



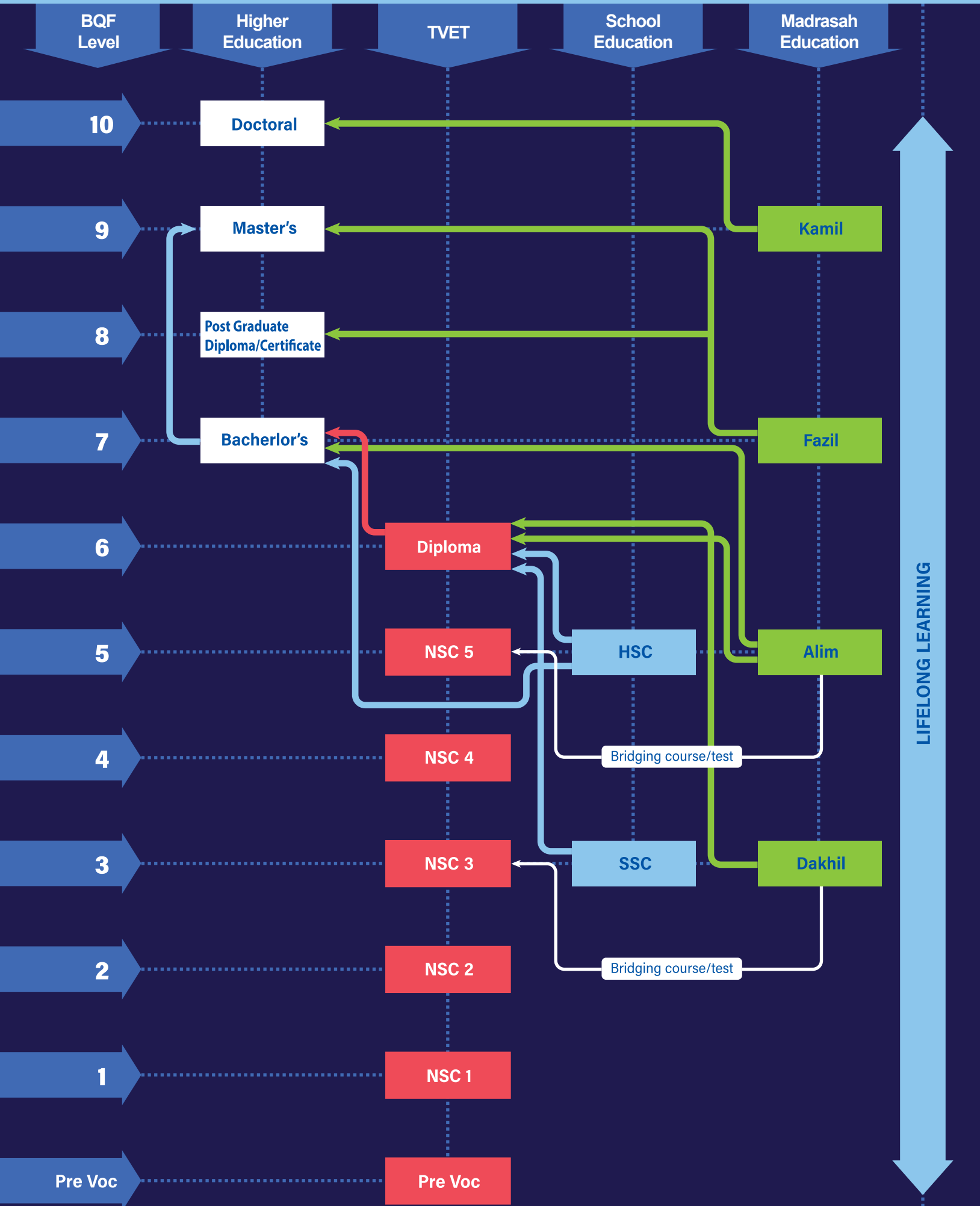
Bangladesh National Qualifications Framework (BNQF)

Part B: Higher Education
(Level 7-10)

January 2021

Bangladesh National Qualification Framework (BNQF)

Progression, Pathways and Equivalences



Structure of Bangladesh National Qualification Framework (BNQF)

