

The Bachelor of Science (Hons) Nursing in Ireland

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1. Description of selected qualification

→ General overview

For the purpose of this research a Degree of Bachelor of Science (Nursing) Hons has been selected in the Irish healthcare system and this qualification equates to NQF level 8 (240 ECTS) and/or level 6 on the European Framework.

Nursing and Midwifery is located solely in higher education of the Irish National Framework of Qualifications that has been developed and maintained by the National Authority of Ireland, which was set up in 2001 by the Department of Education and Science and the Department of Enterprise, Trade and Employment and governed by the Irish Health Education Authority (HEA, 2005).

Nursing Registration programmes are placed at level 8 on the NQAI framework of qualifications. An Bord Altranais recognises that Registered Nurses and Midwives as competent professionals practice at level 8 (EQF 6). Registered Nurses and Midwives teach, supervise, assess and support pre-registration students to achieve competence at level 8 at the point of registration (An Bord Altranais, 2010). Pre-registration into these courses commences at NFQ 6 (EQF 5). The post registration educational standards for clinical nurse specialists and advanced nurse practice posts have been set at levels 8 & 9 respectively (EQF 6 & 7). Additionally, level 10 (EQF 8) is concerned with The Nursing Doctorate programmes available. The frameworks for clinical specialists and advanced practice posts have been effective in streamlining the approval process and making it transparent from an awards viewpoint. This has been achieved through leadership from the National Council for the Professional Development of Nurses and Midwives, the establishment of the National Framework of Qualifications, investment by The Department of Health & Children and effective collaboration between Health Service and the academic education providers.

Higher education within Ireland is a broad system that encompasses the University sector, the colleges of education, the institutes of technology, and private, independent colleges. The Universities, Institutes of Technology and Colleges of Education are largely funded by the state through the HEA (Higher Education Authority), while others are funded and managed by a range of private bodies, including religious orders. The focus of this report is on the Universities that provide bachelor degrees of Science in Nursing. From a national objective, there is an impetus to move towards a 'lifelong learning society' in which learners can avail of learning opportunities at various stages throughout their lives and within the nursing context this is clearly visible.

Developing and enhancing a culture of educational excellence, lifelong learning and procedures to implement access, transfer and progression are key features of recent legislative instruments in the education sector internationally (An Bord Altranais, 2010). Ireland's higher education system has played a major role in the development of Irish society and the economy, and has an even more critical role to play in the coming decades as we seek to rebuild an innovative knowledge-based economy that will provide sustainable employment opportunities and good standards of living for all our citizens. Its role in enabling every citizen to realise their full potential and in generating new ideas through education and research area will be the foundation for wider developments in society (Department of Education, 2011).

→ *An Bord Altranais*

In order to gain a clear understanding of nurse training programmes within the overall context of professional health education in Ireland, An Bord Altranais must be considered as having played a significant role regarding nurse education. This body has been integral to addressing items such as nurse registration, regulation, structural and work changes, segmentation of grades, training & education requirements, promotional opportunities and general assistance with the evolving profession of nursing particularly in the last decade.

An Bord Altranais (the board) is the statutory regulatory body for nursing and midwifery in Ireland. The primary function of the board is to promote the highest standards of professional educational conduct among nurses and midwives. Part IV 36 (1) (d) of the Nurses Act, 1985 states that 'The board shall, from time to time as occasion may require but, in any event, not less than once

every five years, satisfy itself as to the adequacy and suitability of post registration courses for nurses provided by bodies recognised by the board for that purpose’.

Roles and responsibilities include:

- To provide for the education and training of nurses and student nurses.
- The Board has statutory responsibility to approve providers and Health Care Institutions in respect of post registration nursing and midwifery education programmes/units of learning.
- To establish and maintain a register of nurses nationally.
- To inquire into the conduct of a registered nurse on the grounds of alleged professional misconduct or alleged unfitness to engage in such practice by reason of physical or mental disability.
- To give guidance to the profession.
- To manage the Nursing Careers Centre, which was set up in 1998 to facilitate a centralised system of processing and selection of applicants wishing to enter nursing and market nursing as a career; provide career information to registered nurses and midwives.

Additionally as evidenced above, in order to practice as a nursing as a profession, every nurse must register with this regulatory board and pay yearly subscriptions to remain on a live nursing register.

→ *Knowledge, skills and competencies of the Irish Nurse Training Programme*

The nursing graduates are expected to possess the following knowledge, skills and competencies at the end of the programme:

- To educate and train the student to degree-level knowledge and practice competence.
- To develop in the student a range of competencies in pre-specified domains of competence.
- To provide a professional education for the student within the statutory framework of the professional regulatory body.
- To develop in the student the capacities for the performance of a professional nursing role.

- To develop the student as a knowledgeable, skilled and caring professional practitioner of nursing, capable of acting independently in the provision of nursing service.
- To develop the students of professional awareness and professional responsibility and accountability.
- To develop in the student the capacities for critical thinking and critical self appraisal.
- To enable the student to value learning as a continuous and a necessary process in the context of his/her professional role.
- To develop the student as a clinical leader.
- To contribute to the personal growth and development of the student.

→ *Typical work tasks and areas of responsibility of the graduates*

The Degree of Bachelor of Science (Nursing) provides a professional education within the relevant regulatory and academic framework to degree-level knowledge and practice competency. In so doing, the programme aims to prepare professional registered practitioners with the capacities for the performance of a professional nursing role, who are capable of acting independently in the provision of nursing service, and who have a strong professional and academic orientation. Graduates will typically be employed as registered general nurses in the public and private health care systems in Ireland and further afield.

