS	22		
	General affinity	Green		
	Learning outcomes		HND learning outcomes	Remarks
	1. Identify the structure and organisational form of the company, relating them to the production and marketing of its products.	Green	Unit 2 L02, L03	This is a cross-cutting module that, in the Spanish system, consists of a three-month placement in a company, in which the students have to put into practice much of the learning from the other modules and demonstrate the knowledge, procedures and skills acquired.
	2. Adopt ethical and professional habits in the practice of the profession, as per the characteristics of the employment position and the procedures established by the enterprise.	Green	Unit 3 L02, L03	This is a cross-cutting module that, in the Spanish system, consists of a three-month placement in a company, in which the students have to put into practice much of the learning from the other modules and demonstrate the knowledge, procedures and skills acquired.
	3. Participate in the design and conceptualisation of an animation or multimedia project, relating its requirements and particular characteristics to the processes necessary to put it into production.	Green	Unit 44 L02 Unit 31 L02 Unit 36 L02, L03 Unit 21 L02	This is a cross-cutting module that, in the Spanish system, consists of a three-month placement in a company, in which the students have to put into practice much of the learning from the other modules and demonstrate the knowledge, procedures and skills acquired.
	4. Participate in planning the production process for an animation or multimedia project, specifying the activities and characteristics of the human and technical resources required.	Green	Unit 44 L02 Unit 31 L02 Unit 36 L02, L03 Unit 21 L02	This is a cross-cutting module that, in the Spanish system, consists of a three-month placement in a company, in which the students have to put into practice much of the learning from the other modules and demonstrate the knowledge, procedures and skills acquired.
	5. Participate in production of an animation project, performing the stop-motion or pixilation capture, animating the 2D or 3D frames on a computer and designing the appropriate motion capture and/or rotoscoping system.	Green	Unit 61 L02, L03, L04 Unit 30 L02, L03 Unit 31 L03 Unit 36 L03	This is a cross-cutting module that, in the Spanish system, consists of a three-month placement in a company, in which the students have to put into practice much of the learning from the other modules and demonstrate the knowledge, procedures and skills acquired.
	6. Participate in the operations required by production of a multimedia project through to attainment of the final product as per the schedule established.	Green	Unit 36 L03 Unit 23 L03, L04 Unit 44 L01, L02, L03	This is a cross-cutting module that, in the Spanish system, consists of a three-month placement in a company, in which the students have to put into practice much of the learning from the other modules and demonstrate the knowledge, procedures and skills acquired.
3D, game and interactive environment animation project	3D, game and interactive environment animation project		HND in Creative Media Production (various units)	
	ECTS	5		
	General affinity	Green		
	Learning outcomes		HND learning outcomes	Remarks
	1. Identify the needs of the productive sector, relating them to model projects capable of meeting them.	Green	Unit 55 L01	
	2. Design projects related to the skills inherent in the module, including and developing the constituent phases.	Green	Unit 55 L02	
	3. Plan the implementation of the project, defining the programme plan and related documentation.	Green	Unit 55 L03	
	4. Define the procedures to monitor and review implementation of the project, justifying the variables selected and the tools used.	Green	Unit 55 L04	

