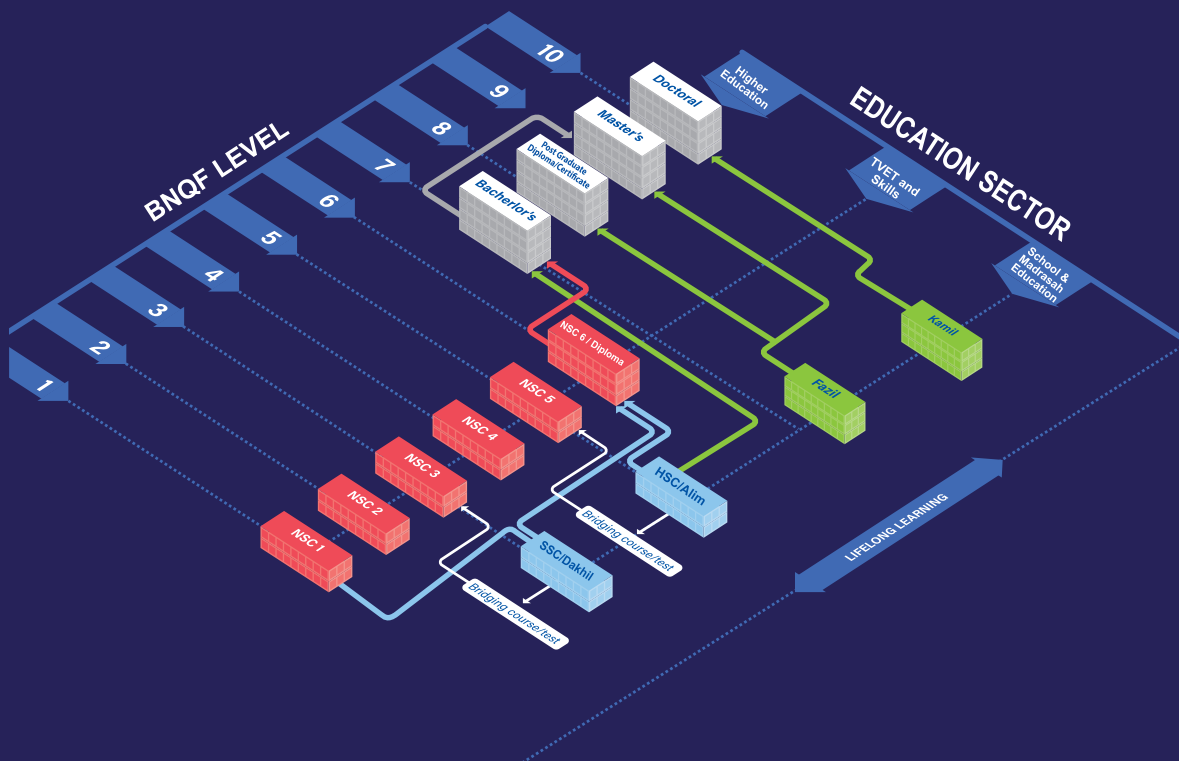


▶ Bangladesh National Qualifications Framework (BNQF)



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(BNQF)*

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Ministry of Education
December 2021

Bangladesh National Qualifications Framework (BNQF)

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Acronyms

APEL	Accredited Prior Experiential Learning
BAC	Bangladesh Accreditation Council
BEF	Bangladesh Employers' Federation
BMEB	Bangladesh Madrasah Education Board
BMET	Bureau of Manpower, Employment and Training
BNFE	Bureau of Non-Formal Education
BNQF	Bangladesh National Qualifications Framework
BTEB	Bangladesh Technical Education Board
BUET	Bangladesh University of Engineering and Technology
CAS	Competency Assessment System
CAD	Course (Qualification) Accreditation Document
CBT	Competency-Based Training
CBT&A	Competency-Based Training and Assessment
CS	Competency Standards
DAE	Department of Agricultural Extension
DCCI	Dhaka Chamber of Commerce and Industry
DME	Directorate of Madrasah Education
DSHE	Directorate of Secondary and Higher Education
EQF	European Qualifications Framework
EU	European Union
GoB	Government of Bangladesh
HE	Higher Education
HEQEP	Higher Education Quality Enhancement Project
HSC	Higher Secondary Certificate
IBC	Industrial Bangladesh Council
ICT	Information and Communications Technology
IDEB	Institute of Diploma Engineers, Bangladesh
ILO	International Labour Organization
ISC	Industry Skills Council

Acronyms

IQACs	Institutional Quality Assurance Cells
MoE	Ministry of Education
NCCWE	National Coordination Committee on Workers Education
NQAS	National Quality Assurance System
NQFBHE	National Qualifications Framework of Bangladesh for Higher Education
NSC	National Skills Certificate
NSC	National Steering Committee
NSDA	National Skills Development Authority
NSQAS	National Skills Quality Assurance System
NSQF	National Skills Qualification Framework
NTVQF	National Technical and Vocational Qualifications Framework
OBE	Outcome-based Education
Pre-Voc	Pre-Vocational
QA	Quality Assurance
QAU	Quality Assurance Unit
QF	Qualifications Framework
RPL	Recognition of Prior Learning
RTO	Registered Training Organization
SAG	Self-Assessment Guide
SCDC	Standards and Curriculum Development Committee
SHED	Secondary and Higher Education Division
SSC	Secondary School Certificate
TMED	Technical and Madrasah Education Division
TSC	Technical School and College
TVET	Technical and Vocational Education and Training
TWG	Technical Working Group
UCEP	Underprivileged Children's Educational Programs
UGC	University Grants Commission
UoC	Unit of Competency

Executive Summary

Bangladesh National Qualifications Framework (BNQF) is an internationally benchmarked national instrument for the development, classification, and recognition of skills, knowledge, and attitudes along a continuum of agreed levels. It is a fundamental tool in bringing about quality changes in the education and training system, and it provides the structure for developing, describing, and systematizing relationships between qualifications. The BNQF makes qualifications transparent and understandable for teachers, students, employers and the community at large. Such transparency enables teachers to know what they teach, students to know what they learn, and employers and the community to know what to expect of graduates.

The BNQF provides for the comparability of qualifications and shows how a learner can progress from one level to another. It provides the basis for improving the quality, accessibility, linkages as well as public and labour market recognition of qualifications both nationally and internationally.

The BNQF defines open and flexible pathways to provide multiple entry points and progression routes to enable graduates to move within and across institutions, sectors and countries. The framework establishes national and international recognition, equivalence, comparability and consistency of qualifications.

The Framework fosters the development of qualifications, supports development of skills and competencies, fosters educational mobility using credit transfer systems, enhances the marketability of the higher education sector at international level, and improves Bangladesh's higher education ranking globally.

The Framework provides the foundation for student-based learning/training system giving individual students options, and assigns them responsibility for organizing and pursuing their respective education pathways.

The Framework structures existing and new qualifications by defined learning outcomes, i.e. clear statements of what the learner will be able to do whether learned in a classroom, in the research laboratory and on-the-job through practical or industrial training, or less formal means.

The qualifications within the Framework are independent of institutions that offer the program. This allows for a system, which recognizes accreditation of programs as well as institutions.

The BNQF has the following key features:

- a) A total of ten (10) levels;
- b) The first six levels are from TVET and skills sub-sector (1-6) and the subsequent four levels are from HE sub-sector (7-10);
- c) School sub-sector and madrasah sub-sectors are included;
- d) All the subsectors are connected by pathways;
- e) Lifelong learning cuts across all levels.

This model takes into consideration the overarching need for maintaining the sanctity of the existing qualifications in TVET, Skills and HE sub-sectors as much as possible. As indicated, the NTVQF/ NSQF has six levels stated as National Skills Certificate (NSC) from Level 1 - 6 merged into BNQF.

The BNQF has one pre-vocational level preceding the six levels. This part also incorporates general school, madrasah and non-formal education streams. Levels 7-10 of the BNQF are the HE levels from the proposed higher education framework. All these levels have their respective level descriptors based on the learning outcomes.

The BNQF has been formulated to ensure that qualification outcomes remain relevant and nationally consistent, continue to support flexible qualifications linkages and pathways enable national and international portability and comparability of qualifications.

BNQF is an evolving document and to be reviewed as and when necessary.

Background

The Government of Bangladesh (GoB) first approved a qualifications framework in 2012, a sectoral framework for TVET named National Technical and Vocational Qualifications Framework (NTVQF). In 2018, the National Qualifications Framework of Bangladesh for Higher Education (NQFBHE) was drafted by the University Grants Commission (UGC) focusing on the higher education sub-sector. It provides the basis for the functioning of the recently formed Bangladesh Accreditation Council (BAC).

The NSDA worked on skills sub-sector and prepared National Skills Qualification Framework (NSQF). These two frameworks were independent from each other. ILO's Skills 21 project provided technical support for the establishment of NTVQF for the TVET sub-sector while World Bank's Higher Education Quality Enhancement Project supported the development of proposed higher education framework. The implementing agency of NTVQF is Bangladesh Technical Education Board (BTEB) under the Technical and Madrasah Education Division (TMED), NSDA is the implementing agency of the proposed NSQF and the implementing agency of higher education qualification is the Bangladesh Accreditation Council (BAC) under Secondary and Higher Education Division (SHED) of the Ministry of Education (MoE). In NTVQF it has 6 levels of qualifications and in NQFBHE has 4 levels of qualifications. In TVET and Skills sub-sector, the level descriptors have 3 domains-knowledge,

skills and responsibilities while NQFBHE level descriptors have 4 domains-fundamental, social, thinking and personal. The TVET and Skills sub-sectors prepare people for specific jobs with skills set that the holder can apply in the job market and/ or to continue their learning in their chosen technical area. Higher education potentially serves two purposes: one is to prepare people to become leaders in their technical fields and/ or to make original contributions to their chosen field of study.

