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Himachal Pradesh University, Summer-Hill, Shimla-5.
(NAAC Accredited "A" Grade University)
Academic Branch

Dated: 26 DEC 2024

To

1. The Dean of Studies
H.P.U. Shimla-5.
2. The Deans of all Faculty,
H.P.U. Shimla-5.
3. The Chairmen/ Chairpersons/Directors of the Teaching Departments
H.P.U. Shimla-5.
4. All the Principal Govt/Non-Govt. Colleges affiliated with this University.
5. The Controller of Examination/ACOE, H.P.University, Shimla-5.

Subject: UGC Guidelines for National Credit Framework (NCrF) dated April , 2023.

Sir/ Madam

The Vice-Chancellor on the recommendations of the NEP Committee constituted vide Notification No. 1-10/2022 (NEP)-HPU (DS) dated 03-04-2024 and the meeting of the said committee held on 27- 11-2024 vide item No. 2 has been pleased to approve and notify the above mentioned UGC Guidelines i.e. National Credit Framework (NCrF) dated April, 2023 copy consisting 99 pages which may kindly be downloaded from website www.hpuniv.ac.in of this University for your perusal and necessary action please.

Yours faithfully,

[Signature]
26/12/2024
Registrar
H.P.U. Shimla-5.

Dated: 26 DEC 2024

Endst. No.

Copy for information and further necessary action to:-

1. All the members mentioned above.
2. The Web Admin, H.P.U. Shimla-5 with the request to kindly upload the letter alongwith its enclosures in the University website immediately.
3. The SPS to Vice-Chancellor/Pro-Vice-Chancellor/SPS to Dean of Studies/SPS to Registrar
H.P.U. Shimla-5.

Sd/-
Registrar



NATIONAL CREDIT FRAMEWORK (NCrF)

The Report of the High-Level Committee
Comprising Members
from
UGC, AICTE, NCVET, DoSEL & DoHE, MoE,
MSDE, CBSE, NCERT, NIOS and DGT

April 2023

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The Report on **National Credit Framework (NCrF)** jointly developed by the High-Level Committee comprising of members from University Grant Commission (UGC), All India Council for Technical Education (AICTE), National Council for Vocational Education and Training (NCVET), National Council for Educational Research and Training (NCERT), Department of School Education and Literacy (DoSEL) & Department of Higher Education (DoHE), Ministry of Education (MoE), Ministry of Skill Development and Entrepreneurship (MSDE), Central Board of Secondary Education (CBSE), National Institute of Open Schooling (NIOS) and Directorate General of Training (DGT)



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FOREWORD



Educational opportunities and effective skilling are the driving force of economic growth and social development for any country. India is the world's youngest nation in terms of youth population with a burgeoning economy. The benefits of these strengths can be evenly spread across the country only when the youth is well educated and appropriately skilled. Quality education that meets the need of the industry and enhances employment, therefore, is a pressing need. Emphasizing that there should be no hard separation among curricular and extracurricular or co-curricular or between vocational or academic streams, the National Education Policy (NEP) 2020 stressed upon the need for vocational education through integration and mainstreaming of vocational education with general education. This calls for re-engineering of education system.

The High-Level Committee constituted by the Government to formulate a unified credit accumulation & transfer framework for both vocational and general education, from school education to higher education, has developed "National Credit Framework" encompassing three main components such as credits earned from academic grade, skill programme and relevant experience. This framework will enable establishing equivalence and mobility between general education and vocational education so that lifelong learning, recognition of prior learning, multiple entry and exit, and continuous professional development are encouraged in the system.

I congratulate the High-Level Committee under the chairmanship of Dr N. S. Kalsi, Chairman, NCVET for taking on this challenging task of drafting the "National Credit Framework". I am sure this framework will make studies and courses more transparent, flexible and provide skilled manpower for India's economy to achieve inclusive and equitable growth.

A handwritten signature in black ink, reading "M. Jagadesh Kumar".

Prof. M. Jagadesh Kumar

Chairman
University Grants Commission

PREFACE



National Education Policy (NEP), 2020, envisioned under the dynamic leadership of our **Hon'ble Prime Minister, Shri Narendra Modi**, reflects **the aspiration** of the **students, teachers and citizens** of the country. The NEP is rooted in **Bhartiya** and is in sync with the culture and heritage of our nation while assimilating global knowledge and perspective.

The National Education Policy 2020, **lays emphasis on of making the education more holistic and effective by integration of general (academic) and vocational education** while ensuring the **vertical and horizontal mobility of students and learners** between academic and vocational streams. Built on the **foundational pillars of access, equity, quality, affordability and accountability**, NEP strives to **transform India into a vibrant knowledge society** to become a global knowledge superpower (*Vishwaguru*).

To realise the intent and objectives of National Education Policy 2020, the **National Credit Framework (NCrF)**, has been developed **under the guidance of Shri Dharmendra Pradhan, Hon'ble Minister of Education and Minister of Skill Development & Entrepreneurship** jointly by a **High Level Committee** constituted by the Government with members from UGC, AICTE, NCVET, NIOS, CBSE, NCERT, Department of School Education and Learning & Department of Higher Education, Ministry of Education, DGT, and Ministry of Skill Development. NCrF is a **comprehensive credit framework** encompassing elementary, school, higher, and vocational education & training, **integrating creditization of learning** on in various dimensions i.e. **academics, vocational skills and Experiential learning including relevant experience and proficiency/ professional levels acquired**.

The NCrF provides for **creditization of all learning and assignment, accumulation, storage, transfer & redemption of credits, subject to assessment; removes distinction and establishes academic equivalence** between vocational & general education while enabling **mobility** within & between them, and its operationalization through the Academic Bank of Credits (ABC).

The NCrF **relies on an integrating approach** across the **education and skilling frameworks enabling** the education and skilling ecosystem **in implementing** one single credit-based framework in line with the vision of National Education Policy 2020. While catering to **multi-disciplinarity and holistic education** across sciences, social sciences, arts, humanities and sports, NCrF **enables multiple entry - multiple exit (ME-ME) pathways** in general & vocational education; **ensures flexibility for students** to choose their **learning trajectories and career choices**, including option for **mid-way course correction or modification**, as per their talents and interests.

NCrF also recognizes blended and online learning, promoting extensive use of technology in teaching and learning, especially in vocational education, training and skilling. Use of technology in turn helps in removing barriers while improving access and opportunities for Divyangs.

Implementation of NCrF will promote Internationalization of education by enabling equivalence of courses and qualifications, provisions of credit transfer, and encourage international exchange of students and faculty with foreign universities.

NCrF has enabled special provisions for educational acceleration for gifted students with special learning abilities as also for Recognition of Prior Learning for workforce those have acquired the knowledge and skills informally, through family inheritance, work experience, traditional or other methods, thereby allowing them progression and mobility into the formal education and learning ecosystem.

The NCrF will enable transformation of India **by providing high quality education opportunities integrated with effective skills** to reap the demographic dividend making education and skilling truly **aspirational for our youth.**

The NCrF is an enabling framework and may not be construed as a regulation. It empowers, facilitates and allows the stakeholders while giving them the required flexibility for catering to their specific academic and skilling needs. National Credit Framework (NCrF) shall act as one single **broad enabling frameworks** for all regulatory organizations, and autonomous institutions who may, wherever required, **notify their detailed implementation guidelines** within this Framework. I am confident that NCrF will become a game changer by mainstreaming the skill education and experiential learning including relevant experience & proficiency/professional levels acquired, making this integral part of the education system thereby ensuring that the youth is provided with educational opportunities with quality skills for better employability.

As a part of this framework formulation and finalisation process extensive consultations have been carried out with various stakeholders including the presentations & discussions on the contours of National Credit Framework with IITs, IIMs, IIITs, NITs, IISERs, INIs, Universities, including skills universities and technical universities, HEIs, Engineering Colleges, School Boards, Technical Education Boards, state departments of education, higher education, technical education and skill education among many others. The draft national credit framework was given wide publicity and also put up for public consultation for more than 40 days and all comments and suggestions received have been duly analysed and, wherever necessary, have been incorporated in the document.

I am thankful to all the esteemed members of the High-Level Committee namely Shri Atul Kumar Tiwari, now Secretary, Ministry of Skill Development & Entrepreneurship, Shri Manoj Ahuja, the then

Chairperson CBSE, Shri Vineet Joshi, Additional Secretary, DoHE & Director General NTA, Shri. Maneesh Garg, Joint Secretary, DoSEL, MoE, Ms. Nidhi Chhibber, Chairperson CBSE, Prof. M.P Poonia, Vice- Chairman, AICTE, Prof. Rajnish Jain, Secretary, UGC, Prof. (Dr.) Saroj Sharma, Chairperson, NIOS, Dr. Dinesh Prasad Saklani, Director, NCERT, Dr Sridhar Srivastava, officiating Director, NCERT and Dr. Biswajit Saha, Director (Training & Skill Education), CBSE, Member-Secretary of the committee for working relentlessly on this framework, providing their valuable inputs, insights and support in bringing out this report. I acknowledge their invaluable contribution in formulation of this framework in such a short timeframe.

This document would have not been possible without the valuable guidance and unstinted support of Prof. Jagadesh Kumar, Chairman, UGC and Prof. Anil Sahasrabudhe, the then Chairman, AICTE. I whole heartedly thank them. I am also thankful for the valuable support of Sh. Rajesh Aggarwal, the then Secretary, Ministry of Skill Development and Entrepreneurship, Sh. Sanjay Murthy, Secretary Department of Higher Education, Smt. Anita Karwal, Secretary Department of School Education and Learning, Ministry of Education in bringing out this policy. I would also like to thank Dr. Vinita Aggarwal, Dr. Neena Pahuja the Executive Members, Lt Col Gunjan Chowdhary, Director, Ms. Sarika Dixit and Mr. Shourya Sangam, consultants at NCVET for their persistent help and assistance in preparing this document.

My best wishes to all the stakeholders for effective & efficient implementation of this much awaited framework which will be a game changer for the education and skilling landscape of the country for not only country's growth but also making education and skilling aspirational for our youth and making India the **skill capital of the world** by our global recognition in the education and skilling domain.

Dr. Nirmaljeet Singh Kalsi, IAS (Retd.)

Chairperson of NCVET &
High-Level Committee

ABBREVIATIONS

AICTE	-	All India Institute of Technical Education
CBCS	-	Choice Based Credit System
CBSE	-	Central Board of Secondary Education
CITS	-	Craftsman Instructor Training Scheme
CTS	-	Craftsman Training Scheme
DGT	-	Directorate General of Training
HEIs	-	Higher Education Institutes
MSDE	-	Ministry of Skill Development and Entrepreneurship
NAC	-	National Apprenticeship Certificate
NCERT	-	National Council for Educational Research and Training
NCrF	-	National Credit Framework
NCVET	-	National Council for Vocational Education and Training
NEP	-	National Education Policy
NSEQF	-	National School Education Qualification Framework
NHEQF	-	National Higher Education Qualification Framework
NIOS	-	National Institute of Open Schooling
NSQF	-	National Skill Qualifications Framework
NTA	-	National Testing Agency
NTC	-	National Trade Certificate
SAMVAY	-	Skill Assessment Matrix for Vocational Advancement of Youth
SDG	-	Sustainable Development Goals
UGC	-	University Grants Commission
VET	-	Vocational Education and Training

CONSTITUTION OF COMMITTEE ON CREDIT FRAMEWORK

The Government of India Constituted a High-Level Committee, vide order dated 18th November 2021, to develop a National Credit Accumulation & Transfer Framework for both Vocational and General Education. The Credit Framework would enable the integration of academic and vocational domains/components of learning and ensure flexibility and mobility between the two. The composition of the Committee is as follows:

1.	Dr. Nirmaljeet Singh Kalsi, Chairperson, NCVET	Chairman
2.	Shri Manoj Ahuja, Chairman, CBSE	Member
3.	Shri Atul Kumar Tiwari, Addl Secretary, MSDE	Member
4.	Shri Vineet Joshi Addl Secretary DoHE & Director General NTA, Chairman, CBSE	Member
5.	Smt. Neelam Shammi Rao, Addl Secretary & DG, DGT, MSDE	Member
6.	Shri. Maneesh Garg, Joint Secretary, DoSEL, MoE	Member
7.	Prof. Rajnish Jain, Secretary, UGC	Member
8.	Prof. (Dr.) Saroj Sharma, Chairperson, NIOS	Member
9.	Prof. M.P Poonia, Vice- Chairman, AICTE	Member
10.	Dr Sridhar Srivastava, Director, NCERT	Member
11.	Dr. Biswajit Saha, Director (Training & Skill Education), CBSE	Member-Secretary

TERMS OF REFERENCE OF THE HIGH LEVEL COMMITTEE

- i. Assign credit value to academic and skill courses taught at various levels
 - a. School education,
 - b. Higher Education,
 - c. Skilling Ecosystem, Vocational Training and Education
 - d. Distance/ Blended Learning, etc.
- ii. Identify ways of Credit Accumulation for:
 - a. School Education
 - b. Higher Education.
 - c. Vocational education and Training
- iii. Propose Credit Transfer Model for:
 - a. Vocational and School Education and vice-versa
 - b. Vocational and Higher Education and vice-versa
- iv. Establish academic equivalence between Vocational and General Education at all levels.
- v. Develop the unified credit framework for integration of vocational education and training/ skilling into school and higher education in line with the National Education Policy 2020 to enable vertical and horizontal mobility between education and skilling
- vi. Identify the mechanism for accumulation and storage of credits through a Credit Bank
- vii. Any other matter relating to the development and functioning of the unified credit framework

The Final Report has agreement and signature of all the esteemed members of the High level Committee.

NATIONAL CREDIT FRAMEWORK

We, the undersigned members of the High Level Committee constituted by Ministry of Skill Development and Entrepreneurship (MSDE) vide order no Coord-11/01/2021-P&C dated 18th November 2021 on the National Credit Accumulation and Transfer Framework for both Vocational and General Education, hereby submit the final Report of National Credit Framework (NCrF):

S.No.	Name and Designation		Signature with Date
i.	Dr. Nirmaljeet Singh Kalsi, Chairperson, National Council of Vocational Education and Training (NCVET)	Chairman	
ii.	Shri Atul Kumar Tiwari, Secretary, Ministry of Skill Development and Entrepreneurship (MSDE) (Then Addl Secy MSDE)	Member	
iii.	Shri Vineet Joshi, AS, DoHE, MoE & Director General NTA	Member	
iv.	Ms. Nidhi Chibber, Chairperson, CBSE	Member	
v.	Shri. Maneesh Garg, Joint Secretary, DoSEL, MoE	Member	Transferred out
vi.	Smt. Trishaljit Sethi, Director General, DGT, MSDE	Member	
vii.	Prof. M.P Paonia, Vice-Chairman, AICTE	Member	
viii.	Prof. Rajnish Jain, Secretary, UGC	Member	
ix.	Dr. Dinesh Prasad Saklani, Director, NCERT	Member	
x.	Prof. (Dr.) Saroj Sharma, Chairperson, NIOS	Member	
xi.	Dr. Biswajit Saha, Director (Training & Skill Education), CBSE	Member - Secretary	

THE NATIONAL CREDIT FRAMEWORK: EXECUTIVE SUMMARY

Manifesting the National Education Policy 2020

The National Education Policy 2020 envisions making education more holistic and effective and to lay emphasis on the integration of general (academic) education, vocational education and experiential learning including relevant experience and proficiency/ professional levels acquired. To fulfil this vision, it is imperative to establish and formalize a national credit accumulation and transfer system which will **integrate both general & vocational education** while ensuring mobility of students/ learners within and between the two systems.

The **National Credit Framework (NCrF)** has been jointly developed by UGC, AICTE, NCVET, NIOS, CBSE, NCERT, DGT, Ministry of Education, and Ministry of Skill Development to achieve the vision and intent of NEP. NCrF is a comprehensive framework encompassing elementary, school, higher, and vocational education & training, integrating **learning on all dimensions i.e. academics, vocational skills and experiential learning including relevant experience and proficiency/ professional levels acquired**.

The **National Credit Framework (NCrF)** is an **inclusive one single meta framework** to seamlessly integrate the credits earned through school education, higher education and vocational & skill education. For creditization and integration of all learning, the National Credit Framework (NCrF) shall encompass the qualification frameworks for higher education, vocational & skill education and school education, namely National Higher Education Qualification Framework (NHEQF), National Skills Qualification Framework (NSQF) and **National Curriculum Framework (NCF)/ National School Education Qualification Framework (NSEQF)** respectively.