BQF Level	Higher Education	Technical and Vocational Education	School and Madrasah Education
10	Doctoral (PhD) - NQFBHE 10 Doctoral by research Doctoral by mixed mode		
9	Master's - NQFBHE 9 Masters' by research Master's by mixed mode Master's by coursework		Kamil
8	Post Graduate Diploma/ Post Graduate Certificate NQFBHE 8		
7	Bachelor's - NQFBHE 7 Bachelor's 5 years Bachelor's with honours/ 4 years Bachelor's 3 years		Fazil
6		Diploma	
5		National Skills Certificate NSC 5	HSC/HSC (Voc)/Alim
4		National Skills Certificate NSC 4	
3		National Skills Certificate NSC 3	SSC/SSC(Voc)/Dakhil
2		National Skills Certificate NSC 2	
1		National Skills Certificate NSC 1	
Pre Voc		National Pre-vocation Certificate	

LIFELONG LEARNING

Bangladesh National Qualifications framework (BNQF)

PART B: Higher Education (Level 7-10)

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Foreword

The Bangladesh National Qualifications Framework (BNQF) Part-B for Higher Education (henceforth called the Framework) is an internationally benchmarked instrument for the development, classification and recognition of skills, knowledge and competencies along a continuum of agreed levels. This Framework describes the learning outcomes and volume of learning of students corresponding to each qualification.

The objectives of the Framework are to:

1. provide a national definition for higher education qualifications;
2. promote recognition, equivalency and consistency of qualifications between sectors;
3. clarify learner-entry and exit points and progression routes;
4. support national lifelong learning policy; and
5. enable national policy in developing human capital and graduate mobility through benchmarking.

BNQF Part- B for higher education sector is primarily applicable to all higher education institutions- general, technical and madrasah. This Framework starts from level 7 that corresponds to Bachelor's level with an entry level of HSC and equivalent and ends at level 10 which corresponds to Doctoral level. The descriptors are stated in a comprehensive manner against each of these levels. Minimum number of credits that should be earned by learners for each qualification is also given.

The Framework sets national classification of qualifications and levels of learning based on learning outcomes, and prescribes minimum academic load and nomenclatures. As such, programs will only be accredited if they comply with the Framework. It underpins the quality assurance system practiced by the Bangladesh Accreditation Council (BAC), acting as the custodian of the Framework. An accredited program/qualification indicates that the program is quality assured, and it has fully satisfied all the quality standards and is compliant to this Framework.

The BNQF Part- B for Higher Education is drawn up by the University Grants Commission of Bangladesh and will be implemented by the BAC, a statutory autonomous body responsible for governance and management of the Framework. This is in line with international norms. The BAC is required to coordinate policies across government agencies and ensure adequate involvement of all stakeholders in implementing the Framework.

The Framework promotes qualifications awarded by an approved higher education institution and identifies the knowledge, skills, competencies and values a graduate from this institution would have acquired.

Professor Kazi Shahidullah
Chairman
University Grants Commission of Bangladesh

Executive Summary

1. The Bangladesh National Qualifications Framework (BNQF) Part-B for higher education (henceforth called the Framework) is an internationally benchmarked instrument for the development, classification and recognition of skills, knowledge and competencies along a continuum of agreed levels.
2. Structured for developing, describing and systematizing relationships between qualifications, the Framework makes qualifications transparent for teachers, students, employers and the community at large. This 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.
3. The Framework provides for the comparability of post-higher secondary qualifications and shows how a learner can progress from one level to another.
4. The Framework provides the basis for improving the quality, accessibility, linkages as well as public and labor market recognition of qualifications both nationally and internationally.
5. The Framework also 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.
6. If implemented effectively, the Framework should increase the autonomy of education institutions. In such cases, the Framework can help make self-governing institutions more accountable in terms of the outcomes they are to achieve/have achieved.
7. The Framework provides the foundation for student-based learning/training system giving individual students options, and assigns them responsibility for organizing their respective education pathways.
8. 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, on-the-job through practical or industrial training, or through less formal means.
9. 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.
10. The Framework provides for:
 - a. a modular/unitized qualification system that allows for the accreditation or certification of a component part/s of the larger qualification;
 - b. assessment based on explicit and demonstrative criteria; and
 - c. recognition of prior formal and informal learning to support lifelong learning.

Abbreviations

APEL	Accredited Prior Experiential Learning
HEQEP	Higher Education Quality Enhancement Project
ICT	Information Communication and Technology
IQACs	Institutional Quality Assurance Cells
NQFBHE	National Qualifications Framework of Bangladesh for Higher Education
QA	Quality Assurance
TVET	Technical and Vocational Education and Training
UGC	University Grants Commission of Bangladesh

Introduction

The social, economic, and political development of a nation is highly dependent on the strength and quality of its education system. In higher education, one of the many global policies and related initiatives during the last three decades has been the framing of a national qualifications framework with the view to achieve quality higher education. The implementation of national qualifications frameworks improves learning skills and competencies of graduates, and supports national development goals and internationalisation agenda of the country. Two of the more fundamental issues for implementers of qualifications frameworks globally are the pace and the scale of the growth of new national level qualifications, particularly from the more robust private higher education sector. Thus, a generic yet comprehensive framework is necessary to cater for the ever-changing requirements within the higher education sector.