Mapping of modules 0024–0025

	MODULE	UNIT
Audiovisual editing and post-production	Audiovisual editing and post-production	HND in Creative Media Production (various units)
	ECTS 9	
	General affinity Green	
	Learning outcomes	HND learning outcomes Remarks
	1. Configure and maintain the editing and post-production equipment, relating the characteristics of the different technical quality standards to the functional capability of the equipment.	Green Unit 26 LO1, LO2
	2. Perform editing/post-production of audiovisual products, applying editing theories, codes of practice and techniques and evaluating the differences between the outcome and the project objectives.	Green Unit 26 LO3, LO4
	3. Generate and/or insert the image effects during the editing process, critically evaluating the functional and operational characteristics of the standardised tools and technologies.	Green Unit 88 LO4
	4. Prepare the materials intended for exchange with other platforms and external organisations, identifying the characteristics of the standardised audiovisual product and document exchange standards and protocols.	Green Unit 88 LO2, LO3
	5. Perform the finishing processes in post-production of the audiovisual product, identifying the characteristics of the quality standards when applied to the different recording, distribution and broadcasting formats.	Green Unit 88 LO2, LO3, LO4
	6. Adapt the characteristics of the audiovisual product master to the various formats and technologies employed in broadcasting, critically evaluating the technical solutions available to protect the rights to exploitation of the work.	Green Unit 88 LO2, LO3, LO4
Business and entrepreneurship	Business and entrepreneurship	HND in Creative Media Production (various units)
	ECTS 11	
	General affinity Green	
	Learning outcomes	HND learning outcomes Remarks
	1. Recognise the capabilities associated with entrepreneurship, analysing the requirements derived from employment positions and business activities.	Green Unit 37 LO1, LO2
	2. Determine the opportuneness of creating an SME, critically evaluating its impact on the environment in which it operates and incorporating ethical values.	Green Unit 37 LO3
	3. Perform the tasks required to create and launch a new business, selecting the appropriate legal form and identifying the corresponding legal obligations.	Green Unit 37 LO3, LO4
	4. Perform the administrative and financial tasks associated with managing an SME, identifying the main accounting and tax obligations and completing the necessary documentation.	Green Unit 62 LO2

Mapping of CFGS–HND learning outcomes (LOs): Art&Design/Graphic Design

CFGS learning outcomes

Affinity level	VET module	Credits	Module No	Code	GLH	LO1	LO2	LO3
Green	Fundamentals of visual expression and representation	7	0011	01	128	1. Analyse the elements that comprise the representation of space in a two-dimensional medium and the interrelationships established between them.	2. Make appropriate use of the elements and techniques of plastic and visual language to graphically represent images.	3. Adapt graphic representation to the communication objectives of the message.
Green	Theory of the image	3	0012	02	64	1. Identify, critically evaluate and interpret images, applying different analysis models.	2. Understand the theoretical principles of visual perception.	3. Interpret the codes of significance of the image.
Green	Digital tools and media (I and II)	20	0013	03–10	296	1. Analyse the evolution of digital tools and media in contemporary society and the presence of new technologies in the creation and editing of animated images.	2. Understand the fundamentals of IT and the relationship between hardware and software and comprehend their characteristics and functions.	3. Comprehend and apply the fundamental concepts of digital vector and bitmap images, the processing of digital typography, colour systems and the most appropriate formats for each requirement.
Green	Photography	3	0014	04	64	1. Understand and master photographic techniques and technology.	2. Understand the language of photography, its dimensions and its particularities.	3. Use photography in own projects in the context of the specialism.
Green	History of the graphic image	6	0015	05	64	1. Comprehend the artistic and plastic languages of graphic and visual media from a conceptual and formal perspective.	2. Know the origins and evolution of the graphic image and its associated techniques within the historical and artistic context.	3. Comprehend the historical, formal and technological development of the printed image and identify significant authors and works.
Green	Typography	8	0016	06	160	1. Critically evaluate the communicative dimension of typography as an image of the word and the transmission of ideas.	2. Analyse the formal elements of the typographical sign.	3. Analyse the formal constraints of an alphabet. The sign and the alphabet.
Green	Graphic expression techniques	5	0017	07	128	1. Differentiate between procedures and know how to use the main graphic expression techniques, as well as the associated tools and material.	2. Select and know how to apply the most appropriate graphic techniques according to the thematic, stylistic and communicative characteristics of the graphic commission.	3. Experiment with the expressive potential of the various techniques based on the designer's stylistic and artistic preferences and incorporate them into the designer's personal style.
Green	Fundamentals of graphic design	6	0018	08	128	1. Differentiate the areas, particularities and main applications of graphic design.	2. Identify and analyse the communicative and expressive capabilities of graphic design in its various spheres.	3. Explore the communicative potential of graphic design capabilities in effectively conveying ideas and messages in the printed product.
Green	Printed graphic projects (I and II)	30	0021	09–11	544	1. Be familiar with the methodologies specific to the specialism and know how to apply them in different graphic projects.	2. Plan and implement the project execution process for practical exercises in the specialism and perform the quality control needed to resolve the technical, artistic and communicative issues encountered.	3. Integrate the content of the other modules into the production of printed graphic products and issue a reasoned critical opinion on the work and outcomes.
Amber	Industrial graphic production	7	0022	12	112	1. Analyse and differentiate between the different types of originals, considering the processes and factors involved in reproduction.	2. Prepare files for printing.	3. Comprehend and critically evaluate the variables involved in a print run.
Red	Vocational training and guidance	6	0023	13	56	1. Analyse and interpret the legal framework governing employment and understand the rights and obligations arising from employment relationships.	2. Understand the legal requirements and constraints involved in administering and managing a small or medium-sized enterprise, considering the production, legal, commercial, social and employment factors.	3. Identify the various pathways into the employment market and lifelong learning and be familiar with the institutional, national and European bodies that facilitate them.
Green	Integrated project	10	0024	15	150	1. Propose and execute a commission or own project of high technical, artistic and communicative quality in the area of specialism.	2. Implement the project, executing all the corresponding stages and quality controls.	3. Develop, through the conception and implementation of an original project in the area of specialism, the professional skills corresponding to that specialism.