The implementation of **NCrF would be a game changer** in realising the vision and intent of NEP by ensuring **flexibility & mobility** and **establishing academic equivalence** between general and vocational education **while removing distinction between them**. Such integration shall open numerous options for further progression of students and inter-mingling of school & higher education with vocational education & experiential learning including relevant experience and proficiency/ professional levels acquired, to further enable entry and re-entry from vocational stream to general education and vice-versa, thus mainstreaming the vocational education and skilling.

The **National Credit Framework (NCrF)** enables for broad based, **multi-disciplinary, holistic education**, allowing **imaginative and need based curricular structures** and encourages **creative combinations of subjects and disciplines**. The Framework has been built on the strength of existing regulations, guidelines and qualification frameworks of UGC, AICTE, NCVET, NCERT, CBSE & NIOS as

also the credit system being followed by IITs, IIMs, NITs and other INIs so that the options for Multiple Entry-Multiple Exit (ME-ME) are available, accessible and applicable across the higher education, school education and vocational education.

The National Credit Framework (NCrF) provides **for Assignment, Accumulation, Storage, Transfer & Redemption of Credits**. It paves way for **multi-disciplinary education** and **empowers students** through **flexibility in choice of courses** for choosing their **own learning trajectories and programmes**, and thereby choose their paths in life with **appropriate career choices**, including **option for mid-way course corrections**, according to their talents and interests.

The NCrF fully enables the students with opportunities to catch up and re-enter education ecosystem in case they have fallen behind or dropped out at any stage. NCrF also fully supports **educational acceleration for students with gifted learning abilities and Recognition of Prior Learning for workforce that has** acquired knowledge and skills informally through the traditional family inheritance, work experience or other non-formal or informal methods, **thereby allowing them integration, progression and mobility into formal education ecosystem**.

The total **Notional Learning Hours** for one year of education/ learning across school education, higher education and vocational education, training and skilling have been agreed to be **1200 Hrs per year** for the purpose of assignment of credits for which the students/ learners shall be **awarded 40 Credits** subject to assessment.

Thus for the purpose of credit calculations under National Credit Framework (NCrF), overall, one Credit is equivalent to 30 notional learning hours while the regulators or autonomous institutions may provide for different number of hours per credit for theory practical and experiential learning. The assignment of credits is independent of the education streams, subjects or type of learning. The students/ learners may take additional courses, programs, subjects or projects beyond 40 credits to get additional credits for the same.

The NCrF recognises **no hard separation between different areas of learning**, i.e. arts and sciences, vocational and academic streams, curricular and extra-curricular for the purpose of assignment of credits and credit levels. In the true spirit of National Education Policy 2020, **the total learning hours of students / learners can be creditized, subject** to assessment.

The **learning hours may include** class room learning, teaching, practical and laboratory work, innovation labs, class projects, assignments, tutorials; sports and games, yoga, physical activities, performing arts, music, handicraft work, social work, NCC, bag less days; examinations, class tests, quizzes, assessments; vocational education, training and skilling, minor or major project work, field visits in skill education as well as internship, apprenticeship, on the job training (OJT), and experiential learning including relevant proficiency and professional levels acquired etc.

Such an approach would also close the gap in achievement of learning outcomes by shifting focus from the classroom education to competency and learning outcome-based learning.

Under the National Credit Framework (NCrF) **every learning hour can be creditized subject to its assessment.** The **Credit levels** to be assigned across school/ higher/ vocational education/ skilling, (independent of the streams, subjects etc.) are based on the **cumulative numbers of years of learning with assessment.** For earning credits, the course/ qualification should be aligned to the qualification framework concerned, be assigned a defined NCrF level while clearly describing the desired competency and learning outcome expected. Also, the learning outcome shall be assessed after completing the course/ qualification for assignment of credits.

The **assessment is thus mandatory for earning credits** for all types of learning. **The Assessment** are the stages at which the student/ learner needs to be formally assessed for progression in academic/ vocational/ skilling streams. (e.g. 10th/ 12th board exams, DGT's assessment and exams for CTS, UG/ PG exams in higher education). The NCrF Credits for the two courses/ qualifications/ programs may be added to each other and accumulated in ABC if these are earned in the same assessment band subject to the guidelines of the respective regulators.

The NCrF credit levels to be assigned for school education are up to level 4, while for higher education the NCrF levels will be assigned from Level 4.5. to level 8 [Undergraduate Levels: 4.5, 5.0, 5.5 & 6.0; Post Graduate Levels: 6.0, 6.5 & 7.0; and PhD Level 8] and for vocational education & training from level 1 to level 8.

The total Credit Points earned by the student in a particular year could be obtained by multiplying the credits earned with the NCrF Level at which the credits have been earned. The credit points may be redeemed as per the guidelines issued in this regard for entry or admission in school, higher, technical or vocational education programs/ courses at multiple levels enabling horizontal and vertical mobility with various lateral entry and exit options.

In addition to the credits for higher education, the **Academic Bank of Credit (ABC)** shall also be expanded to include **credits earned through school education, vocational education, training and skilling, including apprenticeships, internships, project work etc.** ABC could digitally store the academic and other credits earned from recognized institutions / bodies so that credits could be redeemed, and the relevant award of certificate, diploma or degree granted taking into account the credits / credit points earned at various NCrF levels. The credits may also be linked to Digi locker for easy verification and portability.

The National Credit Framework (NCrF) also **enables creditization of experiential learning including relevant experience and proficiency/professional levels acquired**, based on the weightage for the purpose, subject to assessment.

Assignment of Credits has also been enabled for online, digital and blended learning, especially in vocational education and skilling to expand the open and distance learning options and to promote extensive use of technology in education, learning & skilling. This would help in overcoming the constraints of physical infrastructure & scalability while enhancing access, equity, and affordability and ensuring quality and accountability. The blended learning option shall also **enhance accessibility of learning in Indian language for 90% non-English medium students as well as for Divyangs.**

National Credit Framework (NCrF) will encourage **internationalization of education through credit transfer provisions**, thus enabling **wider recognition and acceptance of Indian education and skilling** by other countries through **international equivalence**, promoting exchange with foreign universities and institutions.

Thus, there would be only **one National Credit Framework** for higher education, school education, vocational education, training and skill education, namely the **National Credit Framework (NCrF)** which would be the **single meta framework document notified for creditization and integrating learning in various dimensions** of academics, skilling and experiential learning including relevant experience and proficiency/ professional levels acquired. The NCrF would be operationalised through the Academic Bank of Credits (ABC). The **qualification frameworks for school, higher education and skills would be aligned with NCrF**. The **basic principles and provisions of National Credit Framework (NCrF)** would be **applicable to all the qualification frameworks**.

National Credit Framework (NCrF) shall act as a **broad enabling framework** for all regulatory organizations (UGC, AICTE, NCVET, NCERT etc.), and autonomous institutions, including Universities, INIs, CBSE, NIOS, State School Boards, State Technical Education Boards, etc. who may, wherever required, **notify their detailed implementation guidelines. However, all such guidelines shall confirm to the provisions of the national credit framework**. The NCrF empowers institutions and enables them with the required flexibility for catering to their specific academic requirements and other special needs.

The National Credit Framework (NCrF) shall not only enable effective implementation of the vision of National Education Policy 2020 through integration of various policy endeavors under general education and vocational education but will also be a game changer to establish a benchmark for holistic education and learning integrated with skills, by removal of barriers, infusion of flexibility and creation of lifelong learning opportunities. NCrF will enable transformation of India by providing high quality education opportunities integrated with effective skills to reap the demographic dividend making education and skilling truly aspirational.

NATIONAL CREDIT FRAMEWORK

1. SECTION 1: OVERVIEW

1.1. INTRODUCTION

Education is fundamental for achieving full human potential, developing an equitable society and promoting national development. Providing universal access to quality education is the key to India's continued ascent and leadership on the global stage in terms of economic growth, social justice & equality, scientific advancement, national integration, and cultural preservation. Universal high-quality education opportunities integrated with effective skills is the best way forward for developing and maximizing our country's rich talents and resources for the good of the individual, the society, the country, and the world.

Today, India is one of the youngest nations in the world with more than 62% of its population in the working-age group (15-59 years), and over 54% of its total population below 25 years of age. Its population pyramid is expected to bulge across the 15-59 age groups over the next decade. This is a huge opportunity and at the same time poses a formidable challenge. To reap this demographic dividend India needs to equip its workforce with knowledge and employable skills so that they can contribute substantively to the economic growth and development of the country. Our ability to provide high-quality educational opportunities to the youth will determine the future of our country.

Not only the educational opportunities but effective skilling is also the driving force of economic growth and social development for any country. Countries with higher levels and standards of skills adjust more effectively to the challenges and opportunities in domestic and international job markets. The United Nations in the epic summit of 2015 on 'Transforming our World: the 2030 Agenda for Sustainable Development' defined 17 Sustainable Development Goals (SDGs) which places emphasis on 'skill' apart from the 'basic necessities' for people across the world.

The SDGs have defined skill development requirement as - 'to promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all'. The SDGs report 2018 by the United Nations shows that 42% of the world population is young with a global youth unemployment rate of 13%, which can be brought down drastically by skilling the youth.

The global education development agenda reflected in the Goal 4 (SDG4) of the 2030 Agenda for Sustainable Development, adopted by India in 2015 seeks to 'ensure inclusive and equitable quality education and promote lifelong learning opportunities for all' by 2030. Such a lofty goal will require the entire education system to be reconfigured to support and foster learning, so that all of the critical targets and goals (SDGs) of the 2030 Agenda for Sustainable Development can be achieved. Efforts

made in this direction should meet the needs of all sectors of economy including primary, industry and the service sectors. Such efforts should also be learner centric to make the entire skilling movement aspirational. Skill training needs to be considered as a complementary and essential part of mainstream education, rather than being regarded as a secondary alternative, as also envisaged under the National Education Policy (NEP), 2020.

This National Education Policy, 2020 envisions an education system rooted in Indian ethos that contributes directly to transforming India, into an equitable and vibrant knowledge society, by providing high-quality education to all and thereby making India a global knowledge superpower. The Policy envisages that the curriculum and pedagogy of our institutions must develop among the students a deep sense of respect towards the Fundamental Duties and Constitutional values, bonding with one's country and a conscious awareness of one's roles and responsibilities in a changing world.

The vision of this policy is to instill among the learners a deep-rooted pride in being Indian, not only in thought, but also in spirit, intellect, and deeds, as well as to develop knowledge, skills, values, and dispositions that support responsible commitment to human rights, sustainable development & living, and global well-being, thereby reflecting a truly global citizen. Education with effective skilling is a great leveller and is the best tool for achieving economic and social mobility, inclusion, and equality. These elements must be incorporated considering the local and global needs of the country, and with a respect for and deference to its rich diversity and culture.

The National Education Policy seeks to provide to all students, irrespective of their place of residence, a quality education system, with particular focus on historically marginalized, disadvantaged, and under-represented groups. Instilling knowledge of India and its varied social, cultural, and technological needs, its inimitable artistic, language, and knowledge traditions, and its strong ethics in India's young people is considered critical for purposes of national pride, self-confidence, self-knowledge, cooperation, and integration. This may be achieved by a number of factors and an important one amongst these being establishing equivalence and mobility between general education and vocational education and training/ skilling so that lifelong learning, recognition of prior learning, multiple entry and exit, and continuous professional development is encouraged in the system.

1.2. CREDITS IN INDIAN CONTEXT

1.2.1. School Education

At present, there is no established credit mechanism for regular school education. However, under the open schooling system, the National Institute of Open Schooling (NIOS) follows the following credit system:

- i. Each subject is assigned 240 hours for self-study. Total 5 subjects are required at the

Secondary and Senior Secondary level which makes it of 1200 hours and 40 credits in one year

- ii. 1 credit is equivalent to 30 hours of total study i.e. each subject is of 8 credits.

There is no distinction for allocation of credits based on type of learning like theory, practical or experiential learning etc.

1.2.2. Higher Education

I. CHOICE BASED CREDIT SYSTEM (CBCS) BY UGC

Under the CBCS system, the requirement for awarding a degree or diploma or certificate is prescribed in terms of number of credits to be earned by the students. This framework is being implemented in several universities across States in India. The main highlights of CBCS are as below:

- The CBCS provides flexibility in designing curriculum and assigning credits based on the course content and learning hours.
- The CBCS provides for a system wherein students can take courses of their choice, learn at their own pace, undergo additional courses and acquire more than the required credits, and adopt an interdisciplinary approach to learning.
- CBCS also provides opportunity for vertical mobility to students from a bachelor's degree programme to masters and research degree programmes.

The detailed Guidelines for Choice Based Credit System is available at https://ugc.ac.in/pdfnews/8023719_Guidelines-for-CBCS.pdf

II. SKILL ASSESSMENT MATRIX FOR VOCATIONAL ADVANCEMENT OF YOUTH (SAMVAY) BY AICTE

The scheme on Skill Assessment Matrix for Vocational Advancement of Youth (SAMVAY) is a credit framework for skill-based vocational courses which was launched by MHRD on 11th November 2014. The SAMVAY defines the rules for credit allotment and follows the NSQF regulatory framework while stating the credit assessment requirements for skills. The skill-based courses, under SAMVAY, generally, have both the skills and general education components.

The following formula may be used for the credit calculation in general education component of the courses:

- i. General Education credit refers to a unit by which the course work is measured. It determines the number of hours of instructions required per week. One credit is equivalent to one hour of teaching [lecture or tutorial] or two hours of practical work/field work per week. Accordingly, one Credit would mean equivalent of 14-15 hrs of theory or 28 - 30 hrs of workshop/ lab work.
- ii. One Credit is equivalent to 14-15 periods of 60 minutes each, for theory, or 28-30 periods of 60 minutes for workshop/labs and tutorials.
- iii. For internship/field work, the credit weightage for equivalent hours is 50% of that for lectures/tutorials.
- iv. For self-learning, based on e-content or otherwise, the credit weightage for equivalent hours of study is 50% or less of that for lectures/tutorials.

For the ease of calculation, the break -up of credit with respect to general education component is as in the table below:

Table1: Break-Up of Credits

Theory 1 Credit = 15 hours	Practical 1 Credit = 30 hours	Experiential learning including relevant experience and proficiency/ professional levels acquired 1 Credit = 40-45 hours
• In each theory class, a new concept is taught, and the student is learning something new throughout the class. • It also involves self-learning.	• The practical is dependent on theory and experiments performed are based on concepts learned in theory class. • Repetition of an already learned concept. Observations are taken again and again	Experiential learning including relevant experience and professional levels acquired activities like field visits, industrial visits, etc carry lesser weightage because it is just an observation and/or application of concepts learned

As per SAMVAY, the credits regarding skill component may be awarded in terms of NSQF level certification which will have more than 50% weightage of total credits of the course based on the assessment in a manner prescribed by the concerned regulatory body.

The latest SAMVAY guidelines are available at: [SAMVAY_1_.pdf \(aicte-india.org\)](https://aicte-india.org/SAMVAY_1_.pdf)

III. UGC GUIDELINES FOR PROVIDING SKILL-BASED EDUCATION UNDER NATIONAL SKILL QUALIFICATION FRAMEWORK

Under these guidelines, the skill-based programmes shall have a mix of general and skill components in which 30-40% of the total content shall be of general nature including language courses while the remaining 60% (extendable upto 70%) of the content shall be on skill development. In such programs the following formula is used for conversion of time into credit hours.:

- a. **Skill Component:** The skill component should have a minimum of 60% (extendable upto a maximum of 70%) of the total credits. The skill component will include practical classes in laboratories / workshops, internships, apprenticeships and any other forms of hands on training.
- b. **General Education Component:** The balance credits of the program i.e. 30-40% are of general component. This will include curricula which are supportive to the core trade in addition to communication skills, soft skills, digital skills, critical thinking, problem solving skills, environmental studies and value education.

The Credit assigned for the general education components are in line with SAMVAY. The detailed guidelines can be accessed at [6556003_Guidelines-for-providing-Skill-Based-Education-under-NSQF.pdf \(ugc.ac.in\)](https://www.ugc.ac.in/6556003_Guidelines-for-providing-Skill-Based-Education-under-NSQF.pdf) and summary document at [NSQF New Guidelines.pdf \(ugc.ac.in\)](https://www.ugc.ac.in/NSQF-New-Guidelines.pdf)

IV. CREDITS STRUCTURE FOR AUTONOMOUS INSTITUTIONS LIKE IIT/IIMs

The institutions like IIT/IIMs in India are autonomous and each institution implements its own credit system which broadly follow the similar system. Education and learning at such institute/s are generally organized around the semester-based credit system of study. There is a process of continuous evaluation of a student's performance/progress and flexibility is allowed to students to progress at an optimum pace suited to their ability or convenience, subject to fulfilling minimum requirements for continuation and within the maximum allowable period for completion of a degree/ program of study.