The BNQF is a result of a collaborative and consultative process guided by the National Steering Committee (NSC) chaired by the Hon'ble Minister, Ministry of Education and supported by seven Technical Working Groups (TWGs) and assisted by a committee consisting of the representative of SHED, TMED, UGC and BAC. There were four rounds of consultation and almost over 60 workshops and bilateral meetings with the TWGs, government agencies, professional organizations and the workers and employers groups. The Higher Education part was formulated by UGC's Quality Assurance Unit of HEQEP through five regional, 24 stakeholders workshops and one national consultation workshop and has been finalized by a committee led by SHED. Explicit consultation was made with concerned higher education sector professionals to harmonise the Framework.

The TMED, SHED and NSDA combined their efforts to harmonise the TVET and Skills, and higher education sectoral frameworks into the BNQF. The NSDA carries out the role of harmonising skills development activity of different ministries as well as other government and non-government organizations.

The Directorate of Technical Education (DTE) and the UGC firmed up the BNQF structure with technical support from the International Labour Organization (ILO)-Skills 21 Project and the World Bank (WB)-Higher Education Quality Enhancement Project (HEQEP), respectively.

Through a series of stakeholder consultations, technical working group discussions and finally validation in NSC meeting, these frameworks have been harmonized framing the shape of the Bangladesh National Qualifications Framework (BNQF). The BNQF has been validated in the 2nd and 3rd meetings of the National Steering Committee chaired by the Hon'ble Minister, Ministry of Education.

¹The Seven TWGs are: TWG 1. Primary and Mass Education; TWG 2. Secondary and Madrasah Education; TWG 3. TVET & Engineering (Diploma) Education; TWG 4. Higher Education (Diploma, BS, MS, PhD); TWG 5. Higher Education (Medical & Health Education); TWG 6. Higher Education (Agriculture, Fisheries, Livestock and Forestry); TWG 7. Higher Education (Engineering). Each TWG has representatives from the government, employers, workers and professional groups.

Introduction

The BNQF is an internationally benchmarked national instrument for the development, classification and recognition of knowledge, skills and attitudes along a continuum of agreed levels. It is a fundamental tool in bringing about quality changes in the education and training system. The BNQF develops pathways that provide improved access to qualifications and assist people to move easily and readily between education and training sectors, and the job market. It allows for comparisons between qualifications and qualification levels. The Framework also provides recognition of non-formally acquired skills and facilitates the integration of these into a formal system via Accredited Prior Experiential Learning (APEL) or other lifelong learning programmes such as RPL.

The Framework covers all the Technical and Vocational Education and Training (TVET) and skills sub-sectors including madrasah education as well as all types of general education sectors. It includes all levels of qualifications from class VIII to doctoral qualifications. It also covers all learning achievements and pathways; such as adult education and lifelong learning pathways. The BNQF develops pathways that provide improved access to qualifications and assist people to move easily and readily between the education and the training sectors and the job market. It

allows for comparisons between qualifications and qualification levels. The design of the Framework provides a unified system where levels 1-6 and levels 7-10 and training provisions are within a single fit-for-purpose structure. The Higher Education Framework is managed centrally and is supported by following quality assurance documents.

- 1) Self -assessment Manuals;
- 2) Best Practice Manuals for QA Areas; and
- 3) Discipline Manuals containing program specifications or standards.

The Self-assessment Manual will address QA areas. Best Practice Manuals and Discipline Manuals will further the Framework by providing specific guidelines in relation to QA Areas and program disciplines.

Objectives of BNQF

The objectives of Bangladesh National Qualifications Framework (BNQF) are as below:

1. Provide a consistent national definition of qualifications in the schools and madrasahs, TVET and skills, and HE sectors;
2. Uphold lifelong learning and increase the employability of graduates through open and flexible qualification pathways, recognition of prior learning (RPL), and credit transfer;
3. Promote horizontal and vertical mobility of workers within and between the institutions, sectors, and countries;
4. Promote quality learning process and culture to produce quality graduate and to ensure research and innovations;
5. Promote national and international recognition, equivalence, comparability and consistency of qualifications and mobility of graduates; and
6. Define clear and flexible pathways with entry and exit points and progression routes.

BNQF Structure, Level Criteria and Qualifications

The BNQF structure includes 10 levels of qualifications, which are based on increasing complexity of level descriptors involving the learning domains of knowledge, skills, and responsibility for TVET and skills sub-sector; and fundamental, social, thinking and personal domain for HE sub-sector. There are three parts of the

BNQF structure: (a) qualification levels indicated by numbers from 1 to 10 and corresponding names of the qualifications, (b) qualification pathways connecting the levels, and (c) level descriptors describing the levels in terms of learning outcomes. Figure 1 presents the BNQF structure.

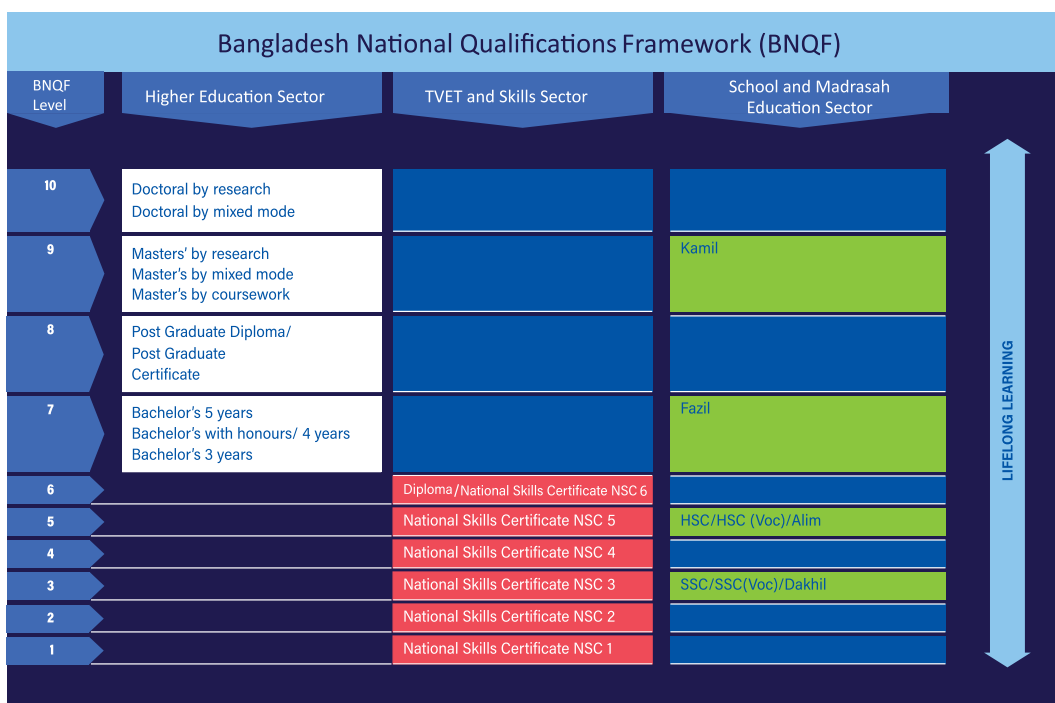


Figure 1: BNQF Structure

The TVET and Skills sub-sector covers the first six levels, BNQF Level 1 to 6, which include 6 skills certificates and one diploma programs.

The HE sub-sector covers the last four levels, BNQF Level 7 to 10 includes bachelor's, postgraduate diploma, master's, and doctoral level.

The Schools sub-sector covers Secondary School Certificates (SSC), and Higher Secondary Certificates (HSC) in different streams. Similarly, the madrasah education comprises various levels such as Dakhil, Alim, Fazil, and Kamil. The BNQF integrates these streams through a solid QA system. Lifelong learning covers any qualification at any level in the BNQF. Through lifelong learning, anyone can seek recognition of the knowledge, skills and attitudes he/she acquired outside as well as inside the formal schooling system and through his/her life's experiences.

The BNQF Levels

The BNQF qualifications consist of certificates, diplomas and degrees. There may be one or more qualifications positioned at the same level. The qualifications may be broadly comparable in terms of general levels of difficulty, and volume of learning, but may not have the same purpose or specific learning outcomes. A credit system will be developed for TVET and skill sub-sector. The BNQF levels are further elaborated below:

TVET and Skills Sub Sector Level: 1-6

Level 1

The National Skill Certificate (NSC) at this level is the initial level qualification in the BNQF that prepares learners of any age to become basic skilled workers. The graduates at this level will have basic competencies for entry-level works, and/or further learning. The

minimum entry requirements for Level 1 (National Skills Certificate NSC - 1) are:

- a) JSC pass, Class VIII pass or evidence of equivalent achievement, or
- b) Pass in a challenge test in language, literacy and numeracy skills, or
- c) Pass in a relevant prevocational program.

Level 2

The NSCs from levels 2 to 4 recognize increasing levels of competencies for skilled workers. The NSC 2 prepares learners to work as semi-skilled workers. The graduates at this level will have competencies to perform primarily routine works and use this level as a pathway to further learning.

Level 3

The qualification at this level includes NSC 3, and Secondary School Certificates (SSC). The NSC 3 prepares learners to work as skilled workers. At the SSC level, there are three main streams of courses: a general stream, religious stream (Madrasah), and a vocational stream. Each stream offers options for further curricular specializations. The SSC and Dakhil under the schools and madrasah sectors cover a wide range of subjects that prepare children and young people for more specialized study at HSC and higher education. The SSC also establishes the foundation for lifelong learning and human development upon which education systems may provide further educational opportunities.