LO4	LO5	LO6	LO7	LO8	LO9
4. Understand the fundamentals and theory of colour and their importance in artistic and plastic creation and use them creatively in the graphic representation of messages.	5. Analyse colour and other elements of plastic and visual language present in different images.	6. Practice the capacity for invention and conception and develop aesthetic and creative sensitivity.			
4. Identify and critically evaluate the expressive function of the image in its context.	5. Identify and analyse the communication strategies in the image.	6. Understand the various domains and environments in which the still and moving image is produced.			
4. Digitise images, store them and convert them into appropriate formats.	5. Be familiar with and use specific design software.	6. Use digital tools and media to conceive, manage and disseminate work.			
4. Manage photographic images suitable for advertising graphics projects.					
4. Analyse graphic products based on historical and artistic knowledge and the products' technical, technological and communicative characteristics.	5. Critically evaluate contemporary graphic works in various spheres based on their expressive, communicative and artistic dimensions, as well as on the designer's own taste and sensitivity.				
4. Identify and comprehend the arrangement of typographical characters. The word and the text.	5. Prepare graphic representations using typographical material.	6. Critically evaluate the aesthetic, technical, semantic and functional dimensions of typography and composition.	7. Explore the creative potential of typographical elements, characters, words, texts and composition to make effective communication proposals.		
4. Analyse and recognise techniques and styles in printed images from different eras and critically evaluate the potential to apply them creatively to the designer's own style.	5. Develop the capacity for graphic communication and personal creativity and expression through graphic production.				
4. Know how to use the elements of graphic language to communicate messages and ideas.	5. Analyse the formal and functional characteristics of composition, typography, colour and image in the printed graphic product.	6. Know how to structure the medium and arrange the elements of graphic discourse to meet the communicative objectives of the commission.	7. Explore the particularities of the medium in relation to the expressive potential of graphic elements of the message and their visualisation.	8. Critically evaluate printed graphic products based on their formal, technical and communicative characteristics.	
4. Plan execution of the various phases of a printed graphic project and implement it to produce a graphic product of high technical, artistic and communicative quality.	5. Critically evaluate graphic production as an opportunity for experimentation, creativity, communication and personal artistic expression.	6. Initiate development of own style and aesthetic discourse when graphically expressing messages.	7. Master the technologies used in the specialism to conceive and execute professional-quality graphic projects.	8. Know the regulations specifically applicable to the specialism.	
4. Define and differentiate between the various types of industrial printing and their particularities.	5. Interpret the characteristics of graphic projects, select the most appropriate printing system and prepare originals and files for subsequent reproduction.	6. Know how to select the most appropriate graphic media for a given project.	7. Optimise the elements involved in the reproduction phase of a graphic project.	8. Monitor the printed product at all stages of reproduction and perform the corresponding quality control.	9. Critically evaluate the presence of new technologies in industrial graphic production.
4. Comprehend and apply occupational health and safety regulations and develop awareness of environmental protection, understanding them as determinants of quality of life.					