The IITs in general follow a concept of L-T-P Structure which means Lectures, tutorials and practical hours respectively. The curricular design of programs being offered and the assignment of credits for lectures, tutorials and practical varies from IIT to IIT. A use case indicating comparison of the credit system for 4 IITs namely- IIT Delhi, IIT Madras, IIT Bombay and IIT Guwahati is placed at Annexure I.

1.2.3. Vocational education and Training/ Skilling

I. NATIONAL SKILLS QUALIFICATION FRAMEWORK (NSQF)

The National Skills Qualification Framework (NSQF) was notified on 27th December 2013, by the Ministry of Finance, pursuant to the decision of the Cabinet Committee on Skill Development held on 19th December 2013.

NSQF is a national competency-based skill framework that provides for multiple pathways, horizontal as well as vertical to facilitate mobility both within vocational education and training/ skilling and between vocational education and training/ skilling and general education thus linking one level of learning to another higher level. The NSQF is also a quality assurance framework as it organizes qualifications in a series of 10 levels (now revised to 8 levels) based on Professional Theoretical Knowledge, Professional and Technical Skills/ Expertise, Employment Readiness & Entrepreneurship Skills & Mind-set, Broad Learning Outcomes and Responsibility. These levels are defined in terms of learning outcomes which are an explicit description of what a learner should know, understand and be able to do as a result of learning, regardless of whether these competencies were acquired through formal, experiential, non-formal or informal learning. This enables learners to acquire the desired competency levels, transit to the job market, and at an opportune time, return for acquiring additional/ advanced skills as required to further upgrade their competencies.

The NSQF is based on an outcome based approach wherein each level is defined and described in terms of competency levels that are to be achieved, thereby enabling clear provisions for mobility (both vertical & horizontal) and making progression pathways transparent for students, institutions and employers. The NSQF has resulted in development of quality qualifications applicable both in school education and higher education and has also helped in alignment of Indian qualifications to international qualifications through existing qualification frameworks of other countries. The NSQF facilitates the awarding of credit and supports credit transfer and progression routes within the Indian Education and Training system.

NSQF is anchored in National Council for Vocational Education and Training (NCVET) and is implemented through National Skills Qualification Committee (NSQC) for which a permanent secretariat is set up in NCVET. The NSQC has representation from Central Ministries, NITI Aayog, all regulators including UGC, AICTE, and CBSE, Awarding Bodies like the Directorate General of Training (DGT), Sector Skill Councils (SSCs) and the State Skill Development Missions, and select industry bodies by rotation.

Thus NSQC represents the stakeholders from higher education, technical education, school education, open schooling, informal education and skill ecosystem including the representatives from various ministries connected with education & skilling. NSQC also has stakeholders from the sector skill councils which are in turn representing industries, recognized industry associations by rotation, state governments by rotation and concerned awarding bodies

The detailed NSQF notification can be accessed at <https://www.ncvet.gov.in/nsqf-notification>.

2. SECTION 2: GENESIS OF THE NATIONAL CREDIT FRAMEWORK

2.1. NEED FOR THE NATIONAL CREDIT FRAMEWORK

The National Education Policy 2020, lays emphasis on the integration of the general (academic) education and vocational education & training/skilling with provision for seamless horizontal and vertical mobility between the two for lifelong learning. Such integration shall enable desired reforms in the education and skilling systems. In addition, this integration of vocational education and training/ skilling programmes into mainstream education at all levels, as is highlighted in NEP 2020, will lead to removal of distinction between general and vocational education and training/ skilling while at the same time enable establishing academic equivalence between the two which is the most important way of making the vocational education and training/ skilling aspirational' for the youth. The integration would also lead to emphasizing the dignity of labour and importance of various vocations.

To fulfil the vision of National Education Policy 2020, make education more holistic and effective and to lay emphasis on the integration of general (academic) education, vocational education and experiential learning including the relevant experience and proficiency/professional levels acquired it becomes imperative to establish and formalize a national credit accumulation and transfer system which will enable such integrations while ensuring equivalence and mobility of students and learners within and between the General and vocational education systems.

The detailed National Education Policy 2020 is available at

https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf

2.2. NATIONAL CREDIT FRAMEWORK- ENABLING EFFECTIVE TRANSFORMATION IN EDUCATION & SKILL ECOSYSTEM THROUGH IMPLEMENTATION OF NEP 2020

The National Education Policy (NEP) 2020, is the first education policy of the 21st century and aims to address the many growing developmental imperatives of our country. The NEP proposes the revision and revamping of all aspects of the education structure, including its regulation and governance, to create a new system that is aligned with the aspirational goals of 21st century education, including Sustainable Development Goal (SDG), while building upon India's heritage, traditions and value systems. The National Education Policy lays particular emphasis on the development of the creative potential of each individual. It is based on the principle that education must develop not only cognitive capacities - the 'foundational capacities' of literacy & numeracy and 'higher-order' cognitive capacities, such as critical thinking and problem solving but also social, ethical, and emotional capacities and dispositions. Built on the foundational pillars of Access, Equity, Quality, Affordability and Accountability, the policy aims to transform India into a vibrant knowledge society and global knowledge superpower by making both school and college education more holistic, flexible and multidisciplinary.

The NEP 2020 proposes reduction in curriculum/content in all subjects to its core essentials, to make space for critical thinking and more holistic, inquiry-based, discovery-based, discussion-based, and analysis based learning. The mandated content will focus on key concepts, ideas, applications, and problem solving. Teaching and learning will be conducted in a more interactive manner; questions will be encouraged, and classroom sessions will regularly contain more fun, creative, collaborative, and exploratory activities for students for deeper and more Experiential learning including relevant experience and proficiency/ professional levels acquired after the individual takes up self/job employment on completion of his or her education/skill training. In all stages of education, Experiential learning including relevant experience and proficiency/ professional levels acquired will be adopted, including hands-on learning, arts-integrated and sports-integrated education, story- telling-based pedagogy, among others, as standard pedagogy within each subject, and with explorations of relations among different subjects. To close the gap in achievement of learning outcomes, classroom transactions will shift, towards competency-based learning and education.

The NEP 2020 while highlighting the importance of flexible learning emphasizes on imaginative and flexible curricular structures which will enable creative combinations of disciplines for study and offer multiple entry and multiple exit (ME-ME) points and thus, enables removing of the current system of rigid boundaries. These would create new possibilities for students to choose and learn the subject(s) of their choice, while changing the educational institute as per their preference, convenience, or necessity'. NEP shall also help to achieve universal participation in educational institutes by carefully tracking students, as well as their learning levels, in order to ensure that they (a) are enrolled in and attending educational institutes, and (b) have suitable opportunities to catch up and re-enter educational institutes in case they have fallen behind or dropped out.

NEP 2020 highlights the need for multidisciplinary study from the secondary education stage. It lays particular emphasis on empowering students through flexibility in course choices so that the learners could choose their learning trajectories and programmes, and thereby choose their paths in life according to their talents and interests. The NEP 2020 also proposes to establish an 'Academic Bank of Credit' (ABC) which could digitally store the academic credits earned from recognized institutions so that the degrees can be awarded considering credits earned.

Given the premise, a well-defined and robust credit framework will enable seamless integration and coordination across institutions and all stages of education and skilling. Such a framework will enable broad based, multi-disciplinary/ inter-disciplinary, holistic education with flexible curricula, creative combinations of subjects, providing for multiple entry and exit points with appropriate certification and thereby will enable achieving the objectives as are envisioned in NEP.

2.3. ADVANTAGES OF NATIONAL CREDIT FRAMEWORK

2.3.1. Removal of Hard Separations between Educational Streams, General and Vocational education, Curricular & other activities

NEP 2020 highlights that, holistic development and a wide choice of subjects and courses should be the new distinguishing feature of secondary school education and there should be no hard separation among 'curricular', 'extracurricular', or 'co-curricular' among 'arts', 'humanities', commerce and 'sciences' etc, or between 'vocational' or 'academic' streams.

Learning is a multi-dimensional process that takes into account cognitive, emotional, social and physical learning as well. To ensure holistic learning of students, it is desirable that they are allowed to choose subjects according to their interests irrespective of the nature of course (academic or vocational). The educational institutes are meant to prepare students for handling life challenges and upheavals, and it is only through this flexibility of choice with a range of elective subjects available that will help learner/students make more informed career choices. The proposed credit system will take into account the learning hours put in by a learner irrespective of the stream of education (general and vocational).

2.3.1. Establishing Equivalence Between General and Vocational education & training/ skilling

Equivalency, in general, determines the level of education and number of years of study completed along with the upward progression in accordance with candidate's field of study. By equivalence, it is understood that the evaluation of a curriculum followed by the holder of the educational award (certificate/ diploma etc.) and its compatibility with the national education system in terms of the learning outcomes and the gained competencies are aligned to other curriculums and therefore considered at parity.

In order to establish such equivalence, it is important that each program within general education and vocational education and training/ skilling has a measurable criterion including the outcomes and competencies backed by proper assessment which is possible only through a robust credit framework. Such framework should enable assignment of a measurable criteria for both general education and vocational education and training/ skilling with due emphasis on the content of the study, duration and achievement of requisite competencies. The credit framework shall also allow for identifying measurable outcomes through a well-defined assessment process in order to bring equivalence of a vocational education and skilling program with general education programs with or without any additional academic learning. It will facilitate interoperability, mobility, and transfer of students between schools, boards, colleges and universities, empowering greater choice and means for students to pursue knowledge and skills of their interests, aptitude and circumstances.

2.3.2. Mobility Between and Within General and Vocational Education & Training/ Skilling

One of the major advantages of the National Credit Framework will be to enable establishment of eligibility criteria for various qualifications being implemented both in general education and

vocational education and training/ skilling in terms of accumulated credit points at certain credit levels. These credit points can be used to determine the eligibility for taking admission in various programs at multiple levels, subject to fulfilment of the broad principles laid down under National Credit Framework (NCrF) and the acceptance of the credit points by the concerned agencies. This mobility will be an outcome of the equivalence that is established between general and vocational education and training/ skilling based on the criterion laid by NCrF without the need for further certification of equivalence of academic qualifications of students.

2.3.3. Enabling Provisions for Lifelong Learning Through Multiple Entry and Multiple Exit (ME-ME) Options

Flexible learning is important to choose one's learning pathway leading to the award of certificate, diploma, and degree. There are occasions when learners pursue alternative schooling, home-schooling, online schooling or have to give up their education mid-way for various reasons. The national credit framework will act as an enabler in this regard and regulators shall be required to define the entry and exit criteria of the programs being offered by them. This would also help in fragmenting an entire program into smaller units with due acknowledgement being given to each unit of learning.

The credit transfer mechanism will also enable a student to enter, exit and re-enter the educational ecosystem both general and vocational at any point of time. In such cases due weightage is proposed to be given to work experience gained or any other training undertaken by the learner, in offline or online mode, subject to assessment. The proposed equivalence by virtue of this national credit framework enables a learner (whether from a general education background or from a vocational education and training/ skilling background) to accumulate necessary credits that will allow him/her to re-enter the mainstream education. The ME-ME is possible when the entire education ecosystem especially in case of higher education is divided into yearly independent modules.

The multiple entry and exit option or the lifelong learning will serve the following objectives:

- i. Remove rigid boundaries and facilitate new possibilities for learners.
- ii. Recognises no hard separation between different areas of learning, i.e. arts, commerce, humanities and sciences, vocational and academic streams, curricular and extra-curricular for the purpose of assignment of credits and credit levels.
- iii. Offer creative combinations of disciplines of study that would enable multiple entry and exit points.
- iv. Offer flexibility in curriculum and novel course options to students in addition to discipline specific specializations.

- v. Offers flexibility in choice of courses to the students for choosing their own learning trajectories and programmes, and thereby choose their paths in life with appropriate career choice, including option for mid-way course corrections, according to their talents and interests.
- vi. Creditization of all types of learning subject to assessment. Also enables creditization of experiential learning including relevant experience and proficiency/ professional levels acquired, based on the weightage for relevant experience and proficiency/ professional levels achieved, subject to assessment.
- vii. Enable credit accumulation, storage transfer and redemption along with provision of assessment/ evaluation.
- viii. Validation of non-formal and informal learning (like alternative/home/open/online/distance learning) for the award of a certificates, diploma, degree and encourage lifelong learning; and
- ix. Facilitate redemption /encashing credits earned against a certificate diploma or degree when the learner resumes his/her programmes of study.

2.3.4. Integration and Intermingling of Education, Skilling and Work Experience

The proposed credit framework provides for a comprehensive and practical approach to include all dimensions learning i.e. academic education, skilling and experiential learning including relevant experience and professional levels acquired. Such seamless mixing of Education, Skilling and Work Experience would enable a student/learner to take full benefit of the option of Multiple Entry-Multiple Exit wherein, the student exits an academic program, undertakes a skill based training followed by a relevant work experience, acquires corresponding credits and then returns back for further education/ higher education.

This also enables a student/learner to get benefits of all kinds of learning whether acquired from academic education, vocational education & training/skilling or through Experiential learning including relevant experience and proficiency/ professional levels acquired by engaging in a workplace.

2.3.5. Enabling creditization of learning for students with varying learning capacities

This framework will enable creditization of learners with varying learning abilities including the educational acceleration of gifted students which is when students move through traditional curriculum at rates faster than normal pace and includes grade/class skipping, early entrance to school

or college and/ or subject based acceleration and also students with learning disabilities subject to achieving the desired learning outcomes prescribed at a particular level determined by successful assessments.

Such an approach may also be extended, and special provisions must be enabled for Hackathons, Olympiads and students showing exemplary performance in Sports, Fine Arts and other similar activities. Within the broad principles of NCrf, the regulator may define the specific modalities for catering to such students, subject to defining special assessment criteria.

The NCrf, therefore, also envisions to be a competency framework which shall, in addition to the established processes of formal education and certification, shall also enable the gifted learners with exceptional learning abilities/ capabilities/ competencies to move up the education and skilling ladder without going through the prescribed established formal education / learning hours by assessing the **learning outcomes for assignment of credits and the credit levels**. However, such **specialized assessment methods have to be very strict, objective, above board and adhere to high standard** so as to keep the credibility of the NCrf intact.

2.3.6. Enables provisions for Recognition of Prior Learning (RPL)

The NCrf has enabled provision for **Recognition of Prior Learning thereby creditizing the existing knowledge and skills of the workforce acquired through various formal, non-formal or traditional of any other methods. This would also take into account the learning acquired** through family inheritance, work experience, cluster-based learning and creditizing the same, **thereby allowing them progression and mobility into mainstream education.**

3. SECTION 3: DEVELOPING THE NATIONAL CREDIT FRAMEWORK

3.1. FORMULATION OF THE HIGHLEVEL COMMITTEE (HLC)

In order to fulfil the vision of NEP, 2020 and to facilitate its effective implementation, it was felt that it is important to formulate a comprehensive framework which caters to both General Education and Vocational Education and Training/ Skilling and also seamlessly aligns and integrates them. This was further emphasized upon by the Hon'ble Minister MSDE and MoE who suggested that the credit frameworks made in silos will not be conducive to address the challenges existing in the entire educational and skilling ecosystem and hence it is imperative that a national credit framework be developed across academics (school education, higher education) and vocational education & skilling.

Accordingly, a High-Level Committee, with well-defined ToRs was constituted by MSDE vide Order dated 18th November 2021, to develop a National Credit Accumulation and Transfer Framework for both General and Vocational Education and Training/ skilling. This framework should enable integration of academic and vocational domains of learning and ensure flexibility and mobility between the two. The Committee had representation from heads/ senior officials of Ministry of Education (including school and higher education), UGC, AICTE, NCERT, NIOS, CBSE, Ministry of Skill Development and Entrepreneurship (MSDE), NCVET and DGT. The committee was to be Chaired by Dr. Nirmaljeet Singh Kalsi, IAS Retd., Chairperson, National Council of Vocational Education and Training (NCVET).

The ToRs of the Committee and scope is also detailed below:

To formulate a framework for allocation of credits to every component of learning i.e. theory, practical, extracurricular, and experiential for general as well as vocational education and training/ skilling, to facilitate mobility within VET and from VET to general education. This framework is envisaged to cater to the following specific objectives:

- i. To define credit, components of credit and corresponding credit value
- ii. To devise a formula for calculating the credit/s for School Education, Higher Education, and VET.
- iii. To formulate a framework for credit accumulation for School Education, Higher Education, and VET.
- iv. To formulate a framework for credit transfer for VET & School Education, and vice-versa; and VET & Higher Education, and vice-versa.