The SSC (Voc) covers a broad range of competencies to perform skilled works and use this level as a pathway for further learning. Of the three streams, the SSC (Voc) graduate will be awarded two certificates: a Secondary School Certificate, and an NSC 3. The graduates in the other two streams will receive their respective Secondary School Certificates. They will go through some form of bridging program if they intend to obtain the NSC 3.

Level 4

The NSC 4 prepares learners to work as highly skilled workers and to acquire further learning. The graduates at this level will have a broad range of competencies for specialized skills and full craftsmanship/ workmanship, and use this level as a pathway for further learning.

Level 5

The qualifications at this level include NSC 5, HSC, and Alim. The NSC 5 prepares learners to become supervisors. The graduates at this level will have a broad range of competencies to undertake specialized works and use this level as a pathway for further learning.

HSC and Alim recognize individuals with knowledge, skills and values for diverse pathways to further learning, work and effective participation in civic

life. They are typically designed to complete secondary education in preparation for HE or provide skills relevant to employment, or both.

The HSC (Voc) and HSC (BMT) graduate would be awarded dual certificate for higher secondary and NSC 5. The graduates in the other two streams will receive their respective Higher Secondary School Certificates. They will go through some form of bridging program if they intend to obtain the NSC 5.

Level 6

The qualification at this level is either NSC 6 or Diploma. The NSC 6 is developed for the higher level at a specific occupation/discipline.

The Diploma has a wider theoretical base than a certificate and provides broad knowledge and skills for highly specialized works including supervision and management, and/or further learning. The diploma prepares learners to work as mid-level managers.

There will be a provision of dual certification level from Level 1-6. The NSC 6 or Diploma interfaces with the HE qualifications, therefore allows a student to leave the TVET and Skills qualifications, and move to HE levels.

Higher Education Level 7-10

The higher education qualifications system of Bangladesh will be an outcome-based student-centered system focusing on what a graduate can do rather than what s/he had learned. To

support an outcome-based system, the Framework provides a common table of levels for the higher education system in Bangladesh through the recognition of qualification levels with minimum graduating credits (Table 1).

Table 1: Higher Education Qualifications Levels and Minimum Graduating Credits

Level	Qualification	Minimum Graduating Credits
	Name	
10	Doctoral	
	• <i>Doctoral by Research</i>	N/A
	• <i>Doctoral by Mixed Mode</i>	30 + Thesis
9	Master's	
	• <i>Master's by Research</i>	N/A
	• <i>Master's Mixed Mode</i>	20 + Dissertation
	• <i>Master's by Coursework</i>	40
8	Postgraduate Diploma	40
	Postgraduate Certificate	30
7	Bachelor's	
	• Bachelor's (5 years)	160
	• Bachelor with Honours/ Bachelor's (4years)	140
	• Bachelor's (3years)	120

Level 7

There are three modes of Bachelor's: 5-year Bachelor's, 4-year Bachelor's with or without honours and 3-year Bachelors. 5-year Bachelor's must fulfill a minimum 160 graduating credits requirement, 4-year Bachelor's with or without honours must fulfill a minimum 140 graduating credits requirement and 3-year Bachelors must fulfill a minimum 120 graduating credits requirement.

All Bachelor level programs generally provide the basis for progression into a Master's degree, or a Postgraduate Certificate or Postgraduate Diploma degree with relevant post-graduation work experience as required.

Level 8

The two qualifications at this level are incorporated largely to support lifelong learning pathways provided under the framework as they enable learners in acquiring advanced knowledge over that of a Bachelor's but below that of a Master's. These qualifications link Bachelor level graduates to pursue a Master's level qualification by providing the critical bridge of skills and competencies. The minimum graduating credits are 30 and 40 for Postgraduate Certificate and Postgraduate Diploma respectively.

Level 9

Master's qualification is typically an extension of study undertaken at the Bachelor's level in a similar or corresponding discipline or a specialization based on extensive professional practice. There are three modes of Master's: by Coursework, by Mixed-mode and by Research. A Master's by Research will be a thesis/dissertation-based qualification and may or may not have a taught component. However, the taught component will not be credit bearing and students will be assessed solely on their thesis/dissertation. A Mixed-mode Master's has a minimum of 20 credits taught component and a research component involving a thesis/dissertation.

A student's assessment is based on his/her performance in both components. Finally, a Master's by Coursework involves taught courses to a minimum of 40 credits. The duration at this level will range between one to two years of full-time study. The learner profile and level descriptors in the appendices are intended to be inclusive of the various types of Master's unless otherwise indicated.

Level 10

This is the highest level of learning in the Framework leading to the award of a doctoral degree. It involves substantial and independent research and

scholarship in advanced areas of knowledge and emerging issues. The conduct of research resulting in a thesis in a field of study is vital at this level. The graduate should provide effective leadership in his/her field of research, share ideas, and adhere to and deal with complex ethical issues. S/he should continue to contribute towards social, technological and cultural progress in the academic and professional contexts.

While the doctoral level does not stipulate the minimum graduating credits, the credit requirement in the case of Ph.D. by mixed mode, where candidates will complete a minimum taught course before pursuing a thesis is 30. The minimum duration is normally a 3-year full-time study. All doctoral level qualifications will have a thesis as final graduating criteria. The qualifications titles are in the form of a PhD for research doctorates. Applied or professional doctorates may use nomenclatures such as EdD, DEng, or other descriptors relevant to the field concerned.

BNQF Qualifications Level, Domain and Descriptors

Each qualification level is described in terms of level descriptors that are internationally accepted since they are appropriate for both competency-based and knowledge-based learning programs. Level descriptors are used by curriculum developers to design learning and assessment programs for each level. They can also be used by learners and employers to determine what knowledge, skills and attitudes a person can apply at that level. The TVET and Skills descriptors cover the areas relating to knowledge, skills and

responsibilities, where responsibilities are one way of looking at attitudes. The level descriptors of the BNQF are based on Bloom's Taxonomy, which is the common reference of most frameworks especially the EQF and the NQFs in the European countries. The three main domains of Bloom's Taxonomy are cognitive (knowledge), psychomotor (skills), and affective (attitudes). Figure 2 shows how the level descriptors of TVET and Skills and HE sectors align with the domains of Bloom's Taxonomy.

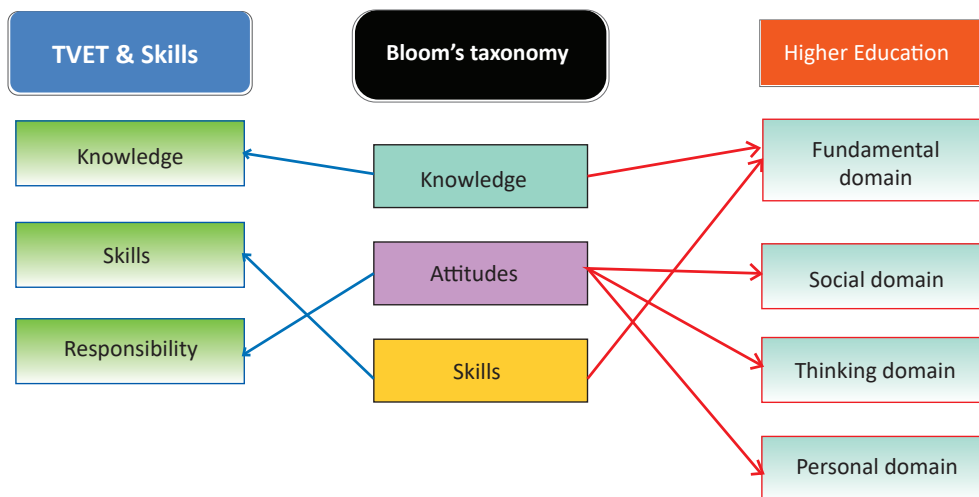


Figure 2: Learning outcome domain alignment between TVET& Skills and HE

BNQF Level Summary and Learning Outcome Criteria

The BNQF level descriptors extract the essence of each level in terms of knowledge, skills and attitudes and use the term responsibility instead of attitudes.

Learning Outcome Domains of the Descriptors for Levels 1-6

- a) **Knowledge Domain-** Knowledge may be factual or theoretical. Factual knowledge is semantic or generic knowledge. The knowledge domain provides basic information, specific details and elements within any domain. This can be learned through exposure, memorization, and repetition. Theoretical knowledge is knowledge of why something is true. It teaches reasoning, techniques and theory of knowledge.
- b) **Skills Domain-** Skills may be cognitive or practical. Cognitive skills involve the use of logical, intuitive and creative thinking as well as written and oral communication and information literacy. Practical skills involve manual dexterity and the use of methods, materials, tools and instruments.

- c) **Responsibility Domain-** Responsibility is the ability of the learner to apply knowledge and skills autonomously and with responsibility. This domain relates to the nature of working relationships, levels of responsibility for self and for others, managing change, and ways in which individuals work and the impact this has on the job and on other individuals.

Learning Outcome Domains for Descriptors of Higher Education Levels 7-10

The HE level descriptors look at knowledge, skills and attitudes but in light of four domains of learning outcomes: fundamental, social, thinking, and personal. The fast-growing changes and the higher demands on graduates from the world of employment, society and the country at large require a re-thinking of graduate skills in Bangladesh. All levels of qualifications in the Framework will address these skills albeit at varying degree. Programmes of study cannot be accredited if these domains are not addressed by providing clear learning outcomes.

Bangladesh adopts four skills as the Learning Outcome Domains for level 7-10 in this Framework. These are loosely based on the 10 skills recommended by the World Economic Forum 2015, which are Complex Problem Solving, Critical Thinking, Creativity, People Management, Coordinating with Others, Emotional Intelligence, Judgment and Decision Making, Service Orientation, Negotiation and Cognitive Flexibility. The four Learning Outcome Domains also provide a common thread across all levels of higher education qualification in Bangladesh.