HND learning outcomes

Unit type	Title	LO1	LO2	LO3	LO4	Level	UK credits	GLH
Core	Unit 1 Professional Development	Explore the creative industries professions, through research into historic and contemporary precedent	Discuss personal career goals in relation to the range of roles and subjects in the creative industries	Define personal development plans, highlighting areas to support specific career goals and general skills	Critically reflect on the achievement of personal development goals and plan for the future	Level 4	15	60
Core	Unit 2 Contextual Studies	Discuss the social, historical and cultural context of key art and design movements, theories and practices	Analyse a specific work of art or design related to own area of specialism	Use primary and secondary research methods to investigate an area of practice, with consideration of research ethics	Present research findings, through written work, visually and orally	Level 4	15	60
Core	Unit 3 Individual Project (Pearson-set)	Examine specialist area of creative practice within historical and contemporary contexts	Develop art and design solutions, through an iterative development process, in response to a given brief	Present an art and design solution, including a portfolio of development work, in response to a given brief	Evaluate work in relation to an identified area of specialism in the creative industries	Level 4	15	60
Core	Unit 4 Techniques & Processes	Evaluate a given brief to identify stakeholder requirements and areas for investigation and research	Explore concepts, materials and processes through experimentation and testing	Present a body of work that includes evidence of development process, as well as final outcomes	Assess own process and outcomes, based on reflection and feedback of others	Level 4	15	60
Optional	Unit 11 Photographic Practices	Apply research and planning techniques, to develop a photographic strategy, in response to a given brief	Evaluate equipment, techniques and processes in order to realise a photographic product	Analyse the characteristics of photographic images in meeting a brief	Critically evaluate the selection and presentation of photographic images	Level 4	15	60
Optional	Unit 12 Screen-based Practices	Evaluate the use of software/systems in the production of screen-based work	Explore the techniques of screen-based production through experimentation	Use industry standard software and hardware in the production of final screen-based work, in response to a given context	Discuss the use of screen-based techniques, highlighting best practice in the production of work	Level 4	15	60
Specialist (Graphic Design Pathway)	Unit 13 Typography	Investigate the application of typographic practice in print and digital workflows	Explore typographic technologies and processes in specific contexts	Apply typographic principles and processes in meeting a brief	Present finished typographic outputs, for print and digital workflows.	Level 4	15	60
Specialist (Graphic Design Pathway)	Unit 14 Graphic Design Practices	Establish project aims, objectives and timeframes based on the chosen theme.	Conduct small-scale research, information gathering and data collection to generate knowledge to support the project	Present the project and communicate appropriate recommendations based on meaningful conclusions drawn from the evidence findings and/or analysis.	Reflect on the value gained from conducting the project and its usefulness to support sustainable organisational performance.	Level 4	15	60
Optional	Unit 18 Digital Design Practices	Apply research techniques to establish an awareness of context, related to a graphic design problem	Develop a graphic design brief, to meet client needs in a given context	Explore alternative solutions to a graphic design brief	Present a final graphic design solution to a client	Level 4	15	60
Optional	Unit 22 Printmaking	Explore the development of printmaking technologies and practices through historic and contemporary precedent research	Evaluate printmaking processes and techniques through experimentation using different materials and technologies	Develop propositions towards a final outcome through an iterative design process	Present a body of printmaking work that communicates both development process and final outcomes	Level 4	15	60