Table 1

Structure of the educational programme including modules with ECTS points

	Module	Credits
Year 1	Scientific Principles for Healthcare	5 ECTS
	Structure and function of the Human Body, Part A	5 ECTS
	Psychology & Interpersonal Skills	5 ECTS
	Foundations of General Nursing, Part A	5 ECTS
	(Elective #1) Elective of student's choosing	5 ECTS
	(Elective #2) Elective of student's choosing	5 ECTS
	Structure and function of the Human Body, Part B	5 ECTS
	Social Science for Healthcare	5 ECTS
	Perspectives on Nursing	5 ECTS
	Foundations of General Nursing, Part B	5 ECTS
	Clinical Placement Induction 1	5 ECTS

	Clinical Placement Induction 11	5 ECTS
Year 2	Patient Safety, Microbiology, Infection Control, Pharmacology	5 ECTS
	General Nursing (medical-surgical nursing 1)	5 ECTS
	Specialist Services	5 ECTS
	(Elective #1) Elective of student's choosing	5 ECTS
	(Elective #2) Elective of student's choosing	5 ECTS
	Clinical Placement Accident & Emergency	5 ECTS
	Clinical Placement Child Care & Paediatrics	5 ECTS
	Clinical Placement Care of Older Persons	5 ECTS
	Clinical Placement Mental Health	5 ECTS
	Clinical Placement Maternity Care	5 ECTS
	Clinical Placement Nursing Home	5 ECTS
Year 3	Clinical Placement Operating Theatres	5 ECTS
	Clinical Placement Out patients Department	5 ECTS
	Clinical Placement High Dependency	5 ECTS
	Clinical Placement Medical-surgical 1	5 ECTS
	Clinical Placement Medical-surgical 2	5 ECTS
	Clinical Placement Medical-surgical 3	5 ECTS
	General Nursing (Medical-surgical 2)	5 ECTS
	General Nursing (Medical-surgical 3)	5 ECTS
	Applied Social Science for Healthcare	5 ECTS
	Biopsychosocial Approaches	5 ECTS
	(Elective #1) Elective of student's choosing	5 ECTS
	(Elective #2) Elective of student's choosing	5 ECTS
Year 4	Nursing in Diverse Settings	5 ECTS
	Medical/Surgical 1V	5 ECTS
	Teaching and Accessing in Practicum	5 ECTS
	Promoting Health	5 ECTS
	Management and Quality Improvements	5 ECTS
	Evidence Based Practice	10 ECTS
	Clinical Placement, Part 4A (internship)	5 ECTS
	Clinical Placement, Part 4B (internship)	5 ECTS
	Clinical Placement, Part 4C (internship)	5 ECTS
	Clinical Placement, Part 4D (internship)	5 ECTS
	Clinical Placement, Part 4E (internship)	5 ECTS
Total		240 ECTS

Total hours of instruction: 4,472 hours

Source: own work

→ *Teaching and learning methods*

It is acknowledged that there is a relationship between teaching styles and approaches and the learning styles and approaches of the learner, including the learner's orientation to learning, and the learner's perceptions of the learning situation and the learning task. A variety of learning experiences are provided, including modified lectures, tutorials, and seminars and these are complemented by a range of student-centred methods, such as student-led workshops and discussions. In order to promote learning through reflection on experience, guided reflection in the practicum and critical incident technique are deployed. Student learning is supported by a range of web-based resources. The focus of clinical instruction is the development of competencies, through the application of knowledge and the learning of specific clinical skills, generally for use in the practicum. Teaching-learning strategies for facilitating the development of clinical competencies employ a combination of supervised practice in the practicum and instruction in the clinical skills laboratory, using a variety of methods, such as stimulation exercises, role play and team teaching. Each student is expected to assume responsibility for his/her own learning, with academic and clinical personnel acting as facilitators of learning. The teaching-learning process emphasised student engagement, meaningful immersion in subject content and independent learning, and students are supported in making conceptual links between subjects and across theoretical and practice-based modules.

→ *Assessment and certification*

Learning takes place in almost equal measures between clinical instruction in health service providers (hospitals, community settings etc) and university based lectures, classes, tutorials and library based activity.

There are a multitude of methods used for the assessment of the learners' knowledge, skills and competencies. These include:

- Exams (Essay form & Multiple Choice Questions),
- Group Project work,
- Clinical skills assessment,
- Poster presentation,
- Oral Presentation,

- Clinical Competence assessment,
- Online Assessment.
- Assignments

Each module must be passed in order to be eligible for the final award. There is therefore no final summative exam. Continuous assessment forms part of this ongoing process of evaluation also. In alignment with this, grade point averages is a standardised grading system used that takes an average from results gleaned over a specified period of time.

Trusting that all the above is on order, each student is awarded a certificate in Bachelor of Science (BSc) Nursing and becomes a Registered General Nurse on paying an annual registration fee to An Bord Altranais. It is a mandatory requirement for every practising nurse to register prior to taking a nursing post/contract.

→ *Transition points and perspectives*

All potential candidates must apply through the Central Applications Office (CAO) Ireland to access this nurse training programme with the minimum requirements as set out by the regulatory body of An Bord Altranais. Additionally, following graduation from this degree programme there are multiple opportunities for transition to further education, e.g medicine or other nurse specialisms.

Obviously, nursing graduates are eligible to apply for further study in nursing (many progress to level 9 courses such as MSc or Graduate Diplomas). There are opportunities to participate in the relatively newly devised 'Practice Nurse Practitioners' training programmes that affords roles & responsibilities similar that of a junior doctor. Similarly all graduates can apply to other courses and degrees in various university settings in accordance with their level 8 status.

Many graduates do end up working abroad but they work as nurses in broadly similar roles. Within the EU, they are eligible for registration as nurses in all other states under the mutual recognition arrangements.

→ *Summary*

This report clearly illustrates how the integration of nurse training programmes into higher education has come to be firmly embedded in the Irish educational structure. It outlines how the National Framework of Qualifications operates & carefully monitors the levels applicable within nursing practice plus potential to further learning opportunities from both a formal & informal entry point. Further, It highlights how An Bord Altranais has a pivotal role to play concerning education, regulations & standards and how this Board works across a multitude of sectors in this ongoing endeavour.