The recognition of all qualifications is achieved through the fulfilment of the four Learning Outcome Domains to the appropriate level. The descriptors are expanded for each level of qualification. The implementation of these four Learning Outcome Domains will help to prepare graduates for the fourth industrial revolution.

The Learning Outcome Domains significant to Bangladesh are Fundamental Domain, Social Domain, Thinking Domain and Personal Domain. These domains are classified below.

- a) **Fundamental Domain-** This domain involves the discipline specific knowledge and application skills that a student obtains after a level of study, which influence his/her performance and societal contributions.

- b) **Social Domain-** This domain involves the skills needed for working with people at various levels to achieve set goals, communication and community engagement. The World Economic Forum categorises social skills as the ability to coordinate, instruct, negotiate, persuade, service-oriented and have people and environment perceptiveness.

- c) **Thinking Domain-** Skills such as learning to learn, decision-making, problem solving and entrepreneurship are part of the Thinking Domain. This involves the ability to be active learners and critical thinkers. It requires the graduates to be investigative, enterprising, scientific and analytical and have management skills.

- d) **Personal Domain-** This domain involves skills such as life-long learning, self-direction, acting with integrity and the development of citizenship. The ability to be active listeners, manage one's own time and the time of others, care for others, develop and build teams, be responsible for one's own acts and results, perform civic duties and contribute to society are some examples of skills under this domain.

Each programme conforms to the Framework by fulfilling the domains identified through clear learning outcomes at the program and course levels. The Level Descriptors provide some examples how these apply at the various qualification levels in the Framework. The learning outcomes at the course level are mapped to the learning outcomes at the program level, which in turn are mapped to the overall vision and mission of the higher education institution. There will be significant variations in the general application of the Learning Outcome Domains to qualifications of different fields and levels.

Credit System

A credit system plays an increasingly important role in higher education at national and international levels. It is used to measure and enhance student learning. The credit system provides course transparency, institutional effectiveness and promotes global mobility of students and graduates. It is effectively an academic currency to be utilized in the maximisation of the value of higher education. Its key advantage lies in its ability to quantify and record student learning and achievement.

Modularised Qualifications Based on Standards and Learning Outcomes

All higher education qualifications will be modular or unitised, based on benchmarked standards and learning outcomes. As such, all teaching and learning activities carried out by a student will be quantified and measured. A qualification is formed by individual courses allowing a student to cumulatively achieve the minimum graduating credits for the relevant qualification level. A course is characterised by its learning outcomes that are translated into credit that is measured by student learning time. This credit will be the academic currency, which a graduate of the Bangladesh higher education sector may carry with her/him for career or educational advancement. For this Framework, the general measure of one credit is 40 notional hours. The calculation of notional hours is based on class contact time and self-learning time of a student in addition to the class contact time.

However, by their very nature, different activities will attract different notional hours. These are dependent on the type of learning-teaching activities as described in Table 2.

Table 2: Learning-Teaching Activities and Suggested Notional Hours per Credit

No.	Learning-teaching Activities	National Hours for 1 Credit
1.	Lecture, Tutorial, Seminar	40
2.	Lab, Studio or Clinical Work	60
3.	Industrial/Workplace Learning	80

**(For lecture, tutorial, seminar 1-hour face to face learning per week for 14 weeks, for lab, studio or clinical work 1.5-hour face to face learning per week for 14 weeks and Industrial/Workplace Learning 2 hours per week for 14 weeks is equivalent to 1 credit)*

The proposed notional hours for each of the learning activity include assessment, self-learning and preparatory work. Thus, a four-credit subject (theory + practical) shall have many possible combinations of total learning-teaching hours (Table 3).

Table 3: Notional Hours Breakdown for a Four-credit Subject

Learning-teaching Activities Hours				
Subject Name	Lecture, tutorial, seminar	Lab, Studio or Clinical Work	Industrial or Workplace Learning	Total Credits (C)
A	160	0	0	4
B	80	120	0	4
C	20	30	240	4
D	0	240	0	4
E	0	0	320	4

The award of the qualification at the respective level may also be described by the minimum graduating credits required for the completion of that level. Students will be required to take and achieve the learning outcomes (pass the courses taken) to achieve the minimum

graduating credits. Thus, if a course has 130 as its minimum graduating credits, a student must take and successfully complete the required number of courses, which amount to 130 credits for graduating.

Assessment

Assessment of the learning outcomes can be multi-fold, over a period and appropriate to the course. Assessment will measure the achievement of learning outcomes. Students are required to achieve all learning outcomes in order to gain a pass mark. The use of grades or classifications, such as credit, merit and distinction are indicative of the level of achievements of the learning outcomes. Assessments based on explicit/defined criteria are benchmarked using an external system at the individual institution. All assessments will include institutionally determined expert moderation, and systematic feedback to the students.

National System of Credit Accumulation and Transfer

The Framework supports a national system of credit accumulation and transfer. A credit accumulation and transfer system promotes recognition and parity of qualifications among sectors and sub-sectors based on clarity of learner entry and exit points. This also supports the national policy on lifelong learning and graduate mobility as it promotes the movement of graduates between sectors and sub-sectors and programs by providing vertical and parallel educational pathways.

Credit accumulation and transfer, subject to individual discipline/field

requirements, may take place at either program level or course level. A student may be exempted from a course or part of a program that s/he had successfully completed. Providers of post-higher secondary qualifications will be required to establish a credit accumulation and transfer model based on international and prevailing national best practices and this will be subjected to audit by the Council. Credit accumulation and transfer models may vary according to program discipline and level.

Common Classification System for Subjects and Occupational Sectors

The Framework provides for a common classification system for subjects and occupational sectors given in Appendix 3. This is used to benchmark all qualifications and allows for parity between qualifications. The main categories for the subjects and occupational sectors are Generic programmes and qualifications, Education, Social Sciences, Journalism and Information, Business, Administration and Law, Natural Sciences, Mathematics and Statistics, Information and Communication Technologies (ICTs), Engineering, Manufacturing and Construction, Agriculture, Forestry, Fisheries and Veterinary, Health and Welfare, and Services.

Level Descriptors

Level and Job Class	Domains	Descriptors
BNQF Level 1 Basic Skilled Worker	Knowledge	Elementary understanding of ability to interpret the underpinning knowledge in a specific study area, able to interpret common occupational terms and instructions.
	Skills	Specific Basic skills required to carry out simple tasks. Interpret occupational terms and present the results of own work within guided work environment/ under supervision.
	Responsibilities	Work under direct supervision in a structured context with limited range of responsibilities.
BNQF Level 2 Semi Skilled Worker	Knowledge	Basic understanding of underpinning knowledge in a specific study area, able to interpret and apply common occupational terms and instructions.
	Skills	Skills required to carry out simple tasks, communicate with his team in the workplace presenting and discussing results of his work with required clarity.
	Responsibilities	Work or study under supervision in a structured context with limited scope of manipulation.
BNQF Level 3 Skilled Worker	Knowledge	Moderately broad knowledge in a specific work or study area, able to perceive ideas and abstract from drawing and design according to workplace requirements. .
	Skills	Basic cognitive and practical skills required to use relevant information in order to carry out tasks and to solve routine problems using simple rules and tools. Communicate with his team and limited external partners upholding the values, nature and culture of the workplace.
	Responsibilities	Work or study under supervision with considerable autonomy. Participate in teams and responsible for group coordination.
BNQF Level 4 Highly Skilled Worker	Knowledge	Broader knowledge of the underlying, concepts, principles, and processes in a specific work or study area, able to solve problems to new situations by comparing and applying acquired knowledge.
	Skills	A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying the full range of methods, tools, materials and information. Communicate using technical terminology and IT technology with partners and users as per workplace requirements.
	Responsibilities	Work under minimal supervision in specific contexts in response to workplace requirements. Resolve technical issues in response to workplace requirements and lead/guide a team/ group.

Level and Job Class	Domains	Descriptors
BNQF Level 5 Supervisor	Knowledge	Broad knowledge of the underlying, concepts, principles, and processes in a specific work or study area, able to scrutinize and break information into parts by identifying motives or causes.
	Skills	Broad range of cognitive and practical skills required to generate solutions to specific problems in one or more work or study areas. Communicate practice-related problems and possible solutions to external partners.
	Responsibilities	Work under guidance of management and self-direction to resolve specific issues. Lead and take responsibility for the work and actions of group/team members. Bridge between management.
BNQF Level 6 Mid-Level Manager/ Sub Assistant Engineer	Knowledge	Comprehensive actual and theoretical knowledge within a specific work or study area with an awareness of the validity and limits of that knowledge, able to analyze, compare, relate and evaluate.
	Skills	Specialised and wider range of cognitive and practical skills required to provide leadership in the development of creative solutions to defined problems. Communicate professional issues and solutions to the team and to external partners/users.
	Responsibilities	Work under broad guidance and self-motivation to execute strategic and operational plan/s. Lead lower level management. Diagnose and resolve problems within and among work groups.
BNQF Level 7	Fundamental Skills	<ol style="list-style-type: none"> 1. 3-year Bachelor's 2. demonstrate an understanding of a broad range of moderately complex, technical and theoretical knowledge to address varied, complex task/work; 3. identify, interpret, apply and evaluate concepts, theories and skills within a defined context of a subject area/field of study, discipline or work; 4. apply knowledge and skills in addressing issues/solving problems in a well-defined area of non-routine and non-predictable work/task with minimal supervision; 5. supervise practices and process operation in his/her respected field of specialization; 6. review and make adjustments to operations under minimal supervision in his/her field; and 7. display advanced digital literacy which is adequate to perform complex task. <ol style="list-style-type: none"> 4-year and 5-year Bachelor's 1. demonstrate knowledge and critical understanding of the well-established principles of his/her field of study, and of the way in which those principles have developed;