Unit type	Title	LO1	LO2	LO3	LO4	Level	UK credits	GLH
Optional	Unit 28 Communication in Art & Design	Discuss communication, in the creative industries, through historical and contemporary precedent research	Analyse a brief to define the context of a communication strategy	Develop a communication strategy, through experimentation, in response to a given brief	Present a communication strategy and finished work in relation to a given brief	Level 4	15	60
Core	Unit 32 Professional Practice	Review own skills and abilities in support of future employment or self-employment	Investigate business structures, legal frameworks and legislation to construct a business plan	Develop material to support future employment or self-employment	Present own skills, abilities and work to an employer or client	Level 5	15	60
Core	Unit 33 Applied Practice Collaborative Project (Pearson-set)	Evaluate own and group skills, in support of a collaborative team	Plan and manage a collaborative project, based on a Pearson-set theme	Present collaborative project outcomes, highlighting own contributions	Critically evaluate own work, and the work of others in a collaborative project	Level 5	30	120
Specialist (App Development Pathway)	Unit 39 Advanced Graphic Design Studies	Investigate the relationship between design development, final output and use	Develop a graphic design proposal, based on client requirements and design constraints, in response to a brief	Produce graphic design prototypes, based on research and analysis, in support of a design strategy	Present a body of graphic design work, including development and design solutions, in response to a brief	Level 5	30	120
Optional	Unit 48 Conceptual Practice	Investigate conceptual approaches in art & design through contextual research	Develop a conceptual approach within an art & design project through experimentation	Present a conceptual work of art & design, based on research and experimentation	Evaluate own work and the work of others in relation to historical and contemporary precedents	Level 5	15	60
Optional	Unit 63 Principles of Lifedrawing	Illustrate the principles and practices of lifedrawing through historic and contemporary precedents	Explore anatomy, structure and form through lifedrawing media and techniques	Develop lifedrawing work; applying principles of proportion, volume, and movement	Present a portfolio of lifedrawing work that reflects evaluation and reflection	Level 4	15	60
Optional	Unit 64 Advanced Lifedrawing	Analyse a creative brief to define a lifedrawing approach	Develop characters and contexts through the application of lifedrawing techniques	Use an iterative approach to refine composition, mood and form in lifedrawing work	Evaluate lifedrawing outcomes and process in support of a creative brief.	Level 5	15	60
Optional	Unit 66 Studio Photography	Discuss the historical and contemporary development of studio photographic practices and techniques	Explore studio practices and techniques to realise photographic outputs	Produce a range of studio-photographic outputs to meet a given brief	Present a body of studio-photographic outputs to an identified audience	Level 4	15	60