A national qualifications framework for higher education is vital in supporting the higher education system of the country as well as contributing to steady growth and quality assurance in higher education. However, to achieve its aims, the qualifications framework has to be a part of the wider higher education strategy of the nation. A qualifications framework cannot be built and its aims cannot be achieved in isolation from other developments in the higher education sector in specific and the education sector as a whole. The key to the successful implementation of the qualifications framework is the development and implementation of a broad and robust higher education system. To have such a system the following should be in place:

- policy coherence across different ministries;
- an enabling funding regime;
- innovative education and training institutions; and
- development of learning materials and professional development of teachers and staff.

Significant to the achievement of these is the development of genuine support and trust for the qualifications framework among the stakeholders.

The Bangladesh National Qualifications Framework (BNQF) Part-B for Higher Education

The BNQF Part-B for Higher Education (the Framework) is implemented by the Bangladesh Accreditation Council (henceforth called the Council), a statutory autonomous body, established by the Bangladesh Accreditation Council Act, 2017 responsible for governance and management of the Framework. This is in line with international norms. The Council is required to coordinate policies across government agencies and ensure adequate involvement of all stakeholders in implementing the Framework.

The Framework promotes qualifications awarded by an approved higher education institution and identifies the knowledge, skills, competencies and values a graduate from this institution would have acquired.

The Framework sets national classification of qualifications and levels of learning based on learning outcomes, and prescribes minimum academic load and nomenclatures. As such, programs will only be accredited if they comply with the Framework. It underpins the quality assurance system practised by the Council, acting as the custodian of the Framework. An accredited program/qualification indicates that the program is quality assured, and it has fully satisfied all the quality standards and is compliant to this Framework.

Background to the Framework

The Framework primarily brings together various best practices from qualifications that are in place in Bangladesh and globally. It aims to enhance the quality of higher education qualifications in Bangladesh and to ensure that the variations in instructions among higher education institutions are harmonized.

The development of the Framework was started during the last phase of implementation of the Higher Education Quality Enhancement Project (HEQEP) funded by the World Bank and Government of Bangladesh. By that time Bangladesh Accreditation Council Act was passed by the National Parliament. Accordingly University Grants Commission of Bangladesh finalized the draft with the consultation of Bangladesh Accreditation Council. Already many of the fundamental quality assurance principles were initiated. The Framework is the culmination of years of quality assurance and enhancement activities in the higher education sector in Bangladesh. The establishment of the Institutional Quality Assurance Cells (IQACs) in 69 universities provides a fertile ground for the establishment and implementation of this Framework.

Implementing the Framework

The Framework sets out an outcome-based higher education system based on qualifications standards that are rationalized, streamlined, and consolidated to cover all post-higher secondary qualifications in Bangladesh. It applies to quality assurance at 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 Transparency;
4. Curriculum;
5. Teaching Learning & Assessment;
6. Student Admission & Support Services;
7. Faculty & Professional Staff;
8. Facilities & Resources;
9. Research & Scholarly Activities; and
10. Monitoring, Evaluation & Continual Improvement

Each QA area/standard may contain sub-areas/sub-standards.

Scope of the Framework

The Framework is an instrument for development, classification and recognition of skills, knowledge, competencies and values of graduates at agreed benchmarked levels. It provides the basis for improving quality, accessibility, linkages and recognition of qualifications within

national and international boundaries. It also restructures existing qualifications and defines new ones by credit, based on student learning outcomes. It operates within the larger national higher education regulatory structure that consists of various universities' charters, Acts of Parliament, rules, regulations and higher education development or strategic plans. It compares different higher education qualifications and shows how students can progress from one level to another, within higher education sector. The Framework allows for articulation of academic qualifications and includes all activities that result in the recognition of learning. Examples of these activities are the development and organisation of policy on national qualifications, quality assurance, and assessment and qualification award processes. 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).