This report also emphasises the uniqueness of the Irish system of transfer, progression and ongoing developments within the nursing healthcare system as it permeates successfully between a somewhat parallel education system (VET & Universities). Moreover this shared ownership illustrates how the system continues to work to improve standards both nationally and internationally to provide the highest quality, sustainable education for undergraduates, adult learners and post-graduate healthcare professionals alike.

2. Results of MLI assessments

This section describes in detail the potential case study for the equivalence check (meso level). It concerns one nurse training programme at pre-registration honours degree level NFQ 8 (EQF level 6) chosen from an Irish University and information gleaned from a questionnaire devised in cognizance of the structural recommendations set out initially within this overall project context.

→ *Implementation of the MLI procedure*

The designed equivalence check i.e. the Learning Outcome Matrix (LOM) and the Module Level Indicator (MLI) toolkit was utilized to analyse and evaluate learning outcomes in the field of Health Care, in particular focusing on a B.Sc General Nursing Studies programme. The implementation of the MLI toolkit was for the most part carried out by a field expert accompanied by interviews and a questionnaire completed by a University Lecturer responsible for delivering this curriculum within the B.Sc. Programme. Additionally information was gleaned from the extensive online information available. Further clarification

where necessary was sought from the initial Credicare MLI – FAO sheet supplied, which provided supplementary information regarding how to accurately and effectively apply the MLI tool.

→ *Selection of modules*

As aforementioned, there are 31 modules (units of learning) including seven practical/clinical placements ranging from 5-30 ECTS (240 ECTS in total). The duration consists of a 4 year full-time undergraduate training programme. Arguably in comparison to some other partner countries, the volume of modules there within is significantly higher.

→ *Results of the MLI toolkit*

In the following an overview is given of the results of the review of the modules by means of the MLI tool.

Table 2

Summative table of MLI results										
	Broad and up-to date knowledge	Critical understanding	Interdisciplinarity	Practice orientation	Problem solving	Creativity and innovation	Autonomy	Communicative competence	Consideration of social and ethical issues	Total MLI score
IE Module 1 – Scientific principles for Health care (Biology, Physics and Chemistry)	7.2	6.8	7.2	7.3	6.6	6.1	6.2	7.2	7.4	6.9
IE Module 2 – Structure and function of the Human Body (Part A)	7.0	6.5	6.3	7.7	6.3	6.8	6.5	6.8	7.4	6.8

IE Module 3 – Psychology & interpersonal skills for clinical practice	7.0	7.3	7.2	6.8	6.6	7.5	5.9	7.9	7.4	7.0
IE Module 4 – Foundations of General Nursing (Part A)	7.0	6.7	7.2	7.3	6.6	6.5	6.8	7.9	7.4	7.0
IE Module 5 – Transitions: Engage to succeed	7.4	7.4	7.2	7.8	6.6	7.5	7.2	7.9	7.4	7.4
IE Module 6 – Structure and function of the human body (Part B)	7.4	6.8	7.2	7.8	6.6	7.5	7.2	7.9	7.4	7.3
IE Module 7 – Social Science for Healthcare (Sociology)	7.4	7.4	7.2	7.4	5.0	6.8	6.8	7.9	7.4	7.0
IE Module 8 – Foundations of General Nursing (Part B)	7.4	7.3	7.2	7.8	6.6	6.8	6.8	7.4	7.4	7.2
IE Module 9 – Perspectives on Nursing	7.4	7.0	6.9	7.3	6.6	7.5	7.2	7.9	7.4	7.2
IE Module 10 – Exposure to Clinical Learning	7.0	6.8	7.2	7.7	6.6	6.8	7.2	7.0	7.4	7.1
IE Module 11 – Nursing the older adult and other populations	7.4	7.4	7.2	7.7	6.6	6.5	6.5	7.9	7.4	7.2
IE Module 12 – General Nursing (Medical – Surgical Nursing 1)	7.4	7.1	7.2	7.7	6.6	6.8	7.2	7.0	7.4	7.2
IE Module 13 – Patient Safety, Microbiology & safety	7.4	7.4	6.3	7.4	6.6	5.5	5.8	7.0	7.4	6.8
IE Module 14 – Broadening Clinical Learning	6.6	6.8	7.2	7.7	6.6	6.5	6.5	7.0	7.4	6.9
IE Module 15 – Pharmacology	7.4	7.4	6.0	7.7	6.6	6.1	5.8	6.8	7.4	6.8

IE Module 16 – Deep- ening Clinical Learning (A) G	7.4	6.8	7.2	6.8	6.6	6.8	5.5	7.0	7.4	6.8
IE Module 17 – Gen- eral Nursing (Medical – Nursing 11)	7.4	6.5	6.0	7.7	6.6	6.1	6.2	7.9	7.4	6.9
IE Module 18 – Gen- eral Nursing (Medical – Surgical 111)	7.4	7.0	6.3	7.7	6.6	6.1	6.2	7.0	7.4	6.8
IE Module 19 – Applied Social Science for Healthcare	7.4	7.4	7.2	7.7	6.6	6.1	7.2	7.9	7.4	7.2
IE Module 20 – Biopsy- chosocial Approaches in Clinical Practice.	7.4	6.7	7.0	7.7	6.6	6.1	7.2	6.8	7.4	6.9
IE Module 21 – Deep- ening Clinical Learning B (G)	7.2	6.8	7.2	7.7	6.6	7.5	6.5	7.9	7.4	7.2
IE Module 22 – Nursing in Diverse Settings	7.4	6.8	7.2	7.7	6.6	7.5	7.2	7.9	7.2	7.2
IE Module 23 –Gen- eral Nursing (Medical – Surgical 1V)	7.4	7.0	7.2	7.7	6.6	7.1	7.2	7.9	7.4	7.3
IE Module 24 – Teach- ing and Assessing in the Practicum	7.4	7.4	7.2	7.4	6.6	7.5	7.2	7.9	7.4	7.4
IE Module 25 – Man- agement and Quality Improvement	7.4	7.4	7.2	7.7	6.6	6.1	7.2	7.9	7.4	7.2
IE Module 26 – Promot- ing Health	7.4	7.4	7.2	7.3	6.6	7.5	7.2	7.9	7.4	7.3
IE Module 27 – Clinical Placement 4C (Intern- ship) G&P	7.4	7.1	7.2	7.7	6.6	7.5	7.2	7.9	7.4	7.3
IE Module 28 – Clinical Placement 4D (Intern- ship) G&P	7.4	7.1	7.2	7.7	6.6	7.5	6.8	7.9	7.4	7.3