Level	Domains	Descriptors
		<ol style="list-style-type: none"> 2. apply underlying concepts and principles outside the context in which they were first studied, including, where appropriate, the application of those principles in an employment context; 3. apply knowledge and skills in addressing issues/solving problems with minimal supervision; 4. evaluate critically the appropriateness of different approaches to solving problems in his/her field of study; 5. support supervision of junior staff via a mentor or a leader/manager; and 6. display advanced digital literacy which is adequate to perform complex tasks and bring about solutions.
	Social Skills	<p><i>3-year Bachelor's</i></p> <ol style="list-style-type: none"> 1. communicate and interact effectively and clearly, ideas, information, problems and solutions as a team to peers, experts and non-experts in Bangla and English; 2. demonstrate appreciation of cultural diversity in Bangladesh; 3. work in a team both professionally and as a member of the larger community; and 4. display advanced civic literacy and knowledge, as well as exercising civic rights and obligations at a local, state and national level. <p><i>4-year and 5-year Bachelor's</i></p> <ol style="list-style-type: none"> 1. communicate and interact effectively and clearly, ideas, information, problems and solutions as a team to peers, experts and non-experts in Bangla and English; 2. express her/himself fluently and spontaneously in English and Bangla; 3. use language flexibly and effectively for social, academic and professional purposes; 4. produce clear, well structured, detailed text on complex subjects, showing controlled use of organizational patterns, connectors and cohesive devices in advanced proficiency level of Bangla and English; 5. demonstrate the ability to incorporate entrepreneurial skills in planning daily activities; and 6. display advanced civic literacy and knowledge, exercising civic rights and obligations at all levels as well as participating in changes for the improvement of Bangladesh society.
	Thinking Skills	<p><i>3-year Bachelor's</i></p> <ol style="list-style-type: none"> 1. work under broad supervision demonstrating a substantial degree of personal responsibility and within a structured work context;

Level	Domains	Descriptors
		<ol style="list-style-type: none"> 2. exhibit a degree of personal responsibility and autonomy under broad guidance and directions within well-defined and non-routine context of study or work activities performed in a wide variety of contexts; 3. demonstrate supervisory, collaborative skills and responsibility for work performance of others; 4. demonstrate the appreciation of problems in a moderately wide range of work and propose solutions; and 5. have professional knowledge and practical skills in both technical and management to lead a team in inexperienced environment. <p><i>4-year and 5-year Bachelor's</i></p> <ol style="list-style-type: none"> 1. exercise very substantial degree of autonomy and often significant responsibility in making judgments/ decisions towards the management of self, others and for the allocation of substantial resources; and 2. demonstrate professional knowledge and practical skills in both technical and management to lead a team in inexperienced environment.
	<p>Personal Skills</p>	<p><i>3-year Bachelor's</i></p> <ol style="list-style-type: none"> 1. demonstrate self-direction for learning and career development; 2. solve problems by taking into account social, professional and ethical issues; and 3. be a responsible and an ethical member who substantially contributes to the society. <p><i>4-year and 5-year Bachelor's</i></p> <ol style="list-style-type: none"> 1. engage in self-direction and self-enterprise skills; 2. demonstrate social, professional, environmental and ethical practice/ values; 3. show-case global knowledge and competencies to fulfil employment, entrepreneurial and lifelong learning skills; and contribute significantly to the society.

Level	Domains	Descriptors
BNQF Level 8	Fundamental Skills	<ol style="list-style-type: none"> 1. demonstrate advanced and comprehensive theoretical and technical knowledge in a specialized field, or of a multidisciplinary nature, which is related to field of study or work; 2. exhibit intellectual independence in the deployment of knowledge within specific field by applying critical, analytical and evaluation skills; 3. manage and solve complex application and unpredictable issues with creative and innovative solution in the field of study or work place/practice; 4. describe and comment upon particular aspects of current research, or scholarship, in the field of study; and 5. use a broad range of information, media and technology applications to support study and/or work.
	Social Skills	<ol style="list-style-type: none"> 1. convey ideas in written and oral forms using appropriate and different presentation techniques, reliably, accurately and to a range of audience in Bangla and English; 2. produce clear, well structured, detailed text on complex subjects, showing controlled use of organizational patterns, connectors and cohesive devices in advanced proficiency level of Bangla and English; 3. work collaboratively with different people in learning and working communities; and 4. demonstrate knowledge of cultural, governmental, and environmental issues at a regional level, in relation to issues within Bangladesh and participating in changes for the betterment of the nation.
	Thinking Skills	<ol style="list-style-type: none"> 1. exercise significant leadership, professionalism in managing responsibilities within broad organizational parameters; and 2. produce clear, well structured, detailed text on complex subjects in solving problems, showing controlled use of organizational patterns, connectors and cohesive devices in advanced proficiency level of Bangla and English.

Level	Domains	Descriptors
	Personal Skills	<ol style="list-style-type: none"> 1. engage in self-directed lifelong learning effectively and demonstrate entrepreneurial skills; 2. demonstrate a relatively high degree of social, professional, environmental and ethical practice/values; and 3. demonstrate appreciation of cultural diversity in Bangladesh in contributing to society.
BNQF Level 9	Fundamental Skills	<ol style="list-style-type: none"> 1. demonstrate a systematic understanding of advanced knowledge and skills which may be at the forefront of a field/fields of study, discipline or practice; 2. analyse general and advanced range of specialized theories, concepts, principles and complex information and method within a field/fields of study, discipline or practice; 3. apply knowledge and skills to manage complex matters; 4. synthesise complex information, concepts, theories and problems in a field/ fields of study or practice as a basis for research; 5. carry out semi-specialized research and/or apply practical skills, tools or techniques which are informed by the forefront latest development in the subject or discipline to solve and manage complex problems or solve issues in a field/ fields of study or practice; and 6. competently use a wide range of suitable software ICTs to enhance study, research and/or work/practice.
	Social Skills	<ol style="list-style-type: none"> 1. communicate clearly the knowledge, skills, ideas, critique and conclusion/rationale using appropriate methods to experts, specialists and peers and non-expert range of audience both in Bangla and advanced English; 2. work with different people in learning and working community and other groups and networks; 3. function effectively as a member of a community; and 4. demonstrate advanced knowledge of cultural, governmental, and environmental issues at a regional and international level, in relation to issues within Bangladesh and actively participating in and advocating for changes/solutions for the betterment of the nation.

Level	Domains	Descriptors
	Thinking Skills	<ol style="list-style-type: none"> 1. be independent and individually responsible for work, professional practice, systems, processes and decision-making on complex problematic matters or issues within the academic, professional or technical settings (a field of study and/or professional practice and/or in multi-disciplinary context); and 2. demonstrate significant autonomy, leadership qualities, interpersonal skill and responsibilities - (planning, resource management, supervision and problem solving) in managing work within a team and others.
	Personal Skills	<ol style="list-style-type: none"> 1. demonstrate self-advancement through continuous academic and/or professional development; 2. observe legal, ethical and professional codes of practice; and 3. demonstrate appreciation of cultural diversity in Bangladesh in contributing to the society.
BNQF Level 10	Fundamental Skills	<ol style="list-style-type: none"> 1. demonstrate understanding which is comprehensive, systematic, integrated and undertake critical analysis and synthesis of new, complex and abstract ideas of current critical issues in the most advanced frontiers of knowledge of a field of study, or discipline, or practice and related principles, theories, practice or techniques/technology; 2. make substantial / significant contribution/ through the creation/production/innovation of new knowledge/theories/practice/solutions which can satisfy peer reviews, meeting international standards through communications in internationally refereed publications; 3. analyze, evaluate and synthesize expert knowledge in specific fields and practice; 4. demonstrate mastery of practical, technical skills/practices and scientific skills which is at the forefront of one or more area of specialization and develop new complex skills or techniques and solutions to resolve new highly complex and emerging problems; 5. design and implement or adapt highly advanced, specialized research methodologies which are at the forefront of one or more areas of specialization; 6. initiate, conduct, manage, supervise and lead future independent original research initiatives; 7. provide informed expert/professional opinion and judgment on new and emerging issues in the related fields; and 8. use/select/improve existing or develop new appropriate software to support and enhance research activities.

Level	Domains	Descriptors
	Social Skills	<ol style="list-style-type: none"> 1. communicate effectively research findings to peers, scholarly community and society at large in the relevant field of expertise in Bangla and advanced English; 2. work with different people in learning and working community and other groups and networks; 3. convey information, insights, ideas, problems and present solutions cogently/coherently to peers, scholarly community and society at large in the field of expertise; 4. contribute to the technical, social and cultural progress in the academic and professional practices to the society on emerging issues; and 5. demonstrate expert/professional knowledge of cultural, governmental, and environmental issues at a regional and international level, in relation to issues within Bangladesh and actively advocating for and initiating changes/solutions for the betterment of the nation.
	Thinking Skills	<ol style="list-style-type: none"> 1. be independent and individually responsible for work, professional practice, systems, processes and decision-making on complex problematic matters or issues within the academic, professional or technical settings (a field of study and/or professional practice and/or in multi-disciplinary context); 2. demonstrate autonomy, leadership qualities, interpersonal skill and responsibilities - (planning, resource management, supervision and problem solving) in managing work within a team and others; 3. be independent original research initiatives with a view to resolve an existing issue; and 4. display expert judgment, and responsibility to promote/contribute towards technological, social and cultural development.
	Personal Skills	<ol style="list-style-type: none"> 1. take full responsibility for own work and where relevant be accountable for overall management of the research; 2. adhere to legal, ethical and professional codes of practice as a natural part of her/his personality; 3. integrate knowledge for lifelong learning, development of new ideas, solutions and systems; and 4. demonstrate appreciation of cultural diversity in Bangladesh in contributing to the society.