Mapping of modules 0011–0013

	MODULE	UNITS
Fundamentals of visual expression and representation	Fundamentals of visual expression and representation	
	ECTS 7	HND in Art & Design (various units)
	General affinity Green	
	Learning outcomes	HND learning outcomes Remarks
	1. Analyse the elements that comprise the representation of space in a two-dimensional medium and the interrelationships established between them.	Green Unit 63 L01, L02
	2. Make appropriate use of the elements and techniques of plastic and visual language to graphically represent images.	Green Unit 63 L02, L03
	3. Adapt graphic representation to the communication objectives of the message.	Green Unit 64 L01
	4. Understand the fundamentals and theory of colour and their importance in artistic and plastic creation and use them creatively in the graphic representation of messages.	Green Unit 64 L03
	5. Analyse colour and other elements of plastic and visual language present in different two- and three-dimensional images.	Green Unit 64 L02, L03
	6. Practice the capacity for invention and conception and develop aesthetic and creative sensitivity.	Green Unit 63 L04 Unit 64 L04
Theory of the image	Theory of the image	
	ECTS 3	HND in Art & Design (various units)
	General affinity Green	
	Learning outcomes	HND learning outcomes Remarks
	1. Identify, critically evaluate and interpret images, applying different analysis models.	Green Unit 2 L02, L04
	2. Understand the theoretical principles of visual perception.	Green Unit 2 L02, L04
	3. Interpret the codes of significance of the image.	Green Unit 2 L02, L04
	4. Identify and critically evaluate the expressive function of the image in its context.	Green Unit 2 L01, L02, L04
	5. Identify and analyse the communication strategies in the image.	Green Unit 2 L02 Unit 28 L01, L02
	6. Understand the various domains and environments in which the still and moving image is produced.	Amber Unit 4 L01 Unit 14 L01 Unit 48 L02 Appropriate contextualisation of the evaluation criteria is necessary to cover this aspect in its entirety.
Digital tools and media (I and II)	Digital tools and media (I and II)	
	ECTS 20	HND in Art & Design (various units)
	General affinity Green	
	Learning outcomes	HND learning outcomes Remarks
	1. Analyse the evolution of digital tools and media in contemporary society and the presence of new technologies in the creation and editing of animated images.	Amber Unit 12 L01 Unit 18 L01 The evolution and influence of IT is not covered sufficiently.
	2. Understand the fundamentals of IT and the relationship between hardware and software and comprehend their characteristics and functions.	Green Unit 12 L01, L02 The use of digital design tools implicitly requires an understanding of the objectives relating to use of IT systems.
	3. Comprehend and apply the fundamental concepts of digital vector and bitmap images, the processing of digital typography, colour systems and the most appropriate formats for each requirement.	Green Unit 12 L01, L02 Unit 18 L02 The use of digital design tools implicitly requires an understanding of the objectives relating to use of IT systems.
	4. Digitise images, store them and convert them into appropriate formats.	Green Unit 12 L02, L03 The use of digital design tools implicitly requires an understanding of the objectives relating to use of IT systems.
	5. Be familiar with and use specific design software.	Green Unit 12 L02, L03 Unit 14 L03 This module is split across the first and second years.
	6. Use digital tools and media to conceive, manage and disseminate work.	Green Unit 12 L03, L04 Unit 18 L03, L04 This module is split across the first and second years.

Mapping of modules 0014–0016

	MODULE		UNITS
Photography	Photography		HND in Art & Design (various units)
	ECTS	3	
	General affinity	Green	
	Learning outcomes		HND learning outcomes Remarks
	1. Understand and master photographic techniques and technology.	Green	Unit 11 L01, L02
	2. Understand the language of photography, its dimensions and its particularities.	Green	Unit 11 L03, L04
	3. Use photography in own projects in the context of the specialism.	Green	Unit 66 L02, L03
	4. Manage photographic images suitable for advertising graphics projects.	Green	Unit 66 L03, L04
History of the graphic image	History of the graphic image		HND in Art & Design (various units)
	ECTS	6	
	General affinity	Green	
	Learning outcomes		HND learning outcomes Remarks
	1. Comprehend the artistic and plastic languages of graphic and visual media from a conceptual and formal perspective.	Green	Unit2 L01 Unit 48 L01
	2. Know the origins and evolution of the graphic image and its associated techniques within the historical and artistic context.	Green	Unit 2 L01
	3. Comprehend the historical, formal and technological development of the printed image and identify significant authors and works.	Green	Unit 2 L02
	4. Analyse graphic products based on historical and artistic knowledge and the products' technical, technological and communicative characteristics.	Amber	Unit 2 L02
Typography	Typography		HND in Art & Design (various units)
	ECTS	8	
	General affinity	Green	
	Learning outcomes		HND learning outcomes Remarks
	1. Critically evaluate the communicative dimension of typography as an image of the word and the transmission of ideas.	Green	Unit 13 L01
	2. Analyse the formal elements of the typographical sign.	Green	Unit 13 L01
	3. Analyse the formal constraints of an alphabet. The sign and the alphabet.	Green	Unit 13 L01
	4. Identify and comprehend the arrangement of typographical characters. The word and the text.	Green	Unit 13 L01, L02
	5. Prepare graphic representations using typographical material.	Green	Unit 13 L03
	6. Critically evaluate the aesthetic, technical, semantic and functional dimensions of typography and composition.	Green	Unit 13 L01, L02
	7. Explore the creative potential of typographical elements, characters, words, texts and composition to make effective communication proposals.	Green	Unit 13 L03, L04