IE Module 29 – Clinical Placement 4A (Internship)	7.4	6.8	7.2	7.3	6.6	7.5	7.2	7.9	7.4	7.2
IE Module 30 – Clinical Placement 4B	7.4	7.1	7.2	7.7	6.6	7.5	6.9	7.9	7.4	7.3
IE Module 31 – Evidence Based Practice for Healthcare	7.4	7.4	7.2	7.7	6.6	7.5	7.2	7.9	7.4	7.4
Mean of MLI scores	7.2	6.9	7.1	7.3	6.5	6.9	6.5	7.5	7.4	7.0

Source: own work

The qualitative analysis illustrates overall a very high MLI level – an average of 7.1 across all 31 modules. In fact 22 modules score an MLI greater than 7 with only nine module MLI's scoring in the high 6's. This would appear to mitigate against the assumption that this BSc Irish Nursing programme is pitched at EQF level 6.

The top three highest MLI score findings

- 7.86 – Across 20 modules, all in 'Consideration of Social and Ethical Issues'.
- 7.73 – Across 23 modules, all in 'Problem solving'.
- 7.39 – Across 30 modules, all in 'Communicative Competence'.

Notably, there are consistently high scores evidenced in areas such as 'consideration of Social and Ethical Issues', 'Problem Solving' and 'Communicative Competence'. These particular competencies would indeed confirm the professional profile and nature of Nursing and support the ongoing developments within Healthcare & Nursing in Ireland particularly considering the close inter-connectivity between ethical/social issues and problem solving. On a day to day basis, it is assumed that the professional nurse is challenged by these fundamental competencies at ward level and moreover underpinned by effective communication with the patient/family and the Multidisciplinary Team alike. A further explanation for the high MLI scores is the high level of teaching practice across all Universities. Lecturers are at very least expected to have a M.Sc. in Nursing Studies or equivalent and preferably a Ph.D. In general they focus on

one particular module/subject and specialise in this area imparting the latest research and up to date knowledge in their chosen field.

The lowest three MLI score findings

- 5.01 – Social Science for Healthcare in ‘Practice Orientation’.
- 5.48 – Patient Safety, Microbiology & Infection in ‘Creativity & Innovation’.
- 5.48 - Deepening Clinical Learning A (G) in ‘Autonomy’.

The lowest MLI findings are in respect of Sociology, year 1 regarding ‘Practice Orientation’. Considering that this module is an introduction to Social Science, and although the newly introduced theories and models can be discussed and learned at classroom level, skills are not immediately transferable to practical situations but they are practiced by the student over time and with experience the student becomes proficient and competent dealing with these sociological aspects when providing nursing care. Equally, when considering the module Patient Safety, Microbiology and Infection, ‘creativity and innovation’ would not necessarily feature very highly with regards learning competencies as this is very much a knowledge based subject with text book learning thus little room for variation.

Finally, ‘Autonomy’ does not score highly in relation to ‘Deepening Clinical Learning’. One theory behind this may be as follows; as the Student Nurse is working in an acute busy hospital environment, she must be supervised closely by a Registered General Nurse (RGN) at all times whilst carrying out her daily nursing duties. All decisions relating to individual patient care must be discussed and agreed with the RGN therefore although the student nurse is taking responsibility as required ongoing, she cannot act independently and design solutions autonomously.

→ *Summary of MLI results*

On reflection of the MLI results and the very high level scoring attained (average of 7.1 across all modules) using this toolkit, this unequivocally highlights the clearly balanced and controlled standardisation of practice in the Irish nursing curriculum. Notably this differs from the established EQF level 6 however either way, gives rise ultimately to a very high quality of sustained nursing care.

This curriculum entails the theory and practice of nursing in a fully integrated manner, establishing a strong foundation for a future career within the Health-care setting. Lectures, workshops, library, tutorials and project group learning are all delivered on college grounds, while “hands on” practice/clinical placements that enhance learning and development of nursing skills take place locally in a designated Dublin Academic Teaching Hospital (DATH’s) and a variety of other Health Care Settings. The diversity of learning methods evidenced within this curriculum duly mirrors the high level results gleaned for the equivalence check i.e. the Learning Out-come Matrix (LOM) and the Module Level Indicator (MLI) tools.

The MLI is a useful tool to begin to explore comparisons on a transnational basis between units of learning and or modules, however it should not be the used as the only basis of comparison. The pedagogical and constructivist approaches to learning within the Irish Nursing Programme may differ greatly in practice to the other partners. Often the stated learning outcomes can also mask the hidden curriculum which operates by default in practice, Nuances within the assessment tools and strategies can also vastly alter the level and depth and complexity of a unit of learning and not reflect broadly the desired stated learning outcomes. The MLI analysis of the Irish modules reflects how these units are written and are intended operate in practice but other qualitative means should also be used to gain a true and authentic picture of the programme and the ‘level’ it represents.