- v. Establish Academic Equivalence:
 - a. Between General Education and Vocational (both for School and Higher Education)
 - b. Within Vocational education and training/ skilling
- vi. Identify the mechanism for accumulation, storage, and redemption of credit through Credit Bank

The HLC submitted its final Report on draft framework to Hon'ble Minister, Education and SDE and the same was launched by the Hon'ble Minister for public consultation from 19th October to 30th November 2022. Based on the observation/feedback/comments received the suitable modifications have been carried out for finalizing the framework.

3.2. THE NATIONAL CREDIT FRAMEWORK, ONE SINGLE META FRAMEWORK; THE BASIC PRINCIPLES

The National Credit Framework (NCrF) is a comprehensive framework encompassing elementary, school, higher, and vocational education & training, integrating the learning on the multiple axis i.e. academics, vocational skills and Experiential learning including relevant experience and proficiency/ professional levels acquired which has been jointly developed by UGC, AICTE, NCVET, NIOS, CBSE, NCERT, Ministry of Education, DGT, and Ministry of Skill Development.

The NCrF has been formulated on the existing regulations /guidelines of UGC, AICTE, NCVET, NCERT & NIOS and existing qualification frameworks for higher education, vocational education and school education so that the options for Multiple Entry-Multiple Exit (ME-ME) are accessible and applicable across the higher education, school education and vocational education.

The National Higher Education Qualifications Framework (NHEQF) has been formulated by UGC to achieve the objectives of NEP with detailed level descriptors and learning outcomes. The NHEQF and National Skills Qualifications Framework (NSQF) are in sync with each other to ease the integration of vocational education into higher education. The National Credit Framework (NCrF) seamlessly integrates higher education and vocational education and is totally aligned with the NHEQF and NSQF while also integrating school education [National Curriculum Framework (NCF)/ National School Education Qualifications Framework (NSEQF)] in continuum. Till now there was no credit framework in place for school education.

The National Credit Framework (NCrF) is one single meta framework which enables seamless integration and coordination across regulators and institutions to enable broad based, multi-

disciplinary, holistic education across sciences, social sciences, arts, humanities and sports, allows imaginative and flexible curricular structures, enables creative combinations of disciplines and integration of vocational education & skilling into academics with multiple entry and exit options.

3.2.1. National Credit Framework (NCrF) to be One Single Meta Framework

National Credit Framework (NCrF) is envisaged as one single credit framework encompassing school education, higher education, vocational education & training/ skilling and experiential learning based on proficiency/professional levels achieved. **The National Credit Framework (NCrF) is the Meta Framework for creditization of all types of learning and** integrating credits earned from academics, vocational education & training/ skilling and experiential learning including work experience and proficiency/professional levels achieved. **This is the enabling Framework,** laying down and defining the basic principles for operationalisation of credit system and **achieving the objectives of NEP 2020.**

It shall also cater to the needs of all HEIs/ institutions including the autonomous institutions and institutes of National Importance including IITs, IIMs, IIITs, IISERs, and NITs as these institutions may also take the advantage of NCrF. Moreover, for creditization and integration of all learning, the National Credit Framework (NCrF) shall encompass the qualification frameworks for higher education, vocational & skill education and school education, namely National Higher Education Qualification Framework (NHEQF), National Skills Qualification Framework (NSQF) and National Curriculum Framework (NCF)/ National School Education Qualification Framework (NSEQF) respectively. A qualifications framework is a formalized structure in which learning level descriptors and qualifications are used to define and understand learning outcomes.

Thus, there would be only one credit framework for higher education, school education and skill education, namely the National Credit Framework (NCrF) which would be one single meta framework. It integrates and provides for creditization of learning in dimensions of academics, skilling and Experiential learning including relevant experience & proficiency/ professional levels acquired. NCrF would be operationalised through Academic Bank of Credits (ABC). The qualification frameworks for school, higher education and skills would be embedded and aligned with NCrF.

3.2.2. National Credit Framework- The Basic Principles

The basic principles and provisions of National Credit Framework (NCrF) would apply to all the qualification frameworks (NHEQF and NSQF are already aligned with NCrF), particularly with respect to the following aspects:

- i. **Creditization of all types of learnings;** Assignments of Credit levels for all learnings for seamless integration,

- ii. **Integration of learning in all dimensions of academics and skilling along with experiential learning including relevant experience and proficiency/professional levels acquired.**
- iii. **Assignment of one single Credit level** i.e. NCrf Credits Levels applicable **across** all qualification frameworks; no other separate Credit levels to be assigned by any stakeholders.
- iv. **Assignment, Accumulation, Storage, Transfer & Redemption of Credits-** Assignment of credits to be independent of the streams, subjects or any learning, of course subject to assessment.
- v. **Assignment of Credits for online, digital and blended learning.**
- vi. Operationalisation of NCrf through **Academic Bank of Credits (ABC)** encompassing school education higher education and vocational / skill education.
- vii. The total **Notional Learning Hours** for assignment of credits to be uniform across school education, higher education and vocational education & training/skilling.
- viii. The **assessment is mandatory for earning credits.**
- ix. **Equivalence of academic and vocational education & skilling programmes.**
- x. Multiple entry and multiple exit (ME-ME) options; ensuring **horizontal and vertical mobility.**
- xi. Provision of **multi-disciplinary and holistic education** across sciences, social sciences, arts, humanities and sports.
- xii. **No hard separation between different areas of learning**, i.e. arts, commerce, humanities and sciences etc., vocational and academic streams, curricular and extra-curricular for the purpose of assignment of credits and credit levels.
- xiii. Allow **imaginative and flexible curricular structures**, enables **creative combinations of disciplines.**
- xiv. Provision for **integration of vocational education & skilling into academic education** at all levels.

- xv. **Empowerment of students for flexibility** in choice of courses/choosing their **own learning trajectories** and programme. Option for **mid-way course corrections**.
- xvi. **Provision for Recognition of Prior Learning, and NCrF credit levels and credit assignment for the same for main streaming the learners who are out of formal education and skilling ecosystem. Provision for RPL with or without upskilling**
- xvii. Caters to **creditization, subject to assessments**, for creating opportunities, progression pathways for **other learnings not creditized earlier** for award of a certificate, diploma, degree and **encourage lifelong learning**:
 - a. **Informal learning** (takes place outside schools/ colleges and arises from learner's involvement in activities that are not undertaken with a learning purpose in mind.)
 - b. **Non-formal learning** (takes place outside formal learning environments but within organizational framework. A conscious decision & intentional effort by learner to master a particular activity, skill or area of knowledge.).
 - c. **Learning through any means including non-government organizations (NGOs)** (like informal slum schools, alternative/ home/ open/ online/ distance learning and in some cases self-study/self-learning through open schooling. This could be formal, informal or non-formal.
- xviii. Supports **educational acceleration for students with gifted learning abilities; also supports the same level and number of credits for Divyangs, even though it may require higher learning hours for achieving the same outcome levels for Divyangs.**
- xix. Supports provision for **hackathons, and subject Olympiads** etc. for exceptional children/ students/ learners/individuals through learning outcome based special assessments.
- xx. Provides scope for creditizing **national/ international achievers** in any fields including but not limited to **Sports, Indian Knowledge System, Music, Heritage and Traditional Skills, Performing & Fine Arts, Master Craftsmen, etc**

The NCrF therefore would integrate the credits earned through learning from the different qualification frameworks i.e. higher education including technical education (NHEQF), vocational

education, training & skilling (NSQF) and for school education NCF/ NSEQF. Therefore, these Qualification Frameworks would be necessary to be maintained, inter-alia, for the **following purposes** for implementation of the intent of National Education Policy (NEP) 2020 as also for the operationalisation of the National Credit Framework (NCrF) by the school education, higher education and vocational education & skilling:

- a. The curricular structure for accreditation/ approval of qualifications.
- b. Planning and delivery of education/ skilling programmes.
- c. Developing, designing of curriculum, courses, qualifications.
- d. Developing syllabus, content, pedagogy, teaching and learning resources.
- e. Information about the broad equivalence of qualifications.
- f. Defining Learning outcomes, which the learner must possess, (regardless of whether they were acquired through formal, non-formal or informal learning).
- g. The level descriptors for school education, higher education and vocational education & skilling. These levels are defined in terms of learning outcomes.
- h. Defining entry criteria and academic equivalence.
- i. Nomenclature and award of certificates, diplomas and degrees.

The National Credit Framework (NCrF) shall act as a **broad enabling framework** for all regulatory organizations (UGC, AICTE, NCVET, NCERT etc.), CBSE, NIOS, State Open Schooling, State School Boards, State Technical Education Boards, etc and autonomous institutions, including Universities, Institutes of National Importance (INIs), who may, wherever required **and as applicable. Notify their detailed implementation guidelines** with respect to following major provisions within the contours of this Framework. Thus, the National Credit Framework (NCrF) empowers institutions and enables them with the required flexibility for catering to their specific academic requirements for creating imaginative and **flexible curricular structures, creative combinations of disciplines** and other special needs.

3.2.3. Credit and Credit Points

'**Credit**' is recognition that a learner has completed a prior course of learning, corresponding to a qualification at a given level. For each such prior qualification, the student would have put in a certain

volume of institutional or workplace learning, and the more complex a qualification, the greater the volume of learning that would have gone into it. Credits quantify learning outcomes that are subject achieving the prescribed learning outcomes to valid, reliable methods of assessment.

The **credit points** will give the learners, employers, and institutions a mechanism for describing and comparing the learning outcomes achieved. The credit points can be calculated as credits attained multiplied with the credit level.

3.2.4. Total Notional Learning Hours in a Year for Assignment of Credits

In line with the philosophy of NEP 2020, which emphasizes on considering any kind of learning as part of the overall learning and doing away with the distinction between curricular, co-curricular, and extra-curricular, it was felt that the overall notional learning hours across the academic classes including pre-school, school and higher education should be aligned. This would lead to consistency and standardization in the entire education and vocational ecosystem, mainstreaming both formal and informal education system and also smoothen the process of implementation of the proposed credit framework.

Accordingly, under the National Credit Framework (NCrF), the total Notional Learning Hours for assignment of credits across school education, higher education and vocational education & training/skilling have been agreed to be 1200 hrs per year (except for pre-school up to grade 5th wherein the learning hours range from 800 to 1000 hours) for which the students shall be awarded 40 Credits.

Thus, 20 Credits shall be awarded for a six-months semester with 600 Notional Learning Hours. Assignment of credits is independent of the streams, subjects or any learning and is subject to achieving the prescribed learning outcomes at a particular NCrF credit level posts successful assessment. Students also have the flexibility to take 1 courses/ programs/subjects/projects beyond 40 credits (within the curricular design) to get additional credits. For the purpose of calculations under the National Credit Framework (NCrF), in general, **30 notional learning hours will be counted as one Credit.**

3.2.5. What Constitutes Learning Hours - Components of Learning

NCrF recognises no hard separation between different areas/streams of learning, i.e., arts, commerce and sciences, vocational and academic streams, or type of learning i.e. curricular and extra-curricular for the purpose of assignment of credits and credit levels. Accordingly, the learning shall not be limited to only the instructional hours but also encompass all the other activities in the educational institutions, earlier categorised as curricular, co-curricular, and extra-curricular. In the true spirit of National Education Policy 2020, the total outcome based learning hours for credits shall, subject to assessment, include:

- i. Classroom teaching/ learning hours/ tutorials
- ii. Lab work/ practical/ innovation labs/ projects/ incubation labs
- iii. Yearly and half-yearly examinations/ class tests/ quiz/ other assessments including formative assessments
 - a. Activities as part of the curricular structure leading to experiential learning like relevant experience and proficiency/ professional levels, Performing arts/ fine arts, music, handicraft, traditional, heritage work,
 - b. Debate and Discussion/ Essay Writing / Recitation/Story Writing etc.
 - c. Celebration of festivals in institutes, music performance, Drama etc.
 - d. Self-defence classes, value education classes, Career Counselling sessions etc. Other Contests/ Events/ Competitions like Hackathons & Olympiads etc.
- iv. Sports/ games / physical activity / yoga
- v. Life skills based education like employment skills, basic operational skills like learning to fix a bulb, basic carpentry, classes on morals/etiquettes, constitutional values, environmental sensitivity etc.
- vi. Social/ community work (like adult education, teaching in NGOs or Out of school students, environment related, gender sensitization), NCC/ shramdan (School cleaning, building, decoration)
- vii. Bag less days, field visits organised by the institution
- viii. vocational education/ training, skilling, minor/ major project work, assignments
- ix. Field visits/ Projects/ Industry attachment by institutions
- x. Internship and apprenticeship hours, on the job training (OJT), and experiential learning including relevant experience and proficiency/ professional levels acquired
- xi. Programs offered through blended/ online/ digital learning
- xii. Self-study/ Home assignments (only for open schooling, out of school students)
- xiii. Any other type of learning as may be notified by the regulators concerned

The consideration and formulation of bouquet of programs/ subjects and activities will be done by the concerned regulator/ autonomous institution / board. They may also prescribe the learning outcomes for every NCrF level/ program which are aligned with the overall national credit framework to enable effective operationalization of the credit framework. Such an approach would also close the gap in achievement of learning outcomes, shifting the classroom education towards competency and learning outcome-based learning and education.

Thus, under the National Credit Framework (NCrF) every learning can be creditized subject to achieving the prescribed learning outcomes is determined by successful assessment. For earning credits, the following shall be applicable:

- i. The course/ qualification should be NSQF/ NHEQF aligned and approved with a defined NCrF level, clearly indicating the desired outcomes expected.
- ii. Also, the learning outcome shall be assessed after completing the course/ qualification for assignment of credits.
- iii. The basis of assessing credits related to sports, fine arts etc. shall be defined and determined by the concerned regulator/ school board.
- iv. It will be under the purview of respective regulator/ institution to determine/ prescribe the content/ curriculum of a program. The curriculum must align with principles as defined in NEP including life skills such as communication, cooperation, teamwork, etc.

A snapshot of learning hours across grades (from pre-school to Ph.D.) is given in table below.

Table 2: Learning hours across academic classes

S.No.	Stakeholders of Education, Higher Education, Technical Education, and Vocational education and training/ skilling System	Total Notional Learning Hours in/ by the Institution per year*	Remarks
1	School Education: Foundational stage (5 Years) (3 years of Anganwadi/ pre-school/ Balvatika) (Ages 3-6) + 2 Years (Class 1 & 2) (Ages 6-8)	800	
2	School Education: Preparatory Stage: 3 Years, (Class 3 to 5) (Age 8-11)	1000	

S.No.	Stakeholders of Education, Higher Education, Technical Education, and Vocational education and training/ skilling System	Total Notional Learning Hours in/ by the Institution per year*	Remarks
3	School Education: Middle Stage: 3 Years, (Class 6 to 8)(Age 11-14)	1200	1000 Hours of Educational Learning + 200 Hours of learning through other activities
4	School Education: Secondary Stage: 4 Years, (Class 9 to 12), (Age 14-18)	1200	1080 Hours of Educational Learning + 120 Hours of learning through other activities
5	NIOS: 8th Grade/ 10th Grade/ 12th Grade (with a gap of 2 years between each)	1200	8th/ 10th or 12th certificate from NIOS/ School Board
6	DGT: 1-Year ITI after 8th Plus NIOS	1200+ 240 hrs (NIOS**/ STT***) +150 hr of project	NTC + 9th Class certificate from NIOS/ School Board
7	DGT: 2-Years ITI After 8th grade plus NIOS or 1-Year ITI plus 1-Year NAC after 8th plus NIOS	1200+ 240 hrs (NIOS/ STT) +150 hr of project	NTC + 10th Class certificate from NIOS/ School Board
8	DGT: 1-Year ITI after 10th Plus NIOS	1200+ 240 hrs (NIOS/ STT) +150 hr of project	NTC + 11th Class certificate from NIOS/ School Board
9	DGT: 2-Years ITI After 10th plus NIOS or 1-Year ITI plus 1-Year NAC After 10th plus NIOS	1200+ 240 hrs (NIOS/ STT) +150 hr of project	NTC + 12th Class certificate from NIOS/ School Board
10	AICTE: 3 Years Diploma after 10th	1200	This does not include self-study hours but includes industry attachments/internships
11	DGT: 1-Year to 2-Year ITI after 12th	1200	This does not include self-study hours but includes industry attachments/internships

S.No.	Stakeholders of Education, Higher Education, Technical Education, and Vocational education and training/ skilling System	Total Notional Learning Hours in/ by the Institution per year*	Remarks
12	AICTE: 2-Years Diploma after 12th	1200	This does not include self-study hours but includes industry attachments/internships
13	AICTE: 3-Years Bachelor's Degree in Vocation (B.Voc) after 12th	1200	This does not include self-study hours but includes industry attachments/internships
14	AICTE: 4-Years Bachelor's degree in Engineering/ Technology after 12th	1200	This does not include self-study hours but includes industry attachments/internships
15	AICTE: - Year Post Graduation Diploma after Bachelor's degree	1200	This does not include self-study hours but includes industry attachments/internships
16	AICTE: 2-Years Master's Degree after Bachelor's degree	1200	This does not include self-study hours but includes industry attachments/internships
17	UGC: 1-Year Undergraduate Certificate after 12th	1200	This does not include self-study hours but includes industry attachments/internships
18	UGC: 2-Years Undergraduate Diploma after 12th	1200	This does not include self-study hours but includes industry attachments/internships
19	UGC: 3-Yyears Bachelor's degree after 12th	1200	This does not include self-study hours but includes industry attachments/internships
20	UGC: 4-year UG with Honours / Honours with Research, after 12th	1200	This does not include self-study hours but includes industry attachments/internships
21	UGC: 1-Year Post-Graduate Diploma after 3-years Bachelor's degree	1200	This does not include self-study hours but includes industry attachments/internships

S.No.	Stakeholders of Education, Higher Education, Technical Education, and Vocational education and training/ skilling System	Total Notional Learning Hours in/ by the Institution per year*	Remarks
22	UGC: 2-Years Master's Degree after 3-years Bachelor's degree OR 1-Years Master's Degree 4-year UG with Honours / Honours with Research	1200	This does not include self-study hours but includes industry attachments/ internships
23	UGC: Doctoral program - Ph.D. (3 to 5 Years) after Master's degree	1200	-

* These Hours will not include the self-study Hours except in case of except in the case of distance education, Rome-schooling, alternative schooling, online education and National/State open schooling/where it is part of the overall learning Hour

** NIOS is National Institute of Open Schooling. In NIOS, self-study forms a major component for a learner as the study material in ODL system specifically of NIOS is called Self Learning Material (SLM) which are quite exhaustive in content and not Textbook. The face to face classroom teaching is limited to Personal Contact Programme (PCPs) which are conducted during weekends or on Holidays in order to facilitate learners from various heterogeneous group having understanding issues/doubts during their self-learning/study. In case of NIOS, the 1200 Hours per year is assigned for self-study +PCP +Assignments +Internal +Theory +Practical +Portfolio +projects +Internship.