The Framework covers all post-higher secondary academic sectors. It includes all levels of qualifications from Bachelor's and Postgraduate qualifications. It also covers all learning achievements and pathways at the post-higher secondary level, such as adult education and lifelong learning pathways. Thus, the Framework provides a basis for improving the quality, accessibility and recognition of post-higher secondary qualifications, nationally and internationally.

The design of the Framework provides a unified system where all higher education and training provisions are within a single fit-for-purpose structure. The Framework is managed centrally and is supported by three other quality assurance documents:

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

The Self-Assessment Manual for Higher Education will address all ten QA Areas/Standards. Best Practice Manuals and Discipline Manuals will further support the Framework by providing specific guidelines in relation to QA Areas/Standards and program disciplines.

Objectives of the Framework

The objectives of the Framework are to:

1. provide a national definition for higher education qualifications;
2. promote recognition, equivalency and consistency of qualifications among different higher education sub-sectors;
3. clarify learner-entry and exit points and progression routes;
4. support national lifelong learning policy; and
5. enable national policy in developing human capital and graduate mobility through benchmarking.

Pillars of the Framework

The Framework has five primary pillars and these are:

1. a single system of levels and a common approach to describing all post-higher secondary qualifications;
2. a modular/unitized qualifications system based on standards and learning outcomes that are internationally benchmarked;
3. an assessment system based on clearly defined criteria;
4. a national system for credit accumulation and transfer; and
5. a common classification system for discipline and occupational sectors.

Definitions

1. **A Credit** means the unit of measuring students' academic load, usually based on 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.
2. **Accreditation** means a certification granted/awarded for a specific period of time by the Council after examining and assessing an academic program or higher education institution which provides programs in accordance with the quality assurance mechanism and the Framework.
3. **Accreditation of Prior (Certificated) Learning (APL)** means learning that is formally assessed and certified by a Bangladesh education/training institution or from outside.
4. **Accreditation of Prior Experiential Learning (APEL)** means the formal recognition of prior learning gained through experience, including paid or unpaid work, self-directed study or leisure pursuits.
5. **Articulation** means the process of comparing the content of courses from accredited programs for the purpose of credit transfer.
6. **Confidence Certificate** means the certificate granted by the Council, in accordance with the provisions of the Bangladesh Accreditation Council Act-2017 in favor 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.
7. **Credit hour** means 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 for industrial/workplace learning 2 hours per week for 14 weeks is equivalent to 1 credit.
8. **Graduating Credits** means the minimum number of credits required to complete a level of study leading to a degree.
9. **Higher Education Institution** means 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.
10. **Learning Outcomes** means what the learner must be able to do at the end of a course or a program of study.
11. **Level** means academic or related level.
12. **Lifelong Learning** means 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.
13. **Modular/Unitized System** means 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.
14. **National Qualifications Framework** means the Framework stated in the Clause 15 of Bangladesh Accreditation Council Act 2017.
15. **Notional Hours** means 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.
16. **Professional Education** means 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.

17. **Program** means academic activities based on a structurally designed curriculum.
18. **Qualification Level** means 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.
19. **Quality Assurance** means 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.
20. **Subject** means a branch of knowledge studied or taught in a school, college, or university. Sometimes it also means a course.
21. **Technical Education** means the instruction in the principles of science and arts and in the application of special branches of science and arts to specific industries or employments.
22. **The Act** means the Bangladesh Accreditation Council Act 2017.
23. **Vocational Education** means Technical and Vocational Education and Training (TVET) concerned with the acquisition of knowledge and skills for the world of work in a technical or vocational field.

Bangladesh Higher Education Qualifications System

The higher education qualifications system of Bangladesh will be an outcome-based student-centred system focusing on what a graduate can do rather than what s/he had learnt. 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 (See Table 1).

Table 1: Higher Education Qualifications Levels and Minimum Graduating Credits

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

Purpose, levels, titles, outcomes and credits define the qualifications in this Framework. Within a single qualification attached to a level, there may be different awards, which denote their modalities and design. Details and clarifications of the various levels are in the following appendices:

- Appendix 1: Higher Education Pathways
- Appendix 2: Summary Information on Qualifications Levels
- Appendix 3: Learner Profile
- Appendix 4: Learning Outcome Domains and Level Descriptors
- Appendix 5: Common Classification System for Subjects and Occupational Sectors for Bangladesh

Qualifications Levels

Level 10 - Doctoral

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 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 PhD 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.

Level 9 – Master's

Master's qualification is typically an extension of study undertaken at the Bachelor's level in similar or corresponding discipline or a specialisation 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 20 credits taught component and a research component involving a thesis/dissertation. A student's assessment is based on his/her performance in both the 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.