3. Bilateral comparisons Ireland and France

This study was undertaken concerning the Irish Partner qualification - Nurse Training Programme at pre-registration honours degree level NFQ 8 (EQF level 6) with the French Partner qualification – Diplome D’Etat d’Infirmier (DEI) (EQF level 6). This exercise comprised identifying where and to what extent the French learning outcomes (within 37 training units) were evident and integrated across the Irish Training Programme Modules through the learning outcomes alike. This was carried out in collaboration with the Irish experts primarily through desk research comparing matrixes for descriptions/subjects/modules/units/learning fields for both. Collaboration and discussion at a local level, decisions as to what percentage of overlap in French learning outcomes to the Irish modules were determined. This procedure predominantly was designed to enable each partner to carry out the comparison independently.

Table 3

Irish learning outcomes covered by French learning outcomes

FR IE	1.1	1.2	1.3	2.1	2.2	2.3	2.4	2.5	2.6	2.7
1				15,00	32,86		3,57	2,14		5,00
2				2,86	42,86		7,14	4,29		5,71
3	28,57								5,71	
4					16,67			13,33		
5			7,50							
6				4,00	44,00		10,00	10,00		12,00
7	38,57	5,00				2,14			11,43	
8			20,00							
9			51,67							
10			10,00							
11		7,50							6,25	5,00
12								5,24		12,38
13								37,50		
14			3,57							
15										
16			4,17							
17										31,43
18							32,50			
19	8,33		16,67							
20					8,89	18,89	6,67	7,78		7,22
21			4,17							
22		6,67				10,00		5,00		
23								10,00		
24		6,36								
25		10,00								
26		20,00								
27										
28										
29										
30										
31										

FR IE	2.8	2.9	2.10	2.11	3.1	3.2	3.3	3.4	3.5
1	1,43	2,14							
2	29,29	2,14							
3									
4			3,33		16,67				
5					6,25	8,75			
6	14,00	6,00							
7					11,43				
8				8,75	2,50	10,00			
9					15,00	3,33			
10						8,33	1,67		
11									
12	19,52	22,14		9,29					
13			22,50						
14					5,00		10,00		
15				100					
16					5,83		1,67		
17	22,86			7,86	6,43	2,14			
18				7,50	5				
19					8,33		10,00		
20	7,22	6,67							
21					4,17		1,67		
22	5,00	33,33					13,33		
23	70,00				5,00				
24									20,91
25							24,00		
26									
27									
28									
29									
30									
31								18,33	

IE \ FR	4.1	4.2	4.3	4.4	4.5	4.6	4.7	4.8	5.1	5.2
1										
2										
3										
4	21,67								11,67	16,67
5										6,25
6										
7							1,43			
8										2,50
9										15,00
10										
11	21,25							6,25	22,50	
12					2,38					
13					40,00					
14										5,71
15										
16										5,00
17										0,71
18	32,50								15,00	7,50
19										
20										
21										5,00
22							21,67			
23										5,00
24						13,64				
25								10,00		
26						34,17				
27										
28										
29										
30										
31										

IE \ FR	5.3	5.4	5.5	5.6	5.7	5.8	6.1	Σ
1								62,14 %
2								94,29 %
3								98,57 %
4								100,00 %
5	18,75			15,00			15,00	77,50 %
6								100,00 %
7								70,00 %
8	10,00		7,50					100,00 %
9	3,33			8,33				96,67 %
10	8,33		1,67			60,00		100,00 %
11						6,25		75,00 %
12								93,81 %
13								100,00 %
14				3,57		57,14		94,29 %
15								100,00 %
16				4,17		53,33		85,00 %
17								74,29 %
18								100,00 %
19				20,00				76,67 %
20								95,56 %
21				4,17		53,33		83,33 %
22								95,00 %
23								90,00 %
24		20,00		13,64		17,27		91,82 %
25				12,00		28,00		84,00 %
26	5,00	19,17		8,33		13,33		100,00 %
27						100		100,00 %
28						85,71		85,71 %
29						100		100,00 %
30						100		100,00 %
31				48,33	20,00		6,67	93,33 %

Source: own work

Table 4

French learning outcomes covered by Irish learning outcomes

FR \ IE	1	2	3	4	5	6	7	8	9	10	11
1.1			6,67				16,67				
1.2									24,29		2,86
1.3				1,3			5,12		26,3		
2.1	88,57										
2.2		43									
2.3		3,08				9,08					7,54
2.4								10			
2.5	2	11,23				5,89		3,89			
2.6							13				39,18
2.7	4	10,15				5,08					20
2.8		8									
2.9											
2.10				20							
2.11											
3.1				22	15				4		
3.2				25,64	51,28						
3.3				3			7,5	4	34,18		
3.4				6,35	4,86						
3.5				14	28				7		
4.1				3,01				6,02		18,66	2,27
4.2					35						
4.3				8				10			
4.4								7			
4.5				4							
4.6					18						
4.7											
4.8					20						
5.1										7,11	
5.2										7	7
5.3			20,31		35						
5.4					30						
5.5								15			
5.6					9,17						
5.7											
5.8										8	8
6.1											
6.2			20		38						

FR \ IE	12	13	14	15	16	17	18	19	20	21
1.1								7,5	33,33	
1.2										
1.3			5,12					5,12		
2.1		5,71		5,71						
2.2									25,5	
2.3	19,08				9,08	9,08				
2.4			8			7	7			7
2.5	7,89	15,79								
2.6			9,82							23
2.7		15,38					15,38			
2.8	38,22				4,44	30,22				
2.9				10						
2.10		80								
2.11				60						
3.1								6		
3.2										
3.3										4,82
3.4								2,71		
3.5										
4.1			5,21		8,96					
4.2										
4.3			10		7		10			10
4.4				18		24	6			
4.5		41								
4.6								3		
4.7										
4.8										
5.1			12,53		18,53	18,55	4,3			8,68
5.2	7		7		7	7	7			7
5.3									4,69	
5.4										
5.5	15			20						
5.6										
5.7										
5.8	8		8		8	8	8			8
6.1										
6.2										