BNQF Pathways and Lifelong Learning

The BNQF is an “outcome-based” Framework which describes knowledge, skills and attitudes a person applies either for work or further learning. The BNQF does not prescribe what a person learns at each level. Rather, it describes what a person can do in terms of learning outcomes. The BNQF generates various pathways (Figure 3) with entry and exit points that recognize individual achievements. It provides links at every

qualification level using a combination of credits and learning outcomes or competency measurement. This linking enables individuals to have clear progression paths for better life opportunities through qualifications and training. The BNQF pathways allow flexibility in how a person moves from one qualification level to another and between sectors with or without bridging programs.

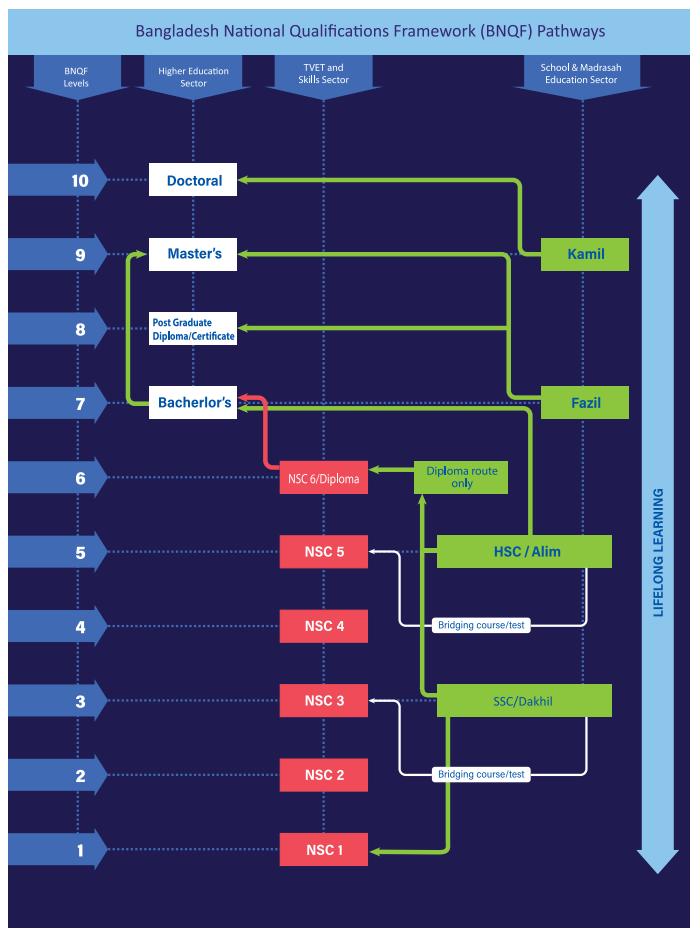


Figure 3: BNQF pathways

Vertical Pathways

(a) The TVET and Skills qualifications are vertical until BNQF Level 6 (Diploma/NSC 6) with a qualification at a lower level usually required for entry to the next level. But in the TVET and skills sub-sector, a person can enter at any level if he or she possesses the required skills to enter that level. In that case, he or she must have to pass in a specially designed challenge test. The BNQF stipulates any of the following minimum entry requirements for BNQF Level 1 (NSC 1): JSC (Class 8) pass or evidence of equivalent achievement, or pass in a challenge test in language, literacy and numeracy skills, or pass in a relevant prevocational program.

The candidates at NSC 6 or Diploma need to pass a rigid selection procedure and a set of entry requirements as there is a significant increase in the knowledge and skills component from the previous level. The requirements may include NSC 5 pass; challenge test and competency interview for knowledge and skills; or HSC/ SSC pass. In addition, the candidates may undertake a bridging program consisting of gap training on the skills relevant to their intended programs as well as general subjects such as English, Mathematics, Science and Information Technology. The candidates for NSC 5 may need to pass the same selection procedure as and when they seek entry to NSC 6.

(b) The Schools qualifications (SSC and HSC) are also vertical. The SSC and HSC do not have well-defined equivalence with TVET qualifications though they provide entry points to qualifications at TVET and HE. The madrasah qualifications are also vertical. There is established equivalence among the qualification levels of school and madrasah education such as SSC and Dakhil, and HSC and Alim. The SSC (Voc) and HSC (Voc) integrate the NSC 3 and NSC 5 respectively and the graduates will obtain dual certificates.

(c) In the HE sector, the progression is vertical from BNQF Level 7 (Bachelor's) to Level 10 (Doctoral) with a qualification at a lower level usually required for entry to the next level. According to the HE academic pathway, it is possible to skip a level with adequate experience, for example, from Bachelor's it is possible to go to Master's.

Horizontal Pathways

(a) The BNQF structure provides a horizontal pathway from the Schools sub-sector to TVET and Skills and vice versa. Some forms of bridging programs may be implemented to set the equivalence. For HSC to be equivalent to NSC 5 (and BNQF Level 5), and SSC to be equivalent to NSC 3 (and BNQF Level 3) some bridging programs may be needed to train students in skills that are lacking in the general school education stream. Such bridging programs would allow students to switch from one sector to another in pursuit of the desired qualification. It is to be noted that an HSC qualification may serve as an entry point to a Bachelor's degree in HE or a Diploma in TVET qualifications because such pathways have been well established in Bangladesh as well as in other parts of the world.

(b) According to the academic pathway of HE, the BNQF Level 6 (Diploma) may serve as an entry point to the Bachelor's level. This horizontal pathway builds a connection between the two sectors. The competencies acquired in the Level 6 programs could be credited towards the Level 7 (Bachelor's) programs. From Level 6 to Level 7 as well as from various years of Level 6 to various years of Level 7, entry requirements will be considered by taking into account lifelong learning, RPL, credit transfer, credit waiver, bridging programs, and other systems of validation and recognition.

(c) Alim qualifications may serve as an entry point to a Bachelor's degree in HE or a Diploma in TVET qualification. There are also entry points from Fazil to Post-Graduate Diploma and Master's, and Kamil to Doctoral qualifications in HE. The BNQF structure suggests bridging programs to set the equivalence between NSC 3 and Dakhil, and NSC 5 and Alim.

Lifelong Learning Pathways

The BNQF provides flexible pathways for entry to any qualification at any level through the lifelong learning pathways. Lifelong learning refers to all learning activities undertaken throughout life, with the aim of improving knowledge, skills and competencies within a personal, civic, social and/or employment-related perspective. Some examples of lifelong learning can be – learning computer programming or a second language via an online program or distance education, leaning a new sport, and learning to cook in a classroom or a restaurant setting. The concept of lifelong learning, as a recognized way of gaining knowledge, skills and attitudes, is fairly new in the Bangladesh education system. The definition, process and possible examples of lifelong learning need to be thoroughly discussed and identified in order to ensure proper integration of all sectors of education with the BNQF.

There will be open entry and no barriers for participants from informal sectors through RPL at any level of BNQF. It is worth noting that the BNQF provides the minimum requirements of completing each level and graduation from one level to the next. Institutions can set their own requirements for entry and exit based on these minimum requirements and approved by the decision-making authority of the institution such as academic council and syndicate in case of HE institutions. Another point to consider is that there are many TVET courses and programs that are outside the purview of the NTVQF. These courses and programs, as listed in the BTEB Act 2018 (dated 25 July 2019), have diversified entry requirements and durations. These courses and programs need to be aligned with various levels of the TVET and Skills sector under the initiative of the BTEB.

Entry through Pre-Vocational Qualifications

The pre-vocational level programs will be considered to enter BNQF Level 1 for the learners who do not meet the entry criteria of NSC 1 (BNQF Level 1). Pre-vocational level programs not only open up additional career pathways for students pursuing general education but also address the needs of under-privileged groups and individuals with low levels of education. Previously, individuals without a Grade 8 or above cannot access the formal education system as they did not meet the prerequisite education level. With the pre-vocational levels, the learner will have a pathway to enter formal training. The pre-vocational will be implemented by Bureau of Nonformal Education (BNFE).

Implementation Arrangements

The framework sets out skills-based TVET and outcome-based higher education system based on qualifications standards that are rationalized, streamlined, and consolidated to cover all TVET, skills and post-higher secondary qualifications in Bangladesh. It applies to quality assurance at a program and institutional level first and thereafter to accreditation of programs and institutions by the Council directly or through Confidence Certificate.

Developing a quality assurance (QA) culture requires special attention to Quality Assurance Areas (QA Areas)/ Standards. The achievements in the QA Areas/ Standards will be measured according to international good practices and conventions, carried out in a transparent and consistent manner, and recognized by users of the qualifications nationally and internationally. The QA Areas/ Standards significant for Bangladesh are:

1. Governance;
2. Leadership, Responsibility and Autonomy;
3. Institutional Integrity and Autonomy;
4. Curriculum;
5. Teaching Learning and Assessment;
6. Student Admission and Support Services;
7. Faculty and Professional Staff;
8. Facilities and Resources;
9. Research and Scholarly Activities; and
10. Monitoring, Evaluation and Continual Improvement.

Each QA area/ Standard will contain sub-areas/ sub-standards. To address the issues at the implementation level following steps would be taken:

- (a) Review the National Quality Assurance System (NQAS).

Quality underpins all components of the BNQF. The five existing NTVQF National Skills Quality Assurance System (NSQAS) Manuals designed in 2011, will be revised to adjust to the BNQF TVET and Skills sector. Additionally, the next actions will include quality assurance in the HE qualifications, and lifelong learning.