*** STT is Short Term Vocational education and training/ skilling

3.2.6. NCrF Credit Levels

In order to align with the international best practices being followed with respect to assigning credit levels, the NCrF has proposed that the maximum levels within this framework shall uniformly be up to level 8. The assignment of Credit levels under NCrF will be based on the cumulative numbers of years of learning with assessment and is explained below:

- The credit level that can be attained after completion of school education i.e. grade 5th will be level 1, grade 8th will be level 2, grade 10th will be level 3 and grade 12th will be level 4.
- The higher education shall be from credit levels of 4.5 and to level 8.

- iii. For the Vocational Education, Training and Skilling, the NCrf credit levels are from level 1 to 8 wherein the level 1 is of lowest level of competence and complexity while level 8 indicates highest level of competence and complexity.

The level descriptors prescribed for a NCrf credit levels will be defined for every qualification framework i.e. National Higher Education Qualification Framework (NHEQF), National Skills Qualification Framework (NSQF) and National Curricular Framework (NCF).

These descriptors may describe the knowledge, skills and outcome based learning expected to be attained by a student/learner at various levels in the qualification framework. The learning outcomes could also be specific to disciplinary areas as Generic learning outcomes.

Example:

- i. In case of National Higher Education Qualification Framework (NHEQF), the Descriptor includes element of -
 - a. Knowledge and understanding, skills required to perform and accomplish tasks,
 - b. Application of knowledge and skills,
 - c. Generic learning outcomes,
 - d. Constitutional, humanistic, ethical, and moral values; employment- ready skills and entrepreneurship skills and mindset,
 - e. Credit requirements, and
 - f. Entry requirements for deciding the NCrf level to be assigned.
- ii. In case of National Skills Qualification Framework (NSQF), there are 5 level descriptors (revised) namely-
 - a. Professional Theoretical Knowledge,
 - b. Professional and Technical Skills/ Expertise,
 - c. Employment Readiness & Entrepreneurship Skills & Mind-set,
 - d. Broad Learning Outcomes, and
 - e. Responsibility for deciding the NCrf level to be assigned.
 - f. NSQF also prescribes the Entry requirements for NCrf level to be assigned and
 - g. Credit earned for each short term / long term skilling.

3.2.7. Notional Hours and Credit Assignment

In accordance with the international best practice and the current recommendations of NHEQF, the framework proposes that the number of credits per year for 1200 learning hours will be 40. Accordingly, every semester will comprise of 20 credits for 600 hours of notional learning hours. Any additional program/ course undertaken by the student/ learner beyond the 1200 learning hours or

beyond the purview of the course syllabus, shall be considered for additional credits that can be earned by the student/ learner. Therefore, the minimum credits that a student/learner can earn in a year shall be 40. However, in case of multiple exit options, the student may require undertaking additional exit module over and above the 40 credits of learning undertaken, as will be prescribed by the concerned regulator.

E.g. A student clearing the assessment of 1st year UG programs and pursuing regular education, moves to 2nd year UG will be awarded 40 credits for 1st year of UG education.

E.g. A student desirous of exiting after 1st year of Graduation (UG program) will require to undertake an exit module of 4 credits subject to achieving the prescribed learning outcomes determined by successful assessment before being awarded UG Certificate. The total credits earned by this student/learner in this case will 44.

The NCrf provides for basic guidelines on total learning hours in a year or part thereof and credits to be allocated based on those learning hours. The assignment of credits for learning hours for theory, practical and experiential learning including relevant experience and proficiency/ professional levels acquired for calculation of one credit, shall be prescribed by the concerned regulator.

Wherever necessary and if the curriculum so demands, the concerned regulator/ autonomous institution may consider having more than 40 credits for a particular program. However, the minimum credits for any program against 1200 hours of learning in a year will be 40.

3.2.8. Credits Assignment for Additional Learning Hours

Any additional program/ course undertaken by the student/ learner beyond the prescribed 1200 learning hours or beyond the purview of the course syllabus, shall be considered for assignment of additional credits that can be earned by the student/ learner. Such programs could include academic subjects, vocational courses, industry based trainings etc. run either directly by the institution, through the industry/ organization or any other. Hence depending on the interest, talent and capability, a student may earn credits beyond the ceiling of 40 subject to achieving prescribed learning outcomes determined by successful assessment. This provision will enable the student to undertake the dual degree/ dual Qualification programs as notified by UGC/ permitted by NCVET and allow students to take additional subjects in case of school education. This shall also encourage and provide for other School Boards / Regulatory Bodies to offer students further flexibility, mobility and opportunities including ME-ME and establishing eligibility for further progression for various educational programs.

3.2.9. Assessment Bands

The credit framework is based on the basic principle that **credits are a function of achieving the desired learning outcome/s for a program/ course/training determined by the successful assessment**. No credit can be earned by the student unless the student is assessed for the achievement of the desired competencies and outcome of a program.

In case of academic education for both school and higher education, progression to the next grade is dependent on the assessment of the stage student is in which are the major assessment stages which are mandatory before the student goes to the next step. For e.g., unless a student clears 8th grade, the student cannot appear for 10th grade and unless the student clears 10th, the student cannot appear for 12th exam. Similarly, in case of higher education, for enrolling in a Higher Education Institute (HEI) “Certificate obtained after successful completion of Grade 12 or equivalent state of education” is a must.

The **assessment is thus mandatory for earning credits** for all types of learning and progression. The assessments may include routine/ regular assessment after completion a program/course; assessment for recognition of prior learning; and on demand assessment for special provisions like accelerated and slow learning etc.

A use case of various types of assessments is attached as Annexure II. In addition, assessment is a compulsory after each academic year/ semester/session and also after a skilling course to enable implementation of multiple entry-multiple exit (ME-ME) options, which would normally be available at the end of each academic year or end of a short term or long term skilling course.

This means that the student will be earning credits after every semester/ year/completion of an academic/vocational program which they go through and hence the framework needs to cater to this requirement.

Accordingly, NCrf proposes that the NCrf levels be equated with the assessment/ major assessment stage which will be a mandatory stage for a student/learner to clear. Between two mandatory stages there may be 2-5 levels depending on whether it falls in purview of school or higher education. The clubbing of these levels has been referred to as Assessment bands. The Credits earned for the two courses/ qualifications/ programs or through experiential learning may be accumulated and added if earned in the same assessment band, subject to the guidelines of respective regulators. The regulator may also consider setting up of broad learning outcomes for each level and bands so defined.

Accordingly, the assessment bands so formulated are as indicated in the Table 3.

Table 3: NCrF levels for different academic grades/ Vocational Education & Training/ Skilling* and Assessment Bands

Academic Band/ Hours of Learning per year	Academic Grade/ Levels- School Education & Higher Education	Vocational Education Long Term Training/ Short Term Training (LTT/STT)	National Credit Framework (NCrF) Credit levels	Credits Earned/ year	Credit Points Earned	Assessment Stage and equivalence
Doctoral Degree	Ph.D.	NSQF Level 8 STT	8.0	40	320	
PG degree (1/2 years)/ ME/ M Tech (1200 Hrs./yr)	PG- 2 nd (Engg)	NSQF Level 7 STT	7.0	40	280	M.Tech. 2 nd Yr/ Engg PG Degree
	PG – 2 nd yr/ PG 1 st yr (Engg)	NSQF Level 6.5 STT	6.5	40	260	PG Degree/ M. Voc / M.Sc. (Engg)
	4-year UG with honors/ Honors with Research / PG – 1st yr	NSQF Level 6 STT	6.0	40	240	UG- Degree (Hons)/ PG – Diploma/B.Tech/BE
	UG- 3 rd Year	10 th +5-Yr NTC/NAC/CITS, 12 th +3-Yr NTC/NAC/CITS, NSQF Level 5.5 STT	5.5	40	220	UG- Degree/ B. Voc/ B.Sc. Eng
	UG- 2 nd Year	10 th +4-Yr NTC/NAC/CITS, 12 th +2-Yr NTC/NAC/CITS, NSQF Level 5 STT	5.0	40	200	UG- Diploma
2 year- Senior Secondary (1200 Hrs/yr)	UG- 1 st Year/equivalent	10 th +3-Yr NTC/NAC/CITS, 12 th +1-Yr NTC/NAC/CITS, NSQF Level 4.5 STT	4.5	40	180	UG- Certificate
	Class XII	10 th +2-Yr NTC/NAC/CITS, NSQF Level 4 STT	4.0	40	160	Class XII (Thru CBSE/ School Boards/ NIOS) Diploma Vocation
	Class XI	10 th +1-Yr NTC/NAC/CITS, NSQF Level 3.5 STT	3.5	40	140	Class XI (Thru CBSE/ School Boards/ NIOS) Certificate of Vocation
2 Year- Secondary (1200 Hrs/yr)	Class X	8 th +2-Yr NTC/NAC, NSQF Level 3 STT	3.0	40	120	Class X (Thru CBSE/School Boards/ NIOS)
	Class IX	8 th +1-Yr NTC/NAC, NSQF Level 2.5 STT	2.5	40	100	Class IX (Thru CBSE/ School Boards/ NIOS)
3 year- Middle (1200 Hrs/yr)	Class VIII	NSQF Level 2 STT	2.0	40	80	Class VIII (thru School Boards/ NIOS)
	Class VII		1.67	40	67	
	Class VI		1.33	40	53	
	Class V	NSQF Level 1 STT	1.0	33	33	Class V (thru School Boards/ NIOS)
3 year- Preparatory (1000 Hrs/yr)	Class IV		0.8	33	26.4	
	Class III		0.6	33	19.8	
	Class II		0.4	27	10.8	
5 year Foundational (800 Hrs / yr)	Class I		0.2	27	5.4	
	Pre-School (3 years)		0.1x3	27x3=81	8.1	

3.2.10. Major Dimensions of National Credit Framework

The National Credit Framework encompasses the following main components/ dimensions of learning:

- i. Credits earned by virtue of completed academic education
- ii. Credits earned by virtue of undergoing vocational education, training/ skill program
- iii. Credit points earned by virtue of relevant Experiential learning including relevant experience and proficiency/ professional levels acquired

i. Academic Education - School Education, Higher Education, Professional Education

At present, the school education system follows a system of progression of academic classes that is dependent on a student successfully clearing the requirements of a particular class/ grade to proceed to next. To formulate a comprehensive and holistic credit framework, that also considers the learning acquired during schooling and through informal modes either by home schooling, special schools (Divyangs & others), open schooling or online schooling, it is necessary that a credit system at the school level is also developed.

For higher and professional education, frameworks namely CBCS and SAMVAY (for skill based programs) exist and the education ecosystem has been aligned with these frameworks. These frameworks, however, were not able to fully address the requirements of assigning credits to vocational education and training/ skilling or school education and other forms of learning. The National Credit Framework therefore seeks to cater to all kinds/ types/ forms/ levels of academic education, be it school, higher/ professional or/ and vocational.

ii. Vocational Education and Training/ Skilling

With the emphasis on mainstreaming vocational education and training/ skilling under the National Education Policy 2020, it is important that the skill/vocational programs undertaken by students/learners are also assigned credits. One of the aims of the national credit framework is to creditise vocational education and training/ skilling, thereby, enabling seamless integration of vocational education and training/ skilling with the general education through credit accumulation & transfer mechanism. This will specifically enable students who have to discontinue general education and undertake short-term skilling program(s) for early employment and to enable them to gain credits for vertical and horizontal mobility and further progression.

iii. Relevant Experiential Learning and Proficiency/Professional levels Achieved

One of the most unique, practical & beneficial features of the National Credit Framework is assignment of credits/credit points/ weightage to the experiential learning including relevant

experience and professional levels acquired/ proficiency/ professional levels of a learner/student. Experiential learning is of two types:

a. *Experiential learning as part of the curricular structure of academic or vocational program. e.g., projects/OJT/internship/industrial attachments etc.*

This could be either within the Program- internship/ summer project undertaken relevant to the program being studied or as a part time employment (not relevant to the program being studied- up to certain NSQF level only). In case where experiential learning is a part of the curricular structure the credits would be calculated and assigned as per basic principles of NCrF i.e., 40 credits for 1200 hours of notional learning.

b. *Experiential learning as active employment (both wage and self) post completion of an academic or vocational program.*

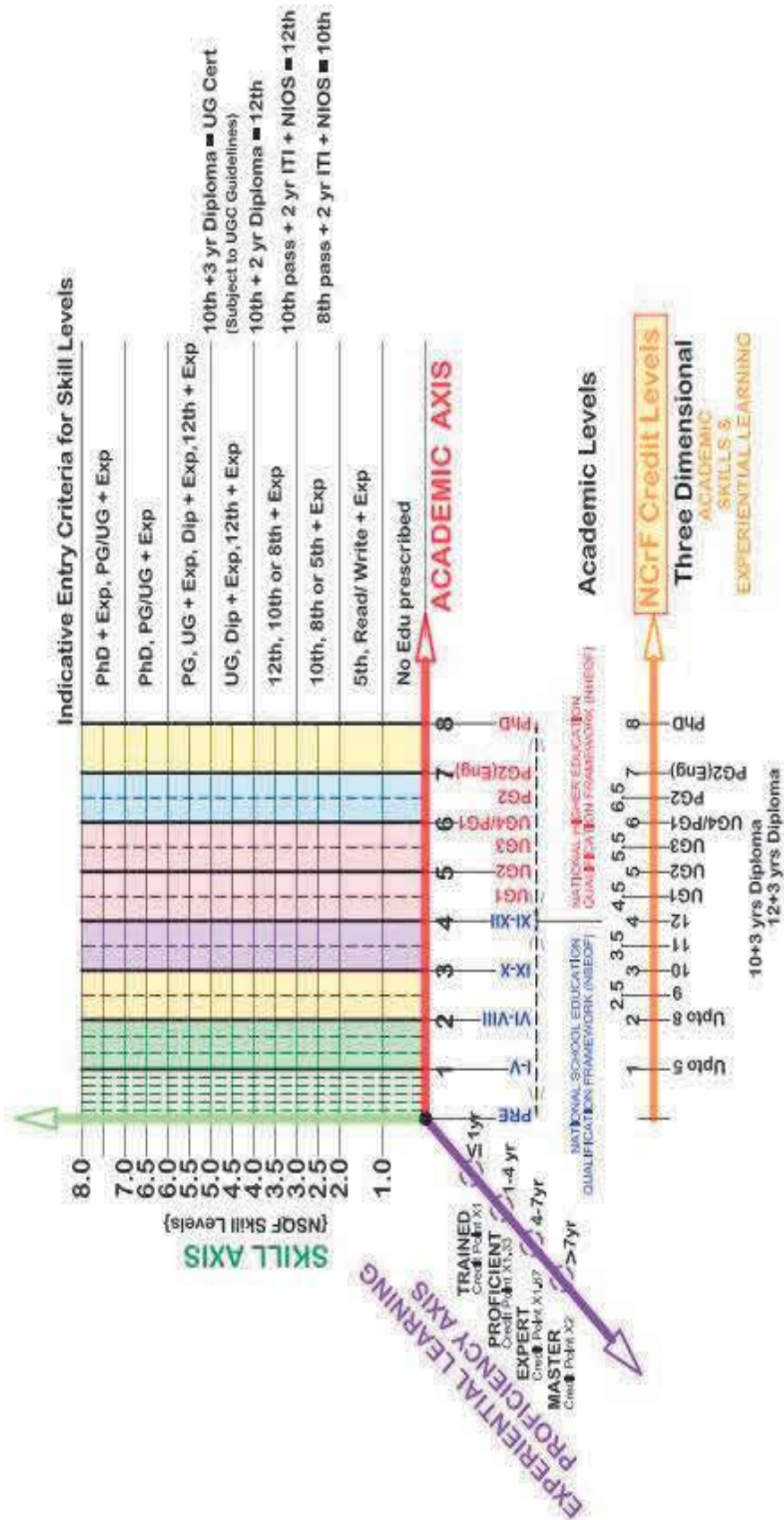
This means that the experience attained by a person after undergoing a particular educational program shall be considered for assignment of credits. This could be either Full or Part time employment after undertaking an academic/ Vocation program

In case where experiential learning is as a part of employment the learner would earn credits as weightage. The maximum credit points earned in this case shall be double of the credit points earned with respect to the qualification/ course completed. The credit earned and assigned by virtue of relevant experience would enable learners to progress in their career through the work hours put in during a job/employment.