IE FR	22	23	24	25	26	27	28	29	30	31	Σ
1.1											64,17 %
1.2				10,86							38,00 %
1.3					4,87		1,18				49,00 %
2.1											100,00 %
2.2											68,50 %
2.3		9,08									65,99 %
2.4											39,00 %
2.5											46,68%
2.6											85,00 %
2.7											70,00 %
2.8		19,11									99,99 %
2.9	90										100,00 %
2.10											99,99 %
2.11											60,00 %
3.1											47,00 %
3.2		20,51	2,56								99,99 %
3.3	6										59,50 %
3.4			10,06							42	65,99 %
3.5			3								52,00 %
4.1						8,96	8,96	8,96	8,96		79,99 %
4.2											35,00 %
4.3						10	10	10	10		95,00 %
4.4											55,00 %
4.5											45,00 %
4.6			18								39,00 %
4.7	86										86,00 %
4.8			8	30							58,00 %
5.1	8,68	4,35				4,3	4,3	4,3	4,35		99,96 %
5.2	7	7				7	7	7	7		98,00 %
5.3	5										65,00 %
5.4			30								60,00 %
5.5											50,00 %
5.6				12,5						8,33	30,00 %
5.7			80								80,00 %
5.8						8	8	8	8		96,00 %
6.1				70						30	100,00 %
6.2											58,00 %

Source: own work

→ *Interpretation of bilateral comparison results (IE/FR)*

More specifically the following results were gleaned:

IE Module 1 – Scientific Principles for Healthcare (Biology, Physics & Chemistry) is covered 62.14% by seven French units. Notably 32.86% of the learning outcomes are evident in FR 2.2 - Cycles of Life and Major functions UE.2.3S1. This is followed by 15% in FR - Basic Biology UE 2.1.S1 and 5% in FR 2.7 - Organic failures and degenerative processes UU2.7.S4.

IE Module 2 – Structure and Function of the Human Body (Part A) is covered 94.29% by the French partners across seven units comprising of 42.86% in FR 2.2 - Cycles of Life and Major functions UE.2.2.S1 and 29.29% regarding FR 2.8 - Obstructive processes UE 2.8.S3.

IE Module 3 – Psychology & interpersonal skills for Clinical Practice is 98.57% covered by two French units namely 64.29% by FR 4.2 - Relationship Care and 28.57% by FR 1.1 - Psychology, sociology, anthropology UE 1.1.S1 and UE 1.1.S2.

IE Module 4 – Foundations of General Nursing (Part A) is 100% covered by seven French units with 21.67% in FR 4.1 - Comfort and Well being and 16.67% across three three French units – FR 5.2 – Assessment of a clinical situation UE 5.2.S2, FR - 3.1 Reasoning and clinical approached in nursing UE 3.1S1 S2 & FR 2.2 – Cycles of Life and major functions UE.2.2.S1.

IE Module 5 – Transitions: Engage to succeed is 77.5% covered by seven French units with 18.75% of learning outcomes evident in FR 5.3 – Communication, project management UE 5.3.S3 and 15% overlap with FR 5.8 - Traineeships UE 5.8.S1 to S6 and FR 5.6 – Implementation of therapeutics and care coordination UE 5.5.S5.

IE Module 6 – Structure and Function of the Human Body (Part B) has 100% coverage evidenced across seven French units with the 44% of the learning outcomes located in FR 2.2 – Cycles of Life and major functions UE 2.2S1.

IE Module 7 – Social Science for Healthcare (Sociology) is 70% covered by six Learning units with 38.57% coverage in FR 1.1 - Psychology, sociology, anthropology UE 1.1.S1 & UE 1.1.S2.

IE Module 8 – Foundations of General Nursing (Part B) is 100% covered by seven French units with 38.75% of the learning outcomes overlap in FR 4.4 – Therapeutics and contribution to medical diagnosis UE 4.4.S2, S4 and S5.

IE Module 9 – Perspectives on Nursing is 96.67% covered by six French units with 51.67% of learning outcomes located in FR 1.3 – Legislation, ethics and deontology UE 1.3.S1 and UE 1.3.S4 as well as 15% overlap in FR 3.1 – Reasoning and clinical approaches in nursing UE 3.1.S1 and S2.

IE Module 10 – Exposure to Clinical Learning is covered 100% by six French units, the largest cohort of learning outcomes 60% in FR 5.8 – Traineeships UE 5.8.S1 to S6.

IE Module 11 – Nursing the Older Adult and other populations is 75% covered by the seven French units with 22.5% in FR 5.1 – Accompaniment in achieving daily healthcare UE 5.1.S1 and 21.25% in FR 4.1 – Comfort and well-being care.

IE Module 12 – General Nursing (Medical – Surgical Nursing 1) is 93.81% covered by seven French units with 22.86% overlap in learning outcomes evident in FR 4.4 - Therapeutics and contribution to medical diagnosis UE 4.4.S2&S4&S5, 22.14% in Fr 2.9 – Tumoral processes UE2.8.S3 & 19.52% in FR 2.8 – Obstructive processes UE 2.8.S3.

IE Module 13 – Patient Safety, microbiology & safety is 100% covered across three French units with 40% of the learning outcomes based in FR 4.5 – Nursing Care and Risk Management UE 4.7.S6, 37.5% in FR 2.5 – Inflammatory and Infectious processes UE 2.5.S3 & 22.5% in Fr 2.10 – Basic Biology UE 2.1.S1.

IE Module 14 – Broadening Clinical Learning is 94.29% covered across seven French units with 57.14% of the learning outcomes predominantly located in FR 5.8 – Traineeships UE 5.8.S1 to S6 followed by 10% in FR 3.3 – Nursing roles, work organisation and inter-professionalism.