- (b) Develop BNQF legislation documents and/or amendments to the relevant law.

It is important to have a legislative basis to ensure that the BNQF is in existence and in effect, and to authorize agencies the responsibilities of implementing and guarding the framework. Aside from the above, the BNQF legislation documents define the BNQF ownership and management, and directs implementers to adhere to standards and qualifications, and allocate resources for its implementation.

(c) Develop the BNQF Implementation Guidelines.

The BNQF requires an Implementation Manual to describe the key policy, processes and instruments to be applied in all operations leading to the awarding of qualifications, including the role of agencies mandated to issue qualifications. In addition, the Implementation Manual will define the industry roles in providing labor market intelligence to ensure the alignment of educational programs to job requirements. The Implementation Manual will provide instructions on developing the BNQF information system which records on promulgated qualifications with the appropriate details and format into the BNQF qualification register. The BNQF guidelines will adopt internationally benchmarked policies and processes to enhance the credibility of qualifications obtained from qualification awarding bodies in Bangladesh.

(d) Develop an advocacy and capacity development programme for the BNQF.

In addition to the BNQF legislation, a successful BNQF implementation needs voluntary “buy-in” and the commitment of the stakeholders. Thus, an advocacy and capacity development program is important to communicate so that all stakeholders in the public and private sectors are aware of the framework and be able to use it. The capacity-building programs encourage the Bangladesh people to take action by themselves, thus breeding sustainability.

Governing and Monitoring of BNQF

The Ministry of Education (MoE) is the apex government body responsible for the management and Quality Assurance (QA) of qualifications, education and training in Bangladesh. The MoE operationalizes these functions in its two divisions: the TMED, for TVET and Madrasah; and the SHED, for secondary and higher education. In addition, as a regulatory body, UGC oversees the country's higher education provided through public and private universities. Moreover, National University (NU) oversees the higher education provided through the government and non-government colleges except seven government colleges.

The TMED carries out its regulatory mandates for TVET and Skills through the BTEB, DTE and BMEB. The BTEB is responsible for the implementation and periodic review of the TVET component of the BNQF. The BTEB Act of 2018 reiterates the power of the BTEB to organize, supervise, regulate, control and develop technical and vocational education and training in Bangladesh. The DTE is responsible for the development, expansion and research in the field of TVET in Bangladesh.

The DTE supervises the implementation of formal TVET programs by public and non-government technical schools and

colleges, polytechnic and monotechnic institutes, non-government vocational institutions, non-government training institutions, and technical teachers' training colleges. The Bangladesh Madrasah Education Board (BMEB) manages the Madrasah education in Bangladesh. The BMEB awards madrasah qualifications Dakhil, Alim, Fazil, and Kamil, and regulates Madrasah institutions.

The SHED carries out its regulatory mandates for secondary education through the nine Boards of Intermediate and Secondary Education. The boards conduct public examinations, and award certification of SSC and HSC qualifications. The boards provide recognition to private sector educational institutes.

In accordance with BNQF The BAC is responsible for recognizing the quality of programs as well as institutions providing higher education. The BAC is a statutory autonomous body established under the Bangladesh Accreditation Council Act 2017.

The BAC is required to coordinate policies across government agencies and ensure adequate involvement of all stakeholders working in close cooperation and collaboration with UGC and MoE.

¹Enacted and approved in November 2018 for modifying, amending, changing and updating the Technical Education Act of 1967 and Technical Education Regulations of 1975

The BNQF provides that the NSDA shares the responsibility with the TMED in managing TVET qualifications. The NSDA is established under NSDA Act 2018 and NSDA Rules 2020 to act as the coordinating body that sets and coordinates the implementation of the National Skills Development Policy, and its strategies and plans.

Whilst a paramount body is ideal, it is not feasible at the current time. There are several reasons for this. Firstly, the cost of setting up a new oversight body is difficult to justify. Secondly, there are already regulatory bodies responsible for schools, TVET and skills, and HE. Some of these bodies are less than two years old, and it would take any new body some time to be set up and institutionalized.

Therefore, the above mentioned bodies agree to be bound by the principles of a QA system to manage the BNQF and various elements of the QA system that will help to implement the BNQF. The BAC and the UGC have set their own procedures for regulating qualifications in the HE sector. The BNQF NSC will designate a high-level committee to define the working mechanisms of the two central agencies for the TVET and Skills sector, and will develop the actionable strategies to implement the agreed institutional arrangements.

Review and Revision of BNQF

The BNQF is a dynamic document. It would be reviewed and revised time to time to align with international and regional framework.

BNQF Glossary of the Terminology

Term	BNQF definition
Accreditation	<p>A certification granted/awarded for a specific period of time by the Council after examining and assessing an academic program or higher education institution of higher education which provides programs in accordance with the quality assurance mechanism and the Framework.</p> <p>It is an assessment of how the organization applies its quality assurance system to the delivery of a particular program of learning. It is the assessment of the organization's ability to provide a learning program that actually meets the competency standards of some of the units of competency included in a TVET and Skills qualification or the entire qualification.</p>
Accreditation of Prior (Certificated) Learning (APL)	Learning that is formally assessed and certified by a Bangladesh education/training institution or from outside.
Accreditation of Prior Experiential Learning (APEL)	The formal recognition of prior learning gained through experience, including paid or unpaid work, self-directed study or leisure pursuits.
Adult learning (andragogy)	Those processes and practices specific to adults gaining knowledge or expertise, based on self-directed learning.
Articulation	The process of comparing the content of courses from accredited programmes for the purpose of credit transfer.
Assessment evidence	The information gathered during the assessment process that determines whether an individual or group is competent. In CBT assessments, evidence is directly linked to the demonstration of competence and the ability of the trainee to perform to a certain standard.
Assessments	A systematic process of measuring/evaluating and documenting an individual or group's level of knowledge, skills and attitudes.
Competency Standards	Benchmarks to assess the knowledge, skills and attitudes required by an individual in order to perform in the workplace. These benchmarks are combined together to form units of competencies.
Competency	The demonstrated ability to apply knowledge, skills and attitudes in order to successfully complete work activities to a defined standard of performance, as expected in a real-life workplace environment.
Competency-based Training (CBT)	A structured training and assessment system that allows individuals to acquire skills and knowledge in order to perform work activities to a specified standard.

Term	BNQF definition
Confidence Certificate	Certificate granted by the Council, in accordance with the provisions of the Bangladesh Accreditation Council Act-2017 in favour of a program or of an institution of higher education under supervision, which is striving to attain the benchmarked standards of education and complying with the Framework.
Credit	The unit of measuring students' academic load, usually based on a number of classroom hours, directed and non-directed independent learning, preparation for and taking assessments and other related activities that lead to the achievement of the learning outcomes stipulated at a level of study in the Framework. The calculation of credit is based on notional hours.
DACUM	A quick and cost-effective method of occupational analysis that uses a focus group to facilitate a story-boarding process in order to conduct a thorough analysis of a given occupation.
Graduating Credits	The minimum number of credits required to complete a level of study leading to a degree.
Higher Education Institution	An organization approved by the appropriate authority in Bangladesh, providing tertiary level education in Bangladesh both in private and public sector, leading to the award of bachelor or above degree.
Learning Outcomes	Statements of what the learner must be able to do at the end of a course or a programme of study.
Level	Academic or related level.
Lifelong Learning	Providing or using or recognizing both formal and informal learning opportunities in order to foster continuous development and improvement of knowledge and skills needed for employment and personal fulfilment.
Modular/Unitized System	A system of teaching and measurement of a course of study, typically one that lasts for a structured study period such as a semester/ an academic term. Students receive grades and academic credits after the completion of the subject or course at the end of the study period.
National Qualifications Framework	A formal national structure for classifying qualifications by level, based on learning outcomes and descriptors stated in BNQF and the Framework stated in the Clause 15 of the Bangladesh Accreditation Council Act 2017.
Notional Hours	The estimated learning time taken by an 'average' student to achieve the specified learning outcomes of a program or a course. They are therefore not a precise measure but instead provide students with an indication of the amount of teacher-student interaction (face to face, blended and online), self-study and degree of commitment expected from them in achieving the required learning outcomes.

Term	BNQF definition
Occupation	An Occupation consists of a number of jobs with overlapping tasks.
On-the-job Training (OJT) or Workplace-based Training (WBT)	Refers to learning that occurs when workers, including apprentices, produce real goods and services. OJT refers to training undertaken at the workplace as part of practical training provided by TVET or other educational institutions.
Professional Education	A formalized approach in specialized training through which participants acquire content knowledge and learn to apply techniques required for a particular profession. It involves the translation of learning into practice, and intends to prevent occupations and professionals from becoming outdated.
Program	Academic activities based on a structurally designed curriculum.
Qualification Level	The level of qualification to which a program of study is attached. The Framework is structured around levels of descriptive criteria, with formal qualifications aligned to appropriate levels. A qualification level shows employers, teachers and learners what is taught, learnt and achieved.
Quality Assurance	The process of determining the quality of all activities of a higher education institution or program or course based on fixed standards and criteria. It is a process to determine the development and competency of that institution.
Self-directed learning	Learning where students initiate their own learning process by identifying their learning needs, goals and strategies, and evaluating their learning outcomes.
Standard detailed task analysis	A process to analyze tasks by breaking them into elements that help identify performance steps and standards, the tools and equipment needed, related knowledge, safety and health information, etc., in order to develop instructional materials.
Subject	A branch of knowledge studied or taught in a school, college, or university. It also means a course.
Technical and Vocational Education and Training (TVET)	Comprises of education, training and skills development relating to a wide range of occupational fields, production, services and livelihoods. TVET, as part of lifelong learning, includes work-based learning and continuing training and professional development which may lead to qualifications. TVET also includes a wide range of skills development opportunities attuned to national and local contexts. Learning to learn, the development of literacy and numeracy skills, transversal skills and citizenship skills are integral components of TVET.