Thus, the National Credit Framework (NCrF) provides for Assignment, Accumulation, Storage, Transfer & Redemption of Credits in alignment with the National Higher Education Qualification Framework (NHEQF), National Curriculum Framework (NCF) National School Education Qualifications Framework (NSEQF) and National Skill Qualification Framework (NSQF) which are the comprehensive credit-based Academic & Skill Qualification frameworks.

A diagrammatic view of the dimensions of the credit assignment is in figure I below:

National Credit Framework (NCrF) -The Dimensions of Learning



3.3. ASSIGNMENT OF CREDITS IN NATIONAL CREDIT FRAMEWORK

3.3.1. Mechanism for Assignment of Credits and Calculation of Credit Points

As explained in the previous sections, for every 1200 hours of learning, the students/learners can earn 40 credits and for the purpose of calculation under NCrF, one (1) credit would correspond to thirty (30) notional learning hours.

This assignment of credits shall also factor in the NCrF level at which these credits are earned which are unique and are also considered as weightage factor. This results in the student/learner earning **credit points** which are further accumulated and stored in the ABC for redemption and credit transfer. **These credit points are calculated as Credits earned multiplied by the NCrF level (weightage factor).** Accordingly, for every year of study or learning undertaken for various NCrF levels, the learner acquires different credit points enabling further accumulation and credit transfer as per the norms prescribed by the concerned regulators/autonomous institutions.

Some examples of how credits points are calculated are given in the example/use case below:

E.G. A 12th pass student earning 40 credits at NCrF level 4 will earn a total of 160 credit points **(40 credits X NCrF level (4) = 160)**

Similarly, a student completing a NSQF level 4 qualification of 450 hours earns 15 credits. The credit points earned by the student after completion and assessment of this qualification would earn a total of 60 credit points.
(15 credits X NCrF level (4) = 60)

3.3.2. Credits Assigned by Virtue of Academic Education

I. School Education

Based on the principles defined in the sections above, the total credits attained by a student who has completed one year of education are 40. These 40 credits are earned on a yearly basis subject to successful completion of the assessment at that level/ class/grade. Currently, National Skills Qualification Framework is totally in sync with the qualification framework being followed at school level and the same may be implemented till such time the National School Education Qualification Framework (proposed for School education) is formulated and notified. School Students engaged in active community service like teaching young's/adults may also be given credits for their work.

The assignment of credits at school level is given in the Table below:

Table4: NCrF levels and credit assignment for school education

S. No	Academic Education Band	School Edu Grade/ Level	Number of Hours of study	Credits for hours / year	Credit Levels as per NCrF	Credit Points Earned *
C-1	C-2	C-3	C-4	C-5	C-7	C-8 (C6 X C7)
	Pre-Primary School		800X3	27x3	0.1	8
1	Primary School(I-V)	Class I	800	27	0.2	5
2	Primary School(I-V)	Class II	800	27	0.4	11
3	Primary School(I-V)	Class III	1000	33	0.6	20
4	Primary School(I-V)	Class IV	1000	33	0.8	26
5	Primary School(I-V)	Class V	1000	33	1.0	33
6	Middle School(VI-VIII)	Class VI	1200	40	1.33	53
7	Middle School(VI-VIII)	Class VII	1200	40	1.67	67
8	Middle School(VI-VIII)	Class VIII	1200	40	2.0	80
9	High School (IX-X)	class IX	1200	40	2.5	100
10	High School (IX-X)	Class X	1200	40	3.0	120
11	Sr. Sec. School (XI-XII)	Class XI	1200	40	3.5	140
12	Sr. Sec. School (XI-XII)	Class XII	1200	40	4.0	160

*Rounded off to the nearest decimal

II. Higher Education including Technical Education

In case of higher education, all one year programs offered will have notional learning hours of 1200 hours with 40 credits. The concerned regulator (UGC and AICTE) may add more programs in the one-year program thereby leading to increased learning hours beyond 1200 notional hours of learning and higher overall credits while ensuring that the broad contours of the National Credit Framework are adhered to.

Additional activities like community-based activities, career counselling, tutorials etc may also be creditized. The regulators/ autonomous institution may consider having baskets of courses/ activities to offer the students along with the flagship programs/ defined curricular programs keeping in view the industry and user organizations.

Accordingly, the assignment of credits with respect to Higher education as prescribed under NHEQF, for all streams including science/ commerce/ arts and Engineering (technical) is as given below:

Table 5: NCrf levels and Credit Assignment in Higher Education

Sr. No	EXAMPLES OF HIGHER EDUCATION QUALIFICATIONS LOCATED WITHIN EACH LEVEL (Including Science/ Arts/ Commerce and Vocational)	TOTAL LEARNING HOURS PER YEAR	TOTAL CREDITS PER YEAR	NATIONAL CREDIT FRAMEWORK (NCRF) CREDIT LEVELS	CREDITS POINTS
C-1	C-2	C-3	C-4	C-5	C-6 (C-4 X C-5)
1	Undergraduate Certificate Programme duration: first year (first two semesters) of any undergraduate programme	1200	40	4.5	180
2	Undergraduate Diploma Programme duration: first two years (first four semesters) of any undergraduate programme.	1200	40	5	200
3	Bachelor's Degree Programme duration: three years (Six semesters) of any undergraduate programme.	1200	40	5.5	220
4	Bachelor's Degree (Honours/ research/ Engineering). Programme duration: four years (eight semesters) of any undergraduate programme.	1200	40	6	240
5	Post-Graduate Diploma. Programme duration: One year (2 semesters) after any bachelor's degree i. PGD after 3-year Bachelor degree/ 2 semesters of the 2-year master's degree programme. ii. PGD after 4-year bachelor degree	1200	40	i. 6 ii. 6.5	i. 240 ii. 260
6	Master's Degree. Programme duration: One year (two semesters) after obtaining a Bachelor's degree (Honours/Research).	1200	40	6.5	260
7	Master's Degree. Programme duration: two years (four semesters) after obtaining a 3 yr Bachelor's degree;	1200	40	6.5	260
8	Master's degree; Programme duration: two years (four semesters) after obtaining a Bachelor's Engineering degree.	1200	40	7.0	280
9	Doctoral degree	1200	40	8.0	320

III. Other Learning Like Online/ Blended/ Open & Distance Learning

The Credit assignment is a function of total hours of learning put in by a student in a year versus total credits available in a year. The learning hours irrespective of the mode of learning (offline, online or blended) shall continue to follow the broad principles specified in previous sections which also form the core of the NCrF. The only exception being the hours may include the self-study hours, as applicable in the case of distance education, home-schooling, special schooling, alternative schooling, and open education.

In case of online programs such as those being offered through MOOC (Massive Open Online Courses), NPTEL or Swayam Platform, it is important that these online courses be defined in terms of learning outcomes against an appropriate NCrF level along with indicative mapping with the other academic/ regular programs. Such mapping would be prescribed by the concerned regulator. Creditization of these courses and redemption of such credits against a degree/diploma/certificate will further be defined by universities/autonomous institutions/regulators.

Assignment of Credits for programs being implanted in online or blended mode in academic /vocational education and skilling will enhance the scope of expand the open /distance learning and will promote extensive use of technology in learning & skilling. This would help in overcoming the constraints of physical infrastructure & scalability while enhancing access, equity, and affordability and ensuring quality and accountability. The blended learning option shall also enhance accessibility of learning for out of school students as well as for Divyangs.

3.3.3. Credits Assignment for Vocational Education and Training & Skilling

For the vocational education and training/ skilling ecosystem, with respect to credit assignment, the following shall be applicable:

- Total notional learning hours in a year (for purpose of calculating credits): 1200
- Credits to be allocated in a year with 1200 notional learning hours: 40 (however for each year of learning the number of hours may go up and correspondingly the number of credits will also go up to say 44 or 48)
- Therefore, for the purpose of overall credit calculations number of notional hours leading to one credit unit= $1200 / 40 = 30$

The credit assignment for vocational/ skill education as per NSQF levels & credit assignment at different levels is reflected in the Table No. 6.

Table 6: NCrF Levels and Credit Assignment in Vocational Education and Training/ Skilling

NSQF/ NCrF level at Entry	NSQF/ National Credit Framework (NCrF) level attained after VET/ Skill Training (STT/ LTT)	Minimum entry criteria for undergoing Short Term Training (STT) at the given level		Minimum Range of Notional hours of Short-Term Training/ STT (Theory + Practical + OJT) (Notional Hours in Multiple of 30/ 15) subject to assessment	Long Term Training LTT Course viz. Craftsmen Training Scheme (CTS) in Industrial Training Institutes (ITIs), Crafts Instructor Training Scheme (CITS) & National Apprenticeship Certificate (NAC)	Optional Additional requirements for below given Academic Equivalence of the LTT or STT VET & Skilling Qualifications, Courses, or Programs
		Min Education/ Skill Qualifications required	Minimum Relevant Experience Required *			
Fresher at Level 0	Level 1	▲No formal education prescribed	No Experience required	150-210 Hours OR 600 hours of Apprenticeship	No LTT course	For Grade 3 or Grade 5 certificate In addition to STT, Foundational literacy and numeracy at NSQF level 1 for Grade 3 and 2 for Grade 5 certificate respectively by Competent Authority**
Fresher or Level 1	Level 2	▲No formal education prescribed ▲May require ability to read and write for some qualifications	No Experience required. However, 1 year relevant experience may be desirable for some qualifications	210-270 Hours OR 750 hours of apprenticeship	No LTT courses	For Grade 5 or Grade 8 certificate In addition to STT Advance Literacy & Numeracy Skills at NSQF level 2 for Grade 5 and 3 for grade 8 certificate by Competent Authority**
		▲Previous relevant Qualification of NSQF Level 1	No Experience required			
Level 2	Level 2.5	▲9 th Grade pass	No Experience required	240-300 Hours	1-year Vocational education & Training/ Skilling (NTC/ NAC) after Grade 8 AND (For NTC only) 150 hours of project work	For Grade 8 or Grade 9 Certificate In addition to LTTs/STTs & Grade 7 or Grade 8 certificate, the candidate must have accumulated 40 credits*** at level 2.5 and completed a language course of level
		▲8 th Grade pass and pursuing continuous schooling				
		▲5 th Grade pass	4 year relevant experience			
		▲Ability to read and write	4 year relevant experience			
		▲Previous relevant Qualification of NSQF Level 2	6 months relevant experience			

		Previous relevant Qualification of NSQF Level 1	1.5 year relevant experience		AND (For NTC/NAC only) 240 hours of Language course	2/3 for Grade 8/9 by a Competent Authority**. For NTC/NAC: In addition to NTC/NAC, successful assessment of language course through NIOS/ DGT/ Competent Authority** for Grade 9 Certificate
Level 2.5	Level 3	Grade 10	No Experience required	270-390 Hours	2 years of Vocational education & Training/ Skilling (NTC/ NAC) after Grade 8 AND (For NTC only) 150 hours of project work AND (For NTC/NAC only) 240 hours of Language course	For Grade 9 or 10 Certificate In addition to LTTs/STTs & Grade 8 or Grade 9 certificate, the candidate must have accumulated 40 credits*** at level 3 and completed a language course of level 3 for Grade 9/10 by a Competent Authority**. For NTC/NAC: In addition to NTC/NAC, successful assessment of language course through NIOS/ DGT/ Competent Authority** for Grade 10 Certificate
		Grade 8 with two years of (NTC/ NAC) after 8th	No Experience required			
		Grade 8 pass and pursuing continuous schooling in regular school with vocational subject				
		8th grade pass	2 year relevant experience			
		5th grade pass	5 year relevant experience			
		Previous relevant Qualification of NSQF Level 2	1 year relevant experience			
		Previous relevant qualification of NSQF Level 2.5	6 months relevant experience			
Level 3	Level 3.5	11th Grade pass	No Experience required	360-420 Hours	1 to 2 years of Vocational education & Training/ Skilling (NTC/ NAC) After Grade 10 AND (For NTC only) 150 hours of project work	Certificate For Grade 11th Certificate In addition to LTTs/STTs & Grade 10 certificate, the candidate must have accumulated 40 credits*** at level 3.5 and completed a language course of level 3.5/4 for Grade 11 by a Competent
		- Completed 1st year of 3-year diploma after 10th 10th grade pass and pursuing continuous schooling 8th grade pass with two years of NTC plus 1 year NAC/CITS 8th grade pass with two years of NTC 8th Grade pass with 1 year NTC plus 1 year NAC	One Experience required			

		▲ 8th Grade pass with 1 year NTC plus 1 year CITS ▲ 8th Grade pass ▲ Previous relevant Qualification of NSQF Level 2.5 ▲ Previous relevant Qualification of NSQF Level 3	3 year relevant experience 3 year relevant experience 1.5 year relevant experience		AND (For NTC/NAC only) 240 hours of Language course	Authority**. For NTC/NAC: In addition to NTC/NAC, successful assessment of language course through NIOS/ DGT/ Competent Authority** for Grade 11 Certificate
Level 3.5	Level 4	▲ 12th grade pass ▲ Completed 2 nd year of 3-year diploma (after 10 th) and pursuing regular diploma ▲ 10th grade pass plus 2-year NTC ▲ 10th grade pass plus 1-year NTC plus 1 year NAC ▲ 8th pass plus 2-year NTC plus 1-Year NAC plus CITS ▲ 10th grade pass and pursuing continuous schooling ▲ 10th Grade Pass ▲ 8 th Grade pass ▲ Previous relevant Qualification of NSQF Level 3.0 with minimum education as 8 th Grade pass**** ▲ Previous relevant Qualification of NSQF Level 3.5	No Experience required No Experience required No Experience required No Experience required No Experience required 2 year relevant experience 4 year relevant experience 3 year relevant experience 1.5 year relevant experience	390-480 Notional Hours of Training	2 to 3 years of Vocational education & Training/ Skilling (NTC/ NAC) (After 10 th) AND (For NTC only) 150 hours of project work AND (For NTC/NAC only) 240 hours of Language course	For Grade 12th Certificate In addition to LTTs/STTs & Grade 11 certificate, the candidate must have accumulated 40 credits*** at level 4 and completed a language course of level 2/3 for Grade 12 by a Competent Authority**. For NTC/NAC: In addition to NTC/NAC, successful assessment of language course through NIOS/ DGT/ Competent Authority** for Grade 12 Certificate
Level 4	Level 4.5	▲ Completed 1 st year of UG ▲ Pursuing 1st year of UG and continuous education ▲ Pursuing 3rd year of 3-year diploma after 10 th and continuous education ▲ Completed 3-year diploma after 10 ▲ Completed 2 nd year of 2-year diploma after 12 th ▲ Pursuing 2 nd year of 2- year diploma after 12 and continuous education	No Experience required No Experience required	450-510 Notional Hours of Training OR For UG Students - 450 Hours of Internship + project work with Assessment	1 to 2 years of Vocational education & Training/ Skilling after 12th (NTC/ NAC/ CITS) OR 3 to 4 years of Vocational education	For LTT and STT Courses with UG Certificate In addition to 20 credits# from NCrf Level 4.5 or above STT/ LTT courses and,