IE Module 15 – Pharmacology is 100% covered by 2.11 – Pharmacology and Therapeutics UE 2.11.S1,S3 & S5.

IE Module 16 – Deepening Clinical Learning (A) is 85% covered by seven French units with 53.33% in FR 5.8 - Traineeships UE 5.8.S1 to S6 followed by 10.83% in FR 4.2 – Relationship care.

IE Module 17 – General Nursing (Medical-Surgical Nursing 111) is 74.29% covered across seven French units with 31.43% of learning outcomes evident in FR 2.7 – Organic Failures and degenerative processes UE 2.7.S4 and 22.86% in FR 2.8 Obstructive processes UE 2.8.S3.

IE Module 18 – General Nursing (Medical-Surgical Nursing 11) is 100% covered by six French units with 32.5% in both FR 2.4 – Traumatic processes UE2.4.S1 and FR 4.1 – Comfort and well being care. To a lesser extent 10% coverage in FR 3.3 - Nursing roles, work organisation and inter-professionalism.

IE Module 19 – Applied Social Science for Healthcare 76.67% covered by six French units with 20% in FR 5.6 – Implementation of therapeutics and care co-ordination UE 5.5.S5, 16.67% in FR 1.3 – Legislation ethics and deontology UE 1.3.S1 & UE 1.3.S4 & 13.33% in FR 4.2 Relationship care.

IE Module 20 – Biopsychosocial Approaches in Clinical Practice is 95.56% covered across eight French units with 32.22% in FR 4.2 – Relationship care followed by 18.89% in FR 2.3 – Health, illness, disability and accidents of life UE.2.3.S2 & 8.89% in FR 2.2 – Cycles of Life and major functions UE.2.2.S1.

IE Module 21 – Deepening Clinical Learning B (G) is 83.33% covered across seven French units with 53.33% of the learning outcomes in FR 5.8 – Traineeships UE 5.8.S1 to S6 followed by 10.83% in FR 4.2 – Relationship care & 4.17% in three further units.

IE Module 22 – Nursing in Diverse settings is 95% covered across seven French units with 33.33% in FR 2.9 – Tumoral processes UE 2.9.S5 followed by 21.67% in FR 4.7 – Palliative and end of life care UE 4.7.S5.

IE Module 23 – General Nursing (Medical – Surgical 1V) is covered 90% within four French units with 70% evident in FR 2.8 Obstructive processes UE 2.9.S5 , 10% in FR 2.5 Inflammatory and infectious processes UE2.6.S2 & S5, and 5% in both FR 3.1 – Reasoning and clinical approaches in nursing UE 3.1S1 & S2 and FR 5.2 – Assessment of a clinical situation UE 5.2.S2.

IE Module 24 – Teaching and Assessing in the Practicum is 91.82% across six French units. This includes 20.91% in FR 3.5 – Supervision of health care professionals UE 3.5.S4, 17.27% in FR 5.8 – Traineeships UE 5.8.S1 to S6, &

13.64% in both FR 4.6 – Education preventive care UE 4.7.S5 and FR 5.6 – Implementation of therapeutics and care coordination UE 5.6.S6 respectively.

IE Module 25 – Management and Quality Improvement is covered 84% across five French units with 28% evident in FR 5.8 – Traineeship UE 5.7.S5 and S6, 24% in FR 3.3 Nursing roles, work organisation and inter-professionalism and 12% in FR 5.6 –Implementation of therapeutics and care coordination UE 5.6.S6.

IE Module 26 – Promoting Health is 100% covered by six French units with 34.17% in FR 4.6 – Educational and preventive care UE 4.7.S5, 20% in FR 1.2 – Public Health and health policy and 19.17% in FR 5.4 – Educational care, training of professionals and trainees UE 5.4.S4.

IE Module 27 – Clinical Placement 4C (internship) G&P is 100% covered in FR – 5.8 Traineeships UE 5.8.S1 to S6.

IE Module 28 - Clinical Placement 4D (internship) G&P is covered 85.71% in FR 5.8 Traineeships UE 5.8.S1 to S6.

IE Module 29 - Clinical Placement 4A (internship) is 100% covered in FR 5.8 Traineeships UE 5.8.S1 to S6.

IE Module 30 - Clinical Placement 4B (internship) is 100% covered in FR 5.8 Traineeships UE 5.8.S1 to S6.

IE Module 31 – Evidence Based Practice for Healthcare is 93.33% covered by four French units with 48.33% coverage in FR 5.6 - Implementation of therapeutics and care coordination UE 5.6.S6 followed by 20% in FR 5.7 Optional teaching unit UE 5.7.S5&S6, 18.33% in FR 3.3 – Nursing roles, work organisation and inter-professionalism and 6.67% in FR 6.1 – Working methods UE 6.1.S1.

→ *Conclusion*

For the purpose of this research, the IE/FR bilateral results were analysed and compared. It is evident that there is a high level of coverage across almost all

IE/FR modules/french learning units with one measured at the medium level only.

There is 100% match across four Irish modules/French learning units, these are:

1. IE Module 15 pharmacology with FR 2.11 – Pharmacology and therapeutics UE 2.11.S1,S3&S5
2. IE Module 27 – Clinical Placement 4C (internship) G&P with FR 5.8 Traineeship UE 5.8.S1 to S6.
3. IE Module 29 – Clinical Placement 4A (internship) with FR 5.8 Traineeship UE 5.8.S1 to S6.
4. IE Module 30 – Clinical Placement 4B with FR 5.8 Traineeship UE 5.8.S1 to S6.

The biggest similarity as evidenced above illustrates clearly the French mandatory clinical traineeships with 2,100 hours of work placement and Irish clinical placements (internships) in an academic teaching hospital also with 1,970 hours of workplace practice over the curriculum duration.