Term	BNQF definition
The Act	The Bangladesh Accreditation Council Act 2017, Bangladesh Technical Education Board Act 2018 and National Skills Development Authority Act 2018.
TVET institutions	Include TVET schools, colleges, polytechnic institutes, monotechnic institutes and centres, together with national, local, and sectoral bodies and councils for TVET providing TVET and skills. STP include all skills training providing institutes established in public, private and NGO's or any other sector.
Units of competency	The building blocks of competency standards that identifies workplace requirements, as well as the knowledge and skills of the competency (including language, literacy and numeracy).
Technology	Technology is the sum of any skills, techniques, methods and process used for practical purposes, especially in industry.
Trade	Any group of interrelated jobs or any occupation which is traditionally or officially recognized as craft or artisan in nature requiring specific qualifications that can be acquired through work experience and/or training.

Appendix 1: Summary Information on Qualifications Levels

Qualifications Level	7	8	9	10
Qualifications Framework Nomenclature	Bachelor's	Post -Graduate Diploma or Certificate	Master's	Doctoral
Base Entry Requirement	HSC or equivalent	<ul style="list-style-type: none"> • 3-year Bachelor's with 2 years' experience or equivalent determined by the university • or 4-year Bachelor's with or without honours • or 5-year Bachelor's 	<ul style="list-style-type: none"> • 3-year Bachelor's with 2 years' experience or equivalent determined by the university • or 4-year Bachelor's with or without honours • or 5-year Bachelor's 	Master's or equivalent
Minimum Duration	<ul style="list-style-type: none"> • 5-year • 4-year • 3-year 	1 year	<p>For 4-year and 5-year Bachelor's 3 modes in full time</p> <ul style="list-style-type: none"> • Taught Course - 1 year • Mixed Mode - 1.5 years • Research - 2 years <p>For 3-year Bachelor's 3 modes in full time</p> <ul style="list-style-type: none"> • Taught Course - 2 years 	2 modes in full time <ul style="list-style-type: none"> • Mixed Mode – 3 years • Research – 3 years

Qualifications Level	7	8	9	10
			<ul style="list-style-type: none"> • Mixed Mode -3 years • Research – eligibility and duration will be determined by the respective University. 	

*(Maximum duration: 6 years for 3-year Bachelor's; 7 years for 4-year Bachelor's; 8 years for 5-year Bachelor's; 3 years for Master's; 7 years for PhD)

Appendix 2: Learner Profile

Qualifications Level	7	8	9	10
Qualifications Name	3-year Bachelor's 4-year Bachelor's with or without honours 5-year Bachelor's	Postgraduate Certificate and Postgraduate Diploma	Master's	Doctoral
Learner Profile	At 3-year Bachelor level, a learner will have moderately specialized knowledge and skills leading to a career and higher responsibilities in a technical, professional or management fields with basic research abilities and a broad degree of autonomy. The learner will acquire a sense of responsibility for further professional or career development. S/he will also express an interest in pursuing further education while possessing a strong sense of ethics and professionalism aligned to national aspirations. S/he will be able to function in an environment of broad degree of autonomy.	At this level, a learner will demonstrate a moderately high mastery of knowledge in specific field/field of study/work exemplifying an understanding of strong theoretical knowledge, critical thinking, and creative and innovative skills. S/he will be able to generate new solutions to problems with light supervision and possess a strong sense of ethics aligned to national aspirations and global citizenship.	At this level, a learner will show a high mastery of knowledge in specific field/field of study/work and professional practice exemplifying strong theoretical knowledge, critical thinking, and creative and innovative skills. S/he will be able to generate new solutions to problems and conduct research under minimal supervision. S/he will possess a	At this level, a learner will demonstrate critical understanding and application skills, which are at the frontier of a field of study or professional practice. S/he will be able to independently conduct, manage, and lead research that contributes to substantial, new and original knowledge, and/or professional

Qualifications Level	7	8	9	10
	<p>At 4-year and 5-year Bachelor’s level, a learner will demonstrate an understanding of broad-based and coherent body of knowledge and skills for full professional work embedding moderately each skills, innovation and creativity in a focused area. S/he will be able to conduct research under supervision, function in an environment with minimal supervision and be a professional, resilient, ethical worker showing an understanding of culture, sustainability needs and an awareness of global citizenship aligned to national aspirations. S/he will be able to function in an environment of broad degree of autonomy.</p> <p><i>Note: The Bachelor’s is the lower- most qualification in this framework.</i></p>	<p>S/he will be able to function in an environment of broad degree of autonomy.</p>	<p>strong sense of ethics aligned to national aspirations and global citizenship. S/he will be able to function in an environment of broad degree of autonomy.</p>	<p>practice and global citizenship. S/he will possess a strong sense of ethics aligned to national aspirations and global citizenship. S/he will be able to function in an environment of broad degree of autonomy.</p> <p><i>Note: The doctoral degree is the higher- most qualification and it does not include Honorary doctorates.</i></p>

Appendix 3: Common Classification System for Subjects and Occupational Sectors for Bangladesh

Board field		Narrow field		Detailed field	
00	Generic Program and Qualification	001	Basic programs and qualifications	0011	Basic Programme and qualifications
		002	Literacy and numeracy	0021	Literacy and numeracy
		003	Personal skills and development	0031	Personal skills and development
01	Education	011	Education	0111	Education Science
				0112	Training for pre-school teachers
				0113	Teacher training without subject specialisation
				0114	Teacher training with subject specialisation
02	Arts and humanities	021		0211	Audio-visual techniques and media production
				0212	Fashion, interior and industrial design
				0213	Fine arts
				0214	Handicrafts
				0215	Music and performing arts
		022	Humanities (except languages)	0221	Religion and theology
				0222	History and archaeology
				0223	Philosophy and ethics

Board field		Narrow field		Detailed field	
		023	Languages	0231	Language acquisition
				0232	Literature and linguistics
03	Social sciences, journalism and information	031	Social and behavioural sciences	0311	Economics
				0312	Political sciences and civics
				0313	Psychology
				0314	Sociology and cultural studies
		032	Journalism and information	0321	Journalism and reporting
				0322	Library, information and archival studies
04	Business, administration and law	041	Business and administration	0411	Accounting and taxation
				0412	Finance, banking and insurance
				0413	Management and administration
				0414	Marketing and advertising
				0415	Secretarial and office work
				0416	Wholesale and retail sales
				0417	Work skills
		042	Law	0421	Law
05	Natural sciences, mathematics and statistics	051	Biological and related sciences	0511	Biology
				0512	Biochemistry
		052	Environment	0521	Environmental sciences
				0522	Natural environments and wildlife
		053	Physical sciences	0531	Chemistry
				0532	Earth sciences
				0533	Physics

Board field		Narrow field		Detailed field	
		054	Mathematics and statistics	0541	Mathematics
				0542	Statistics
06	Information and Communication Technologies (ICTs)	061	Information and Communication Technologies (ICTs)	0611	Computer use
				0612	Database and network design and administration
				0613	Software and applications development and analysis
07	Engineering, manufacturing and construction	071	Engineering and engineering trades	0711	Chemical engineering and processes
				0712	Environmental protection technology
				0713	Electricity and energy
				0714	Electronics and automation
				0715	Mechanics and metal trades
				0716	Motor vehicles, ships and aircraft
		072	Manufacturing and processing	0721	Food processing
				0722	Materials (glass, paper, plastic and wood)
				0723	Textiles (clothes, footwear and leather)
				0724	Mining and extraction
		073	Architecture and construction	0731	Architecture and town planning
				0732	Building and civil engineering
08	Agriculture, forestry, fisheries and veterinary	081	Agriculture	0811	Crop and livestock production
				0812	Horticulture

Board field		Narrow field		Detailed field	
		082	Forestry	0821	Forestry
		083	Fisheries	0831	Fisheries
		084	Veterinary	0841	Veterinary
09	Health and welfare	091	Health	0911	Dental studies
				0912	Medicine
				0913	Nursing and midwifery
				0914	Medical diagnostic and treatment technology
				0915	Therapy and rehabilitation
				0916	Pharmacy
				0917	Traditional and complementary medicine and therapy
		092	Welfare	09210	Care of the elderly and of disabled adults
				923	Child care and youth services
				0922	Social work and counseling
10	Services	101	Personal services	1011	Domestic services
				1012	Hair and beauty services
				1013	Hotel, restaurants and catering
				1014	Sports
				1015	Travel, tourism and leisure
		102	Hygiene and occupational health services	1021	Community sanitation
				1022	Occupational health and safety
		103	Security services	1031	Military and defence
				1032	Protection of persons and property
		104	Transport services	1041	Transport services

In addition to the detailed fields in the table above; "O", "8" and "9" may be used (see also the guidelines in Sections 7 and 8): "8" is used at the narrow and detailed field level when classifying inter-disciplinary or broad programmes and qualifications to the broad field in which the greater part of the intended learning time is spent (e.g. 0288 "Interdisciplinary programmes and qualifications involving arts and humanities"). "O" is used when no further information is available about the field than the field description at the next higher level of the classification hierarchy (i.e. at the broad field or at the narrow field level).

"9" is used at the detailed field level when classifying programmes and qualifications, which do not fit within any of the listed detailed fields.

"9999", "999" or "99" can be used in data collections, especially in surveys if the field is not known

Source :UNESCO (2012). International Standard Classification of Education ISCED 2011, UNESCO Institute of Statistics: Canada: Montreal



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