		10 th Grade pass plus 3 years of vocational education & Training e.g. ▲ 10 th grade pass with 2 year NTC plus 1 year NAC/CITS ▲ 10 th Grade pass with 1 year NTC plus 1 year NAC plus 1 year CITS	No Experience required		after 10 th (NTC/ NAC/ CITS) AND (For NTC only) 150 hours of project work AND (For NTC/NAC only) 240 hours of Language course	20 credits# from UGC/ AICTE approved NHEQF courses at NCrF level 4.5 or above
		▲ 10 th grade pass with 1 year NTC plus CITS	1 year Experience required			
		▲ 8 th Grade pass with 2 year NTC plus 1 year NAC plus 1 year CITS	1 year Experience required			
		▲ Previous relevant Qualification of NSQF Level 3.5 and with minimum education as 8 th Grade pass	3 year relevant experience			
		▲ Previous relevant Qualification of NSQF Level 4 and with minimum education as 8 th Grade pass	1.5 year relevant experience			
Level 4.5	Level 5	▲ Completed 2 nd year of UG ▲ Pursuing 2 nd year of UG and continuous education ▲ Completed 2 nd year of diploma (after 12 th) ▲ Pursuing 2 nd year of 2-year diploma after 12 th	No Experience required	480 to 570 Notional Hours of Training OR For UG Students - 510 Hours of Internship + project work with Assessment	2 to 3 years of Vocational education & Training/ Skilling after 12 th (NTC +NAC/ CITS) OR 4 to 5 years of Vocational education & Training/ Skilling after 10 th (NTC/ NAC / CITS)	For LTT and STT Courses with UG Diploma In addition to 20 credits from NCrF Level 5.0 or above STT/ LTT courses And another 20 credits from UGC/ AICTE approved NHEQF courses at NCrF level 5.0 or above
		▲ 12 th pass with 1 year Vocational Education & training (NTC or NAC or CITS)	No Experience required			
		▲ Completed 3 year diploma after 10 th	1 year relevant experience			
		▲ 12 th Grade pass	2 year relevant experience			
		▲ 10 th Grade pass	4 year relevant experience			
		▲ Previous relevant Qualification of NSQF Level 4 and with minimum education as 8 th Grade pass	3 year relevant experience			
		▲ Previous relevant Qualification of NSQF Level 4.5	1.5 year relevant experience			
Level 5	Level 5.5	▲ Completed 3 rd year of UG ▲ Pursuing 3 rd year of UG and continuous education ▲ Completed 2 nd year diploma after 12 th	No Experience required	540 to 600 Notional Hours of Training OR	3 to 4 years of Vocational education & Training/ Skilling/ experiential learning	For LTT and STT Courses with UG Degree

		12 th Grade Pass plus 2 years of vocational Education and Training. E.g. ▲ 12 th grade pass with 1 year NAC plus 1 year CITS ▲ 12 th grade pass with 1 year NTC plus 1 year NAC/CITS	1 year relevant experience	For UG Students - 550 Hours of Internship + project work with Assessment	after 12 th (NTC/ NAC/ CITS) OR 5 to 6 years of Vocational education & Training/ Skilling/ experiential learning after 10 th (NTC/ NAC/ CITS)	In addition to 20 credits from NCrf Level 5.5 or above STT/ LTT courses And another 20 credits from UGC/ AICTE approved NHEQF/ courses at NCrf level 5.5 or above
		▲ 12 th Grade pass with 1 year NTC/ NAC ▲ Completed 3-year diploma (after 10 th)	2 year relevant experience			
		▲ 12 th Grade pass	3 year relevant experience			
		▲ Previous relevant Qualification of NSQF Level 5	1.5 year relevant experience			
		▲ Previous relevant Qualification of NSQF Level 4.5	3 years relevant experience			
Level 5.5	Level 6	▲ Pursuing first year of 2-year PG program after completing 3 year UG degree ▲ Pursuing PG diploma after 3 year UG degree ▲ Completed 4 year UG (in case of 4-year UG with honours/ honours with research) ▲ Pursuing Completed 4 year UG (in case of 4-year UG with honours/ honours with research)	No Experience Required	570 to 660 Notional Hours of Training OR For UG/ PG Diploma Students - 600 Hours of Internship + project work with Assessment		For STT Courses with PG Diploma In addition to 20 credits from NCrf Level 6.0 or above STT courses And another 20 credits from UGC/ AICTE approved NHEQF courses at NCrf level 6 or above
		12 th Grade Pass with 2 years of Vocational Education & Training. E.g. ▲ 12 th Grade with 1 year NTC plus 1 year NAC/CITS ▲ 12 th grade with 1 year NAC plus CITS	2 year relevant experience			
		▲ 12 th grade pass	4 years relevant experience			
		▲ Previous relevant Qualification of NSQF Level 5.5	1.5 years relevant experience			
		▲ Previous relevant Qualification of NSQF Level 5	3 years relevant experience			
Level 6	Level 6.5	▲ Pursuing PhD (after 4 year UG honours with research) ▲ Pursuing 2nd year of PG (after 3 year UG Degree)	No Experience Required	630 to 690 Notional Hours of Training OR		For STT Courses with PG Degree

		▶ Pursuing 1st year of PG (after 4-year UG Degree with Honours/ honours with Research) ▶ Pursuing 1st year of PG- Eng		For PG Students - 660 Hours of Internship + project work with Assessment		In addition to 20 credits from NCrf Level 6.5 or above STT Courses And Another 20 credits from UGC/ AICTE approved NHEQF courses at NCrf level 6.5 or above
		▶ 2-year Diploma after 12th Grade (in any field)	3 years of relevant experience			
		12 Grade Pass with 2 years of Vocational education and Training thereafter. E.g. ▶ 12th Grade with 1 year NTC plus 1 year NAC/ CITS ▶ 12th grade with 1 year NAC plus 1 year CITS	3 years relevant experience			
		▶ Previous relevant Qualification of NSQF Level 6	1.5 years relevant experience			
		▶ Previous relevant Qualification of NSQF Level 5.5	3 years relevant experience			
Level 6.5	Level 7	▶ Pursuing PhD	No Experience Required	660 to 750 Notional Hours of Training OR For PG Students - 720 Hours of Internship + project work with Assessment		For STT Courses with PG Engg In addition to 20 credits from NCrf Level 7.0 or above STT courses And 20 credits from AICTE approved NHEQF courses at NCrf level 7 or above
		▶ Pursuing 2nd year of 2 year PG- Eng	No Experience Required			
		▶ Completed 3 year UG degree	3 years of relevant experience			
		▶ Completed 4 year UG degree with Honours/ Honours with research	2 years of relevant experience			
		▶ Previous relevant Qualification of NSQF Level 6.5	1.5 years of relevant experience			
		▶ Previous relevant Qualification of NSQF Level 6	3 years of relevant experience			
Level 7	Level 8	▶ PhD in the relevant field	No Experience Required	750 onwards Notional Hours of Training OR 810 Hours of Internship & project		
		▶ PhD in any field	1 year of relevant experience			
		▶ PG in any field	4 years of relevant experience			
		▶ UG in relevant field	5 years of relevant experience			
		▶ UG in any field	6 years of relevant experience			
		▶ Previous relevant Qualification of NSQF Level 6.5	4 years of relevant experience			
		▶ Previous relevant Qualification of NSQF Level 7	2 years of relevant experience			

Note: This table is subject to change as per the requirements of the vocational education and skilling ecosystem. However, any changes made shall be in line with the overall spirit and provisions of national credit framework. NCVET will issue detailed guidelines on various aspects of NSQF from time to time.

NOTES: # May be read as upto 20 Credits from NCrF/NSQF and remaining credits from NHEQF

**	- Relevant Experience may include On the Job training (OJT), Internship and Apprenticeship training. - OJT undertaken as part of qualification and redeemed into credits shall not be considered again as part of relevant work experience. - For establishment of Relevant Experience & OJT till NCrF/ NSQF level 2.5 the concerned AB/ Regulatory Body may, in the absence of a formal experience certificate, prescribe process (like preadmission test etc.) to assess the relevant experience based on the learning outcomes. In such cases, formal experience & OJT certificate may not be insisted upon. - However, for all NCrF/NSQF levels beyond 2.5 proper certificates establishing relevant experience & OJT shall be required. - The additional hours of learning through project work and NIOS lead to additional credit. - Credits in case of STT programs shall be dependent on number of hours calculated on the principal of 40 credits against 1200 learning hours. - Provision of Recognition of Prior learning with or without up-skilling and subject to outcome based assessment and certification shall also be used for assignment of credit levels to the trained workforce with Experiential learning including relevant experience and professional levels acquired
**	Competent Authority shall be the body as approved & notified by the Department of School Education and Learning, Ministry of Education (MoE) for assessment & issuance of certificates of academic/ levels equivalence as mentioned
***	- Credits required for academic equivalence may be accumulated through skill training or relevant work experience or language courses subject to successful completion of the same. - It may be ensured that one should not use Monkey stairs using entry Qs + Exp to gets higher and higher levels of certificates without commensurate outcome based skills, which are properly assessed. ABs concerned should clearly put some practical checks and balances/ riders /Limits. For RPL no formal entry qualifications would be insisted upon subject to the condition that the RPL assessment shall be conducted as per the detailed guidelines of NCVET
****	Not applicable for learners who are purely into skill ecosystem & do not want any academic equivalence or mobility onto the academic axis, may progress vertically on the skilling axis based on the number of years spent in the previous NSQF level and/or RPL subject to assessment without any restrictions on academic entry qualification. This would further be detailed out in RPL Guidelines which provide that in very special cases (say Padma Award winners, Olympic Medalist) the level descriptors may not apply.

3.3.4. Credits Assignment for Relevant Experience and Professional/Proficiency Levels Acquired

One of the dimensions of assigning credit within the NCrF is through relevant experience/ proficiency. As explained previously in the section 3.2.10 (iii), there are two types of experiential learning i.e. experiential learning as part of the curricular design of an academic/ vocational program and experiential learning as part of employment undertaken after completion of an academic/vocational program.

In case where experiential learning is a part of the curricular structure the credits would be calculated and assigned as per basic principles of NCrF i.e., 40 credits for 1200 hours of notional learning. In case where experiential learning is part of employment (related field both wage and self) the learner would earn credits as weightage. The maximum credit points earned in this case shall be double of the credit points earned with respect to the qualification/ course completed. The credit earned and assigned by virtue of relevant experience would enable learners to progress in their career through the work hours put in during a job/employment.

Individual regulators/autonomous institutions may prescribe the weightages for the experiential learning based on the relevant work experience and proficiency/ professional levels achieved. However, the range of these weightages must lie between 1 and 2 wherein 1 is the minimum and 2 is the maximum weightage. An indicative mechanism for assignment of weightages based on the experiential learning (relevant work experience and proficiency level achieved) for calculation of overall credit points is as below:

Table 7: Credit acquired by virtue of relevant experience / proficiency

Experience cum Proficiency/ professional levels	Description of the relevant Experiential learning including relevant experience and professional levels acquired and attaining proficiency/ professional levels	Weightage/ multiplication Factor	Defining criteria by Respective Regulatory/ Trade Bodies (Indicative)
Trained/ Qualified	Completed the coursework/ education/ training and has been taught the skills and knowledge needed for a particular job or activity and assessed	1	▲ E.g. No of years of experience, ▲ Level of knowledge and proficiency or professional levels attained ▲ Any other parameters as maybe defined by the Respective Regulatory/ Trade Bodies
Proficient	Proficient implies a thorough competence derived from training and practice	1.33	
Expert	Expert is defined as performing a job to high standards with good level of education, skill, or training and experience	1.67	
Master	Master means having great/ highest level of knowledge and experience in a trade or profession	2	

Example- a learner who has undertaken training of 1200 hours (40 credits) of level 3 program attains 120 credit points (40*3). Presuming that this candidate works in a related field for 3 years, then the overall credit points earned shall be- $120 \times 1.33 = 159.6$ or rounded off to 160 credit points.

Similarly, in case of student/ learner with more than 7 years' experience, the maximum credit points earned will be $120 \times 2 = 240$

3.4. CREDIT ACCUMULATION AND TRANSFER (OPERATIONALIZATION OF CREDIT FRAMEWORK)

a. Credits Accumulation

The credits will be earned by each student and learner after going through the course qualification or program subject to assessment. The credits would be given for every kind of learning which are for each subject or qualifications. These credits can be accumulated Indian Academic Bank of Credits.

Generally, under each of the programs and qualifications design under National Higher Education Qualification Framework (NHEQF) or National Skill Qualification Framework (NSQF) the requirement of credits to be hard for each year or qualification are prescribed by the concerned regulators. Presently there is no credit system in place at school level and therefore there is no practice of prescribing the credits to be earned for clearing each grade in the school. However, once the national credit framework is in place, the concerned regulator may prescribe the credits to be earned for each grade.

There is also a concept of credit points which could be subsequently used for various purposes. The total credit points earned by a student/learner is a multiplication of total credits earned at a level of study/ skilling and NCrF level assigned to that level of skilling/ academic class. The Framework also envisions to consider the cases wherein the student opts out of the education ecosystem and gains employment.

Such a student, if desirous of returning to mainstream education shall benefit as the experience gained by the student during his active employment shall also be assigned credits which can be redeemed to establish eligibility for further mobility in accordance with the assessment band. The weightage assigned to relevant experience shall be multiplied with the credit points to calculate the final credits available to a student.

Accordingly, at any point of time, the overall credit points accumulated by a student shall be calculated as 'total credit points earned' multiplied by the 'weightage assigned to the relevant experience acquired by the student'.

E.g. A learner completing grade 11 and grade 12 from regular schooling earns 40 **credits** for each grade.

The **credit points** accumulated by the learners would be $3.5 \times 40 = 140$ and $4 \times 40 = 160$ for each grade.

Therefore, the **accumulated credit points for the assessment band** (NCrF level 3.5 and 4) equals 300.

b. Credits Storage

Credits accumulated by an individual shall be stored through Academic Bank of Credits (ABC) as envisaged under by NEP. ABC shall enable an individual to digitally keep record of all the learning acquired and accumulated throughout life in a common account. ABC shall provide for storage of credits irrespective of type of learning i.e. academic, vocational or experiential and thus shall enable

lifelong learning. Information regarding ABC have been further detailed down in Section 3.5 of this document.

c. Credits Transfer

The transfer of credits may be defined as the process of mutual acceptance of credits between two entities. This would mean that the competencies acquired by a learner/ student after completion of qualification/s are acknowledged in numerical values. The transfer of credits is possible only when credits are recognized by concerned awarding bodies and there is a mutual agreement on credits between the body allocating credits and the body accepting those credits. To enable such transfer, it is imperative that learning outcomes for every NCrf level and every program/course be defined by the concerned regulators/board to facilitate effective operationalization. While having the requisite number of credits shall make a learner fulfil the eligibility criteria for entry to a program, the accepting institution will have flexibility to prescribe the modalities and process for admission which may include merit based listing, an entrance test/ examination or simply first come-first serve basis.

In addition, it would be the responsibility of the regulator/ Autonomous institutions to define the need of abridge module while defining the admission criterion.

The transfer of credits shall fulfil the following objectives:

- i. Establish equivalence between General education and Vocational Education and Training/ Skilling, without further certification of equivalence
- ii. Define Entry criteria for various qualifications
- iii. Define and establish Multiple entry and exit possibilities
- iv. Enhance International Mobility
- v. Other benefits like establishing minimum requirements for a job/ employment or projects, if applicable

3.4.1. Establishing Academic Equivalence Within and Between General Education and Vocational Education and Training/ Skilling

One of the objectives of the National Credit Framework is to establish equivalence between various streams of education by ensuring equivalence between different types of existing programs/ qualifications and this equivalence sets the base for establishing eligibility of students and/ or establishing multiple entry and exit pathways. The following are the basic principles to be followed while establishing equivalence:

- i. The learner must have accumulated credit required for a particular level either through regular informal and formal education, vocational education and training/ skilling or through relevant work experience or a combination of all.
- ii. Equivalence is possible only within the same assessment band.
- iii. The learner would need to clear/pass the previous assessment band in order to move to the next assessment band
- iv. The accumulated credits are with respect to each assessment band.
- v. For establishing equivalence (including academic) for a level, the requirement of any additional learning will be defined by the concerned regulator.