A Master's degree involves significantly specialized knowledge in a specific area or discipline, which is current, and at the forefront of knowledge. Critical, systematic and creative thinking skills, research practice or advance professional practice, interpersonal skills with leadership and managerial skills are critical competencies particularly within multicultural or transnational work and learning environments. The learners should be able to inform or advise, improve innovations, and share views on contemporary and new issues in related fields or professional practice to relevant audience. While the above competencies are expected as

outcomes of a Master's study, the differences generally are in the output, in the form of substantial thesis, dissertation, long case study, project report, new technical solutions/practices and art forms.

Level 8 - Post Graduate Certificate and Post Graduate Diploma

These two qualifications 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 7- Bachelor's

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 fulfil a minimum 160 graduating credits requirement, 4-year Bachelor's with or without honours must fulfil a minimum 140 graduating credits requirement and 3-year Bachelors must fulfil a minimum 120 graduating credits requirement.

5-year Bachelor's and 4-year Bachelor's with or without honours involve broad, comprehensive knowledge, strong intellectual and problem solving skills, various work competencies and professional practices. They also require graduates to have effective interpersonal, communication and research skills in a specialized or multi/interdisciplinary field of study. Graduates are required to have leadership and managerial skills to lead, manage and take responsibilities in organisations within a multicultural or transnational setting. The Bachelor in recognized field also leads to professional practice.

3-year Bachelor's involves broad, comprehensive knowledge, intellectual and problem-solving skills, various work competencies and effective interpersonal and communication skills. It also requires graduates to have some research skills in semi-specialised or multi/interdisciplinary field of study, and leadership and managerial skills to manage and take responsibilities in organisations within a multicultural or transnational setting.

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.

Pathways for Individuals and Lifelong Learning

The Framework generates various alternative pathways with entry and exit points that recognize individual achievements. It provides links at every qualification level using a combination of credits and learning outcome or competency measurement. This will enable individuals to have clear progression paths for better life opportunities through higher qualifications. Effectively this recognises both APEL and APL based on the principle that every person should have lifelong learning opportunities to acquire the knowledge and skills that s/he needs in order to fulfil her/his aspirations and consequently contribute to the nation and society. Lifelong learning should not be limited to the attainment of knowledge, skills and other common competencies. It should encompass a larger panel of expertise with emerging skills deemed critical for the individual. The provision of Post Graduate Certificate and

Postgraduate Diploma at level 8 is a direct reference to the presence of and systemic support for lifelong learning mechanism in the Framework.

Entry pathways from Level 6 (Diploma) to Level 7

From Level 6 to Level 7 as well as from various years of Level 6 to various years of Level 7, entry requirement will be considered by taking into account lifelong learning, RPL, credit transfer, credit waiver, bridging programs, and other systems of validation and recognition.

Learning Outcomes

The Framework uses an outcome-based system, which focuses on learning outcomes of a student. Learning outcomes are statements on what students should learn and be assessed for. They reflect what a student can do upon the completion of a period of study, as in a course, semester, year or a program (qualification or a part of it). This shifts the focus of education from a teacher-centred to a student-centred system.

The levels in the Framework, its domains of specific learning outcomes and credits are external standards and guide. Outcomes are intended to narrow the gap between the worlds of education and work using generic learning outcomes. Learning outcomes are individually prepared and seen as a possible separator between components of a course or between courses. Based on an agreed competency level, these outcomes support the growth of continuous development for more knowledge and understanding, better cognitive and personal skills and personal and professional development. Broadly, learners are expected to be able to continue to perform to an improved level in their working life and further education (lifelong learning).

Learning Outcome Domains

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. Programs 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 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, Co-ordinating with Others, Emotional Intelligence, Judgement 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 in Appendix 4. The implementation of these four Learning Outcome Domains will help 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.

i. *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.

ii. *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 categorizes social skills as the ability to coordinate, instruct, negotiate, persuade, be service oriented and have people and environment perceptiveness.

iii. *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.

iv. *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 program conforms to the Framework by fulfilling the domains identified through clear learning outcomes at the program and course levels. The Level Descriptors (in Appendix 4) 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.