Mapping of modules 0017–0018

	MODULE		UNITS
Graphic expression techniques	Graphic expression techniques		HND in Art & Design (various units)
	ECTS	5	
	General affinity	Green	
	Learning outcomes		HND learning outcomes Remarks
	1. Differentiate between procedures and know how to use the main graphic expression techniques, as well as the associated tools and material.	Green	Unit 4 L02
	2. Select and know how to apply the most appropriate graphic techniques according to the thematic, stylistic and communicative characteristics of the graphic commission.	Green	Unit 4 L01 Unit 28 L02, L04
	3. Experiment with the expressive potential of the various techniques based on the designer's stylistic and artistic preferences and incorporate them into the designer's personal style.	Green	Unit 4 L02 Unit 28 L03
	4. Analyse and recognise techniques and styles in printed images from different eras and critically evaluate the potential to apply them creatively to the designer's own style.	Green	Unit 4 L01 Unit 28 L01
Fundamentals of graphic design	5. Develop the capacity for graphic communication and personal creativity and expression through graphic production.	Green	Unit 4 L03, L04
	Fundamentals of graphic design		HND in Art & Design (various units)
	ECTS	6	
	General affinity	Green	
	Learning outcomes		HND learning outcomes Remarks
	1. Differentiate the areas, particularities and main applications of graphic design.	Green	Unit 2 L01 Unit 14 L01 Unit 28 L01
	2. Identify and analyse the communicative and expressive capabilities of graphic design in its various spheres.	Green	Unit 14 L01, L02 Unit 28 L01
	3. Explore the communicative potential of graphic design capabilities in effectively conveying ideas and messages in the printed product.	Green	Unit 14 L02, L03 Unit 28 L03
	4. Know how to use the elements of graphic language to communicate messages and ideas.	Green	Unit 14 L03, L04 Unit 28 L03
	5. Analyse the formal and functional characteristics of composition, typography, colour and image in the printed graphic product.	Green	Unit 14 L01 Unit 28 L01
	6. Know how to structure the medium and arrange the elements of graphic discourse to meet the communicative objectives of the commission.	Green	Unit 14 L03, L04 Unit 28 L02
	7. Explore the particularities of the medium in relation to the expressive potential of graphic elements of the message and their visualisation.	Green	Unit 14 L03, L04
	8. Critically evaluate printed graphic products based on their formal, technical and communicative characteristics.	Green	Unit 14 L01