Conversely, the bilateral comparison of FR/IE illustrates a relatively lower level of overlap with only 15 modules estimated at the higher level (70 -100%). An explanation for this may be the diverse interpretations from the use of english verses the french translation regarding medical language. Notably, identification and interpretation of comparative modules was indeed challenging in this study as the varied use of language made it difficult in incidences to determine the accuracy of the coverage there within. Additionally within each qualification there were a very large quantity of learning outcomes both ways – 135 French learning outcomes and 215 Irish Learning outcomes.

It should be stated that the MLI instrument used to analyse the Modules/Courses of both Irish and French Nursing programmes used the EQFLL as a reference point so validity of the results is based entirely on this tool. When comparing curricula, syllabi, pedagogy and assessment a degree of caution relating to academic and cultural nuance would be advised. Language, interpretation, cause and effect all come into play when analysing on a comparative

basis. The CREDICARE project aimed to compare and contrast courses and programmes from a vocational perspective across Europe. This report focused on a generic Irish Nursing Degree and a generic French Nursing Degree. These results should also be interpreted within the holistic context of each respective programmatic and national perspective. However this Project does offer a innovative and unique perspective for curriculum designers and policy makers in both jurisdictions.

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5. Appendix: Module titles

Diplôme d'Etat d'Infirmier - Module Titles

- FR 1.1 - Psychology, sociology, anthropology UE 1.1.S1 & UE 1.1.S2
- FR 1.2 - Public health and health policy
- FR 1.3 - Legislation, ethics and deontology UE 1.3.S1 & UE1.3.S4
- FR 2.1 - Basic biology UE 2.1.S1
- FR 2.2 - Cycles of life and major functions UE.2.2.S1
- FR 2.3 - Health, illness, disability and accidents of life UE.2.3.S2
- FR 2.4 - Traumatic processes UE2.4.S1
- FR 2.5 - Inflammatory and infectious processes UE2.5.S3
- FR 2.6 - Psychopathological processes UE2.6.S2 & S5
- FR 2.7 - Organic failures and degenerative processes UE2.7.S4

FR 2.8 - Obstructive processes UE2.8.S3
 FR 2.9 - Tumoral processes UE 2.9.S5
 FR 2.10 - Infectiousness, hygiene UE 2.10.S1
 FR 2.11 - Pharmacology and therapeutics UE 2.11.S1, S3 & S5
 FR 3.1 - Reasoning and clinical approaches in nursing UE 3.1S1 & S2
 FR 3.2 - Project in nursing care UE 3.2S2 & S3
 FR 3.3 - Nursing roles, work organisation and inter-professionalism
 FR 3.4 - Introduction in research approach
 FR 3.5 - Supervision of health care professionals UE 3.5.S4
 FR 4.1 - Comfort and well-being care
 FR 4.2 - Relationship care
 FR 4.3 - Emergency Care UE 4.3.S2&S4
 FR 4.4 - Therapeutics and contribution to medical diagnosis UE 4.4.S2&S4&S5
 FR 4.5 - Nursing Care and Risk Management UE 4.5.S2&S4
 FR 4.6 - Educational and preventive care UE 4.6.S3&S4
 FR 4.7 - Palliative and end of life care UE 4.7.S5
 FR 4.8 - Quality of care assessment practices UE 4.8.S6
 FR 5.1 - Accompaniment in achieving daily healthcare UE 5.1.S1
 FR 5.2 - Assessment of a clinical situation UE 5.2.S2
 FR 5.3 - Communication, project management UE 5.3.S3
 FR 5.4 - Educational care, training of professionals and trainees UE 5.4.S4
 FR 5.5 - Implementation of therapeutics and care coordination UE 5.5.S5
 FR 5.6 - Implementation of therapeutics and care coordination UE 5.6.S6
 FR 5.7 - Optional teaching unit UE 5.7.S5&S6
 FR 5.8 - Traineeships UE 5.8.S1 to S6
 FR 6.1 - Working methods UE 6.1.S1
 FR 6.2 - English UE 6.2.S1 to S6

Nursing General BSc (HONS) (NQF Level 8) – Modules Titles

IE - Module 1: Scientific Principles for HealthCare (Biology, Physics and Chemistry)
 IE - Module 2: Structure and function of the human body (Part A)
 IE - Module 3: Psychology & interpersonal skills for Clinical Practice
 IE - Module 4: Foundations of General Nursing (Part A)
 IE - Module 5: Transitions: Engage to succeed
 IE - Module 6: Structure and function of the human body (Part B)
 IE - Module 7: Social Science for Healthcare (Sociology)
 IE - Module 8: Foundations of general nursing (Part B)
 IE - Module 9: Perspectives on Nursing

IE - Module 10: Exposure to clinical Learning
IE - Module 11: Nursing the older adult and other populations
IE - Module 12: General Nursing (Medical – Surgical Nursing 1)
IE - Module 13: Patient safety, microbiology & safety
IE - Module 14: Broadening Clinical Learning
IE - Module 15: Pharmacology
IE - Module 16: Deepening Clinical Learning (A)
IE - Module 17: General Nursing (Medical-Surgical Nursing III)
IE - Module 18: General Nursing (Medical-Surgical Nursing II)
IE - Module 19: Applied Social Science for Healthcare
IE - Module 20: Biopsychosocial Approaches in Clinical Practice
IE - Module 21: Deepening Clinical Learning B (G)
IE - Module 22: Nursing in Diverse Settings
IE - Module 23: General Nursing (Medical – Surgical IV)
IE - Module 24: Teaching and Assessing in the Practicum
IE - Module 25: Management and Quality Improvement
IE - Module 26: Promoting Health
IE - Module 27: Clinical Placement 4C (Internship) G&P
IE - Module 28: Clinical Placement 4D (Internship) G&P
IE - Module 29: Clinical Placement 4A (Internship)
IE - Module 30: Clinical placement 4B
IE - Module 31: Evidence Based Practice for Healthcare