Level Descriptors

Each level has a generic statement, which describes the learning achievement at a particular level (see Appendix 4). These Level Descriptors work as a guide to writing learning outcomes, supporting assessments and providing a common understanding of the qualifications. They function as the comparative instrument for programs from different disciplines, and are utilised to benchmark national and foreign qualifications and gauge equivalency. These Level Descriptors are usually generic in nature and provide for an overarching effect with the intention to fit all types of courses and disciplines in a qualification level. The Program Discipline Manuals will provide greater specificity on Level Descriptors for individual field of study. Level Descriptors will also function as the reference point for assessing prior experiential learning and are largely non-prescriptive in nature. Significantly, the Level Descriptors will provide the expected capabilities/competencies of learners upon the successful completion of a level of study.

Credit System

A credit system plays an increasingly important role in higher education at national and international levels. 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 utilised 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 the purposes of career or educational advancement. For the purpose of 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	Notional 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 for 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) in order to achieve the minimum graduating credits. Thus, if a course has 130 as its minimum graduating credits, a student must take and successfully complete 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, examiner and timely and systematic feedback to the students.

A National System of Credit Accumulation and Transfer

The Framework supports a national system of credit accumulation and transfer. A credit accumulation and transfer system promote 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 movement of graduates between sectors and sub-sectors and programs by providing vertical and parallel educational pathways (See Appendices 1 and 2).

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 for 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 5. 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.

Educational Pathways

The new post-higher secondary pathway under this Framework provides opportunities for intended learners to plan and achieve their goals and academic destinations through establishing clear milestones. Achievements are no longer measured only by the number of years but rather by the completion of level learning outcomes and meeting minimum graduating credits for progression.

Articulation and Recognition of Prior Learning

Articulation recognises learning that takes place in a formal classroom and provides advanced standing or exemptions. The advanced standing is provided by course, semester or year of study exemptions, depending on the institution's own quality measures.

Where a large part of the population had been excluded from the formal education system or where there was a high number of school dropouts, recognition of non-formally acquired skills is important. Facilitating integration into the formal system through accreditation of prior experiential learning requires a structured mechanism, which will be developed as the larger part of the higher education quality system.

This framework may be reviewed/revised and updated based on the needs of time subject to approval of the Government

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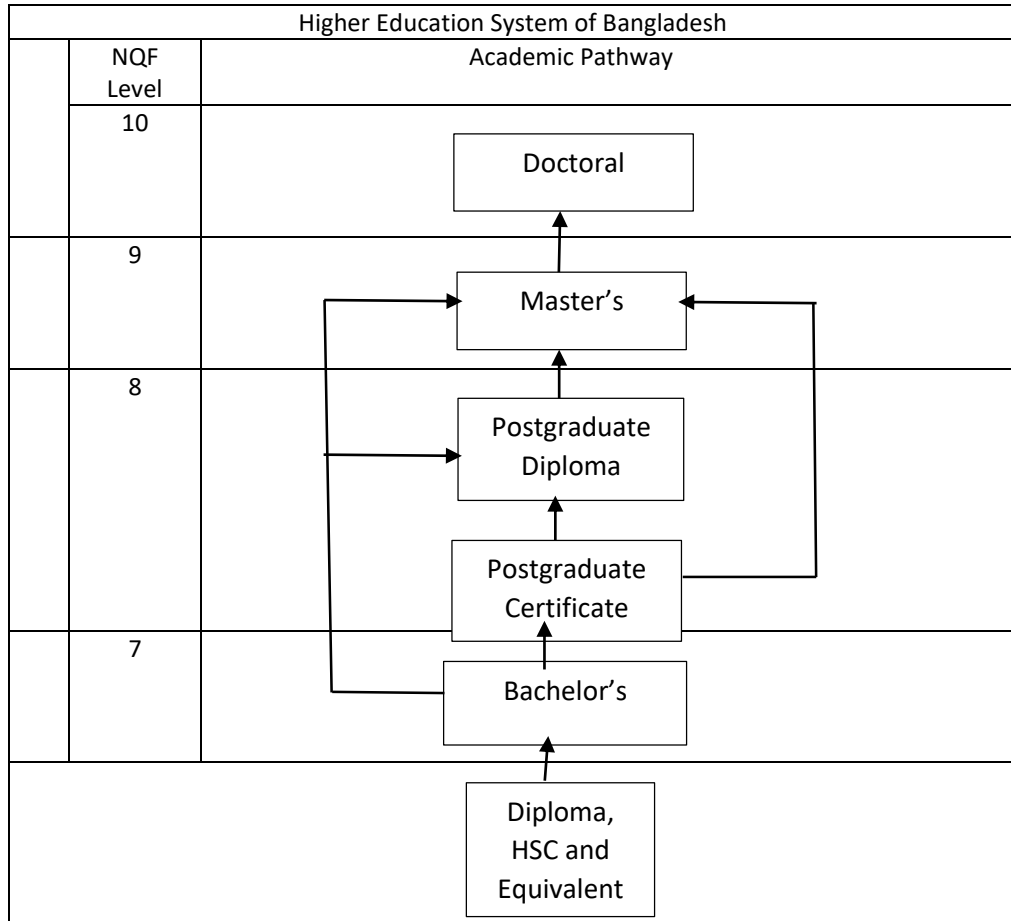
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Part B: Appendices