Mapping of modules 0021–0022

	MODULE	UNITS		
Printed graphic projects (I and II)	Printed graphic projects (I and II)	HND in Art & Design (various units)		
	ECTS			30
	General affinity			Green
	Learning outcomes		HND learning outcomes	Remarks
	1. Be familiar with the methodologies specific to the specialism and know how to apply them in different graphic projects.	Green	Unit 3 L01 Unit 14 L01	
	2. Plan and implement the project execution process for practical exercises in the specialism and perform the quality control needed to resolve the technical, artistic and communicative issues encountered.	Green	Unit 3 L02 Unit 14 L02	
	3. Integrate the content of the other modules into the production of printed graphic products and issue a reasoned critical opinion on the work and outcomes.	Green	Unit 3 L04 Unit 14 L03	
	4. Plan execution of the various phases of a printed graphic project and implement it to produce a graphic product of high technical, artistic and communicative quality.	Green	Unit 3 L02 Unit 14 L02, L03	
	5. Critically evaluate graphic production as an opportunity for experimentation, creativity, communication and personal artistic expression.	Green	Unit 3 L02 Unit 14 L03	
	6. Initiate development of own style and aesthetic discourse when graphically expressing messages.	Green	Unit 3 L02, L03 Unit 14 L03	
7. Master the technologies used in the specialism to conceive and execute professional-quality graphic projects.	Green	Unit 3 L02, L03 Unit 14 L03, L04		
8. Know the regulations specifically applicable to the specialism.	Amber	Unit 32 L02	Each region has its own specific regulations and there are therefore aspects that are not adequately covered.	
Industrial graphic production	Industrial graphic production	HND in Art & Design (various units)		
	ECTS			7
	General affinity			Amber
	Learning outcomes		HND learning outcomes	Remarks
	1. Analyse and differentiate between the different types of originals, considering the processes and factors involved in reproduction.	Amber	Unit 22 L01, L02	
	2. Prepare files for printing.	Amber	Unit 22 L02, L03	
	3. Comprehend and critically evaluate the variables involved in a print run.	Amber	Unit 22 L03	
	4. Define and differentiate between the various types of industrial printing and their particularities.	Red		Some of the subject matter relating to industrial printing is not sufficiently covered.
	5. Interpret the characteristics of graphic projects, select the most appropriate printing system and prepare originals and files for subsequent reproduction.	Green	Unit 39 L01	
	6. Know how to select the most appropriate graphic media for a given project.	Green	Unit 39 L01	
7. Optimise the elements involved in the reproduction phase of a graphic project.	Green	Unit 39 L02		
8. Monitor the printed product at all stages of reproduction and printing and perform the corresponding quality control.	Green	Unit 39 L03, L04 Unit 22 L04		
9. Critically evaluate the presence of new technologies in industrial graphic production.	Red		Some of the subject matter relating to industrial printing is not sufficiently covered.	

Mapping of modules 0023–024

	MODULE		UNITS	
Vocational training and guidance	Vocational training and guidance		HND in Art & Design (various units)	
	ECTS	6		
	General affinity	Red		
	Learning outcomes		HND learning outcomes	Remarks
	1. Analyse and interpret the legal framework governing employment and understand the rights and obligations arising from employment relationships.	Red	Unit 32 LO2 Unit 1 LO1	The legal frameworks depend on each region and must therefore be contextualised in the assignment briefs when seeking correspondence.
	2. Understand the legal requirements and constraints involved in administering and managing a small or medium-sized enterprise, considering the production, legal, commercial, social and employment factors.	Red	Unit 32 LO2	The legal frameworks depend on each region and must therefore be contextualised in the assignment briefs when seeking correspondence.
	3. Identify the various pathways into the employment market and lifelong learning and be familiar with the institutional, national and European bodies that facilitate them.	Red	Unit 32 LO1, LO3 Unit 1 LO3	The legal frameworks depend on each region and must therefore be contextualised in the assignment briefs when seeking correspondence.
	4. Comprehend and apply occupational health and safety regulations and develop awareness of environmental protection, understanding them as determinants of quality of life.	Red		Occupational health and safety regulations are not sufficiently covered.
Integrated project	Integrated project		HND in Art & Design (various units)	
	ECTS	10		
	General affinity	Green		
	Learning outcomes		HND learning outcomes	Remarks
	1. Propose and execute a commission or own project of high technical, artistic and communicative quality in the area of specialism.	Green	Unit 33 LO1, LO2 Unit 1 LO1, LO2	
	2. Implement the project, executing all the corresponding stages and quality controls.	Green	Unit 33 LO2	
	3. Develop, through the conception and implementation of an original project in the area of specialism, the professional skills corresponding to that specialism.	Green	Unit 33 LO3, LO4	