Appendix 1: Higher Education System of Bangladesh



Appendix 2: Summary Information on Qualifications Levels

Qualifications Level	7	8	9	10
Qualifications Framework Nomenclature	BACHELOR'S	POSTGRADUATE DIPLOMA AND 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 • Mixed Mode - 3 years • Research – eligibility and duration will be determined by the respective University. 	2 modes in full time <ul style="list-style-type: none"> • Mixed Mode – 3 years • Research – 3 years
Minimum Graduating Credits (based on 40 notional hours/credit)	<ul style="list-style-type: none"> • 5-year (160 credits) • 4-year (140 credits) • 3-year (120 credits) 	<ul style="list-style-type: none"> • PG Certificate – 30 credits • PG Diploma – 40 credits 	<ul style="list-style-type: none"> • Taught Course – 40 credits • Mixed Mode – 20 credits + Dissertation • Research - Thesis only 	<ul style="list-style-type: none"> • Mixed Mode – 30 credits + Thesis • Research - Thesis only
Academic Pathway	<ul style="list-style-type: none"> • Level 8 with relevant post-graduation work experience of 2 years or equivalent determined by the university • Level 9 with relevant post-graduation work experience of 2 years or equivalent determined by the university 	<ul style="list-style-type: none"> • Level 9 	Level 10	N/A

*(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)

Appendix3: Learner Profile

Qualifications Level	7	8	9	10
Qualifications Name	<p>3-year Bachelor's</p> <p>4-year Bachelor's with or without honours</p> <p>5-year Bachelor's</p>	<p>Postgraduate Certificate and Postgraduate Diploma</p>	<p>Master's</p>	<p>Doctoral</p>
Learner Profile	<p>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.</p> <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 high research 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>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. S/he will be able to function in an environment of broad degree of autonomy.</p>	<p>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 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>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 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 4: Learning Outcome Domains and Level Descriptors

Level 7: Bachelor's

A learner successfully completing programmes at this level will be able to:

Learning Outcome Domains	Level Descriptors
<p style="text-align: center;">Fundamental Skills</p>	<p><i>3-year Bachelor's</i></p> <ol style="list-style-type: none"> 1. demonstrate an understanding of a broad range of moderately complex, technical and theoretical knowledge to address varied, complex task/work; 2. identify, interpret, apply and evaluate concepts, theories and skills within a defined context of a subject area/field of study, discipline or work; 3. 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; 4. supervise practices and process operation in his/her respected field of specialisation; 5. review and make adjustments to operations under minimal supervision in his/her field; and 6. display advanced digital literacy which is adequate to perform complex task. <p><i>4-year and 5-year Bachelor's</i></p> <ol style="list-style-type: none"> 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; 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.
<p style="text-align: center;">Social Skills</p>	<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.

Appendix 4: Learning Outcome Domains and Level Descriptors

	<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 organisational 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; 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.
Personal Skills	<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

Appendix 4: Learning Outcome Domains and Level Descriptors

	<p>3. be a responsible and an ethical member who substantially contributes to the society.</p> <p><i>4-year and 5-year Bachelor's</i></p> <p>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 4. contribute significantly to the society.</p>
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Level 8: Postgraduate Certificate and Postgraduate Diploma

A learner successfully completing programmes at this level will be able to:

Learning Outcome Domains	Level Descriptors
Fundamental Skills	<p>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;</p> <p>2. exhibit intellectual independence in the deployment of knowledge within specific field by applying critical, analytical and evaluation skills;</p> <p>3. manage and solve complex application and unpredictable issues with creative and innovative solution in the field of study or work place/practice;</p> <p>4. describe and comment upon particular aspects of current research, or scholarship, in the field of study; and</p> <p>5. use a broad range of information, media and technology applications to support study and/or work.</p>
Social Skills	<p>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;</p> <p>2. produce clear, well structured, detailed text on complex subjects, showing controlled use of organisational patterns, connectors and cohesive devices in advanced proficiency level of Bangla and English;</p> <p>3. work collaboratively with different people in learning and working communities; and</p> <p>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.</p>
Thinking Skills	<p>1. exercise significant leadership, professionalism in managing responsibilities within broad organizational parameters; and</p> <p>2. produce clear, well structured, detailed text on complex subjects in solving problems, showing controlled use of organisational patterns, connectors and cohesive devices in advanced proficiency level of Bangla and English.</p>
Personal Skills	<p>1. engage in self-directed lifelong learning effectively and demonstrate entrepreneurial skills;</p> <p>2. demonstrate a relatively high degree of social, professional, environmental and ethical practice/ values; and</p> <p>3. demonstrate appreciation of cultural diversity in Bangladesh in contributing to society.</p>

Appendix 4: Learning Outcome Domains and Level Descriptors

Level 9: Master's

A learner successfully completing programmes at this level will be able to:

Learning Outcome Domains	Level Descriptors
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.
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.

Appendix 4: Learning Outcome Domains and Level Descriptors

Level 10: Doctoral

A learner successfully completing programmes at this level will be able to:

Learning Outcome Domains	Level Descriptors
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. analyse, evaluate and synthesise 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.
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 the 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.

Appendix 5: Common Classification System for Subjects and Occupational Sectors for Bangladesh

Broad 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 0112 0113 0114	Education Science Training for pre-school teachers Teacher training without subject specialisation Teacher training with subject specialisation
02	Arts and humanities	021		0211 0212 0213 0214 0215	Audio-visual techniques and media production Fashion, interior and industrial design Fine arts Handicrafts Music and performing arts
		022	Humanities (except languages)	0221 0222 0223	Religion and theology History and archaeology Philosophy and ethics
		023	Languages	0231 0232	Language acquisition Literature and linguistics
03	Social sciences, journalism and information	031	Social and behavioural sciences	0311 0312 0313 0314	Economics Political sciences and civics Psychology Sociology and cultural studies
		032	Journalism and information	0321 0322	Journalism and reporting Library, information and archival studies
04	Business, administration and law	041	Business and administration	0411 0412 0413 0414 0415 0416 0417	Accounting and taxation Finance, banking and insurance Management and administration Marketing and advertising Secretarial and office work Wholesale and retail sales Work skills
		042	Law	0421	Law
05	Natural sciences, mathematics and statistics	051	Biological and related sciences	0511 0512	Biology Biochemistry
		052	Environment	0521 0522	Environmental sciences Natural environments and wildlife
		053	Physical sciences	0531 0532 0533	Chemistry Earth sciences Physics
		054	Mathematics and statistics	0541 0542	Mathematics Statistics
06	Information and Communication Technologies (ICTs)	061	Information and Communication Technologies (ICTs)	0611 0612 0613	Computer use Database and network design and administration Software and applications development and analysis

Appendix 5: Common Classification System for Subjects and Occupational Sectors for Bangladesh

Broad field		Narrow field		Detailed field	
07	Engineering, manufacturing and construction	071	Engineering and engineering trades	0711 0712 0713 0714 0715 0716	Chemical engineering and processes Environmental protection technology Electricity and energy Electronics and automation Mechanics and metal trades Motor vehicles, ships and aircraft
		072	Manufacturing and processing	0721 0722 0723 0724	Food processing Materials (glass, paper, plastic and wood) Textiles (clothes, footwear and leather) Mining and extraction
		073	Architecture and construction	0731 0732	Architecture and town planning Building and civil engineering
08	Agriculture, forestry, fisheries and veterinary	081	Agriculture	0811 0812	Crop and livestock production Horticulture
		082	Forestry	0821	Forestry
		083	Fisheries	0831	Fisheries
		084	Veterinary	0841	Veterinary
09	Health and welfare	091	Health	0911 0912 0913 0914 0915 0916 0917	Dental studies Medicine Nursing and midwifery Medical diagnostic and treatment technology Therapy and rehabilitation Pharmacy Traditional and complementary medicine and therapy
		092	Welfare	0921 0923 0922	Care of the elderly and of disabled adults Child care and youth services Social work and counseling
10	Services	101	Personal services	1011 1012 1013 1014 1015	Domestic services Hair and beauty services Hotel, restaurants and catering Sports Travel, tourism and leisure
		102	Hygiene and occupational health services	1021 1022	Community sanitation Occupational health and safety
		103	Security services	1031 1032	Military and defence Protection of persons and property
		104	Transport services	1041	Transport services
<p>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</p>					

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