Such an equivalence shall be applicable to all kinds of program including those being implemented within school education, Higher education (both general and technical) and vocational education (ITI-DGT based programs). This would mean that even an ITI pass out will be able to get academic equivalence to 9th, 10th, 11th and 12th grades, subject to additionally fulfilling the requirements for such equivalence/ equivalence criteria. The equivalence table (below) in addition to the existing equivalence post completion of 2 year ITI after 8th and 2 year ITI after 10th with 10th and 12th grade respectively also establishes requirements/ process for academic equivalence for ITI pass student for grade 9 and grade 11.

E.g. 1st year UG and 1st year BE/ B.Tech to be treated equivalent for seeking admission in the second year of any UG program.(with/ without any bridge courses)

E.g. An ITI pass out (2 years after 10th) along with an additional language course from NIOS attains equivalence of Class 12th certificate along with ITI-NTC

The matrix of equivalence between school education & vocational education and training/ skilling and higher education and vocational education and training/ skilling is detailed in the **Table No. 8**

Table 8: The National Credit Framework Levels (NCrF), Academic Levels (National School Education, Higher Education Qualifications Framework), and Vocational Education and Skills Levels (National Skill Qualifications Framework) and conditions for academic equivalence

No of Years of Edu	Stages/ Band/ Education Program	School Education grade Passed / Credits Earned per year/ NCrF Credits Levels	Higher Education Programs (General Edu) / Credits Earned	Higher Education Programs (Tech Edu/ AICTE) / Credits Earned	Vocational education and training/ skilling Programs (Long Term) with Entry criteria	Vocational education and training/ skilling Programs (Short Term) with Entry criteria / Credits Earned	Additional requirement for Academic Equivalence of the VET & Skilling qualifications completed	Common National Credit Framework Levels	Credit Points earned
Col-1	Col-2	Col-3	Col-4	Col-5	Col-6	Col-7	Col-8	Col-9	Col-10
	School Education								
	3 years of Pre-Primary 800 Hrs/Year	Balvatika/ 81/ 0.1 x 3	NA	NA	NA	NA		0.1	8
1	Primary School Grade I & II 800 Hrs/Year and Grade III, IV & V 1000 Hrs/Year	Grade I/ 27/ 0.2	NA	NA	NA	▲ No formal education and ▲ 150-210 hrs of Vocational education and Training/ Skilling OR ▲ 600 hours of apprenticeship	In addition to (Col-7) Foundational literacy and numeracy at NSQF level 1/ 2 for grade 3 or Grade 5 certificate by competent authority	0.2	5
2		Grade II/ 27/ 0.4	NA	NA	NA			0.4	11
3		Grade III/ 33/ 0.6	NA	NA	NA			0.6	20
4		Grade IV/ 33/ 0.8	NA	NA	NA			0.8	26
5		Grade V/ 33/ 1.0	NA	NA	NA			1.0	33
6	Middle School 1200 Hrs/Year	Grade VI/ 40/ 1.33	NA	NA	NA	▲ No formal education OR ▲ Ability to read and write with one-year experience wherever job requires AND ▲ 210-270 hrs. of Vocational education & Training/ Skilling	In addition to (Col-7) Advance Literacy & Numeracy Skills at NSQF level 2 or 3 through competent authority for grade 5 th or grade 8 th certificate	1.33	53
7		Grade VII/ 40/ 1.67	NA	NA	NA			1.67	67
8		Grade VIII/	NA	NA	NA			2.0	80

		40/ 2.0				OR ► NSQF Level 1 with 1-year Experience and 210-270 hrs. of Vocational education and Training/ Skilling OR ► 750 hours of apprenticeship			
9	High School 1200 Hrs/Yr	Grade IX	NA	Completed 1 year of ITI after 8th class	8 th Grade pass + 1 year of Vocational education & Training/ Skilling (NTC/ NAC) AND (for NTC only) 150 hours of project work	► Total 8-9 years of learning including academic education, vocational education, training and skilling and/or Experiential learning including relevant experience and professional levels acquired, subject to assessment OR ► 1-year relevant experience at NSQF Level 2 or 6 months' relevant experience at Level 1 AND ► 240-300 hrs. of Vocational education & Training/ Skilling	In addition to (Col-6) Language skill at level 3 through competent authority for 9 th Certificate In addition to (Col-7) Grade 8 th certificate + Accumulated 40 credits at level 2/3 plus Language Skills at level 3 by competent authority for Grade 9 th Certificate	2.5	100
10	High School 1200 Hrs/Yr	Grade X	NA	Completed 2 Years of ITI after 8th Class	8 th Grade pass + 2 years of Vocational education & Training/ Skilling (NTC/ NAC) AND (for NTC only) + 150 hours of project work	► Total 9-10 years of learning including academic education, vocational education, training and skilling and/or Experiential learning including relevant experience and professional levels acquired, subject to assessment OR ► 1-year relevant experience at NSQF Level 2 or 6 months' relevant experience at Level 2.5 AND ► 270-390 hrs. of Vocational education & Training/ Skilling	In addition to (Col-6) Language skill of level 3 through competent authority for 10 th Certificate In addition to (Col-7) Grade 8 th and/or Grade 9 th certificate + Accumulated 40 credits at level 3 plus Language Skill at level 3 through competent authority for Grade 10 th Certificate	3.0	120
11	Sr. Sec. School 1200 Hrs/Yr	Grade XI	NA	Completed	10 th Grade pass + 1 year of Vocational	► Total 10-11 years of learning including academic education,	In addition to (Col 6)	3.5	140

				1st Yr of Diploma after 10 th (Certificate of Voc. (Eng))	education & Training/ Skilling (NTC/ NAC) (After 10 th) AND (for NTC only) + 150 hours of project work	vocational education, training and skilling and/or Experiential learning including relevant experience and proficiency/ professional levels acquired, subject to assessment OR ▶ 1-year relevant experience at NSQF Level 3 or 2-year relevant experience at level 2.5 AND ▶ 360 to 420 hrs. of Vocational education & Training/ Skilling OR ▶ 10 th Grade pass and pursuing continuous schooling in regular school with one vocational subject	Language skill of level 3.5/4 through competent authority for grade 11 th Certificate In addition to (Col 7) Grade 10 th certificate + Accumulated 40 credits at level 3.5 plus Language Skill of level 3.0/3.5 through competent authority for Grade 11 th Certificate			
12	Sr. Sec. School 1200 Hrs/Yr	Grade XII	NA	Completed 2nd Yr of Diploma after 10 th (Industrial Training Certificate (Eng.)) Diploma of Vocation	10 th Grade pass + 1 to 2 years of Vocational education & Training/ Skilling (NTC/ NAC) (After 10 th) AND (for NTC only) + 150 hours of project work	▶ Total 11-12 years of learning including academic education, vocational education, training and skilling and/or Experiential learning including relevant experience and proficiency/ professional levels acquired, subject to assessment OR ▶ 2-year relevant experience at NSQF Level 3 or 1 Year experience at NSQF level 3.5 AND ▶ 390 to 480 hrs. of Vocational education & Training/ Skilling	In addition to (Col 6) Language skill at level 3.5/4 competent authority for 12 th Certificate In addition to (Col 7) Grade 11 th certificate + Accumulated 40 credits at level 4 plus Language Skill at level 3.5/4 through competent authority for Grade 12 th Certificate	4.0	160	
	Higher Education									
13	3-Year Undergraduate Program 1200 Hrs/Yr	NA	Completed 1st Year of 3-year UG / (UG Certificate) 40 credits	Completed 1 Year of technical education after 12th plus internship as per AICTE Policy 40 credits	Total 1 year of Vocational education & Training/ Skilling after 12th (NTC/ NAC/ CITS) OR	▶ Total 12 to 13 years of learning including academic education, Vocational education, Training and Skilling and/ or Experiential learning including relevant experience and proficiency/ professional levels acquired, subject to assessment	For Armed Forces 20 Credits from NHEQF courses at level 4.5 and Above & 20 credits from NSQF aligned & approved skill courses at level 4.5 or above	4.5	180	

				OR Completed 3-year diploma after 10th 40 credits Diploma Engineering	Total 2 to 3 years of Vocational education after 10 th (NTC/ NAC/ CITS) AND (for NTC only) +150 hours of project work	OR ▲ 2 years of relevant experience at NSQF Level 3.5 or 1 year relevant experience at NSQF Level 4 AND ▲ 450-510 hrs. of Vocational education & Training/ Skilling	For LTT & STT with UG certificate 20 credit from NCrf level 4.5 or above STT/LTT courses & 20 credits from UGC/ AICTE approved NHEQF courses at level 4.5 and above		
14	3-Year Undergraduate Program 1200 Hrs/Yr	NA	Completed 2 years of UG education (UG Diploma) 40 credits OR	Completed 2 Year of technical education after 12 th plus internship as per AICTE Policy 40 credits UG Diploma	Total 1 to 2 years of Vocational education & Training/ Skilling after 12 th (NTC +NAC/ CITS) OR Total 3 to 4 years of Vocational education & Training/ Skilling after 10 th (NTC/ NAC / CITS)	▲ Total 13 to 14 years of learning including academic education, vocational education, training and skilling and/or Experiential learning including relevant experience and proficiency/ professional levels acquired, subject to assessment OR ▲ 3-year experience at NSQF Level 4 (min 8 th class pass) or 1.5 years of experience at NSQF level 4.5 AND ▲ 480-570 hrs of Vocational education & Training/ Skilling	For Armed Forces 16 Credits from NHEQF courses at level 5.0 and Above and 24 credits from NSQF aligned & approved skill courses at level 5.0 or above For LTT/ STT Courses with UG Diploma In addition to 20 credit# from NCrf level 4.5 or above STT/LTT courses and 20 credits # from UGC/ AICTE approved NHEQF courses at level 5.0 and above	5.0	200
15	3-Year Undergraduate Program 1200 Hrs/Yr	NA	Completed UG 3 rd Year (UG Degree) 40 credits OR	Completed 3 Years of technical education after 12 th plus internship as per AICTE Policy 40 credits (B. Voc/ B.Sc. Eng)	Total 2 to 3 years of Vocational education & Training/ Skilling/ Experiential learning including relevant experience and proficiency/ professional levels acquired after 12 th (NTC/ NAC/ CITS) OR	▲ UG Diploma OR ▲ Total 15-16 years of learning including academic education, vocational education, training and skilling and/or Experiential learning including relevant experience and proficiency/ professional levels acquired, subject to assessment OR ▲ 3 years of experience at NSQF Level 4.5 or 1.5 years of experience at level 5 AND	For Armed Forces 24 Credits from NHEQF courses at level 4.5 and Above & 16 credits from NSQF aligned & approved skill courses at level 5.5 or above For LTT/ STT Courses with UG Degree In addition to 20 credit from NCrf level 5.5 or above STT/LTT courses	5.5	220

					Total 4 to 5 years of Vocational education & Training/ Skilling/ Experiential learning including relevant experience and professional levels acquired after 10 th (NTC/ NAC/ CITS)	▲ 540-600 hrs of Vocational education & Training/ Skilling	& 20 credits from UGC/ AICTE approved NHEQF courses at level 5.5 and above		
16	4-Year Undergraduate Program (With Honors) 1200 Hrs/ Yr	NA	Completed 4-year UG with Honors / Honors with Research 40 credits OR Completed 1 st year of 2-year PG after 3-year UG 40 credits OR Completed 1-year PG (PG-Diploma) after 3-year UG/ 40 credits	Completed 4 Year of technical education after 12th plus internship as per AICTE Policy 40 credits B. Tech/ B. E	NA	▲ Total 16-17 years of learning including academic education, vocational education, training and skilling and/ or Experiential learning including relevant experience and professional levels acquired, subject to assessment OR ▲ 3 years relevant experience at NSQF Level 5 or 1.5 years of relevant experience at level 5.5 AND ▲ 570-660 hrs. of Vocational education & Training/ Skilling	For STT Courses with UG Degree- Honors/ research or PG Diploma In addition to 20 credit from NCrf level 6 or above STT/LTT courses & 20 credits from UGC/ AICTE approved NHEQF courses at level 6 and above	6.0	240
17	Masters/ Postgraduate 1200 Hrs/Yr	NA	Completed 2 nd year of 2-year PG after 3-year UG/ 40 credits M.Sc. (Engg.) PG Degree OR Completed 1-year PG after 4-year	Completed 1st year of 2-years ME/ M. Tech Prog plus internship as per AICTE Policy 40 Credits OR Completed 2 nd year of M. Voc after 3-year B. Voc	NA	▲ Total 17-18 years of learning including academic education, vocational education, training and skilling and/or Experiential learning including relevant experience and proficiency/ professional levels acquired, subject to assessment OR ▲ 3 years relevant experience at NSQF Level 5.5 or 1.5 year of relevant experience at level 6 AND	For STT Courses with PG Degree In addition to 20 credit from NCrf level 6.5 or above & 20 credits from UGC/ AICTE approved NHEQF courses at level 6.5 and above	6.5	260

			UG with Honors / Honors with Research 40 credits	plus internship as per AICTE Policy 40 credits PG Diploma		630- 690 hrs. of Vocational education and training/ skilling & Training/ Skilling OR ▶ Pursuing 2nd year PG (after 3 years of UG Degree) OR ▶ Ph.D. after Degree (honors) AND 570-660 hrs. of Vocational education & Training/ Skilling			
18	Masters/ Postgraduate 1200 hours/ Year	NA	NA	Completed 2 nd year of 2-years M. E/ M. Tech Prog plus internship as per AICTE Policy 40 Credits (Masters- Eng)	NA	▶ Total 18-19 years of learning including academic education, vocational education, training and skilling and/or Experiential learning including relevant experience and professional levels acquired, subject to assessment OR ▶ 3 years of relevant experience at NSQF Level 6 or 1.5 years of relevant experience at level 6.5 AND ▶ 660-750 hrs. of Vocational education & Training/Skilling	For STT Courses with PG engineering In addition to 20 credit from NCrF level 7 or above & 20 credits from UGC/ AICTE approved NHEQF courses at level 7 and above	7.0	280
19 years +	PhD after PG, 2 to 4 yrs.	NA	NA	1st Yr of Ph.D. and onwards	NA	▶ More than 19 years of learning including academic education, vocational education, training and Skilling and/or Experiential learning including relevant experience and professional levels acquired, subject to assessment OR ▶ 4 years of relevant experience at level 6.5 or 2 years of relevant experience at NSQF Level 7 AND ▶ 750 (or more) hrs. of Vocational education & Training/ Skilling		8.0	320

Notes:

1. The National Credit Framework (NCrF) shall function as **one single and broad enabling framework** for all regulatory organizations, and autonomous institutions who may, wherever required, notifying their detailed implementation guidelines within this Framework. **However, all implementation guidelines and standing operating procedures (SOPs) shall be in-line with and conform to the national credit framework.**
2. The NCrF is **the enabling framework** to empower and enables institutions with the required flexibility for catering to their specific academic requirements for creating imaginative and flexible curricular structures, creative combinations of disciplines and other special needs.
3. **STT is Short Term Training, LTT is Long Term Training. In case of Long Term Training (LTT) i.e., column 6:**
 - i. The NTC stands for National Trade Certificate and is a one or two- year duration certificate program. This certificate program is offered by Directorate General of Training (DGT) and is offered after Grade 8th, Grade 10th and after Grade 12th. NTC is offered to students who pass the All India Trade Test (AITT) for Craftsman Training Scheme (CTS)
 - ii. The NAC is National Apprenticeship Certificate, and the period of training varies from one year & two months to 2 years. The minimum age for undertaking NAC program is 14 years and the qualifications vary from Grade VIII pass to XII Grade pass (10+2) system. NAC is offered to students who pass the All India Trade Test (AITT).
 - iii. The craftsman Instructor Training Scheme (CITS) is a program offered by DGT for the instructor trainees. The DGT mandates that all trainers in the it is must be CITS certified. The duration of CITS program is 1 year and the eligibility for CITS is Raring NTC/ NAC/Diploma/Degree qualifications.
4. **Open schooling and NIOS:**
 - i. Open schooling is an alternative and complementary to formal education offering an opportunity for complete range of schooling. The term open schooling describes that the learning is open in terms of timing, location, teaching roles, instructional methods and modes of access. Open schooling aims at removing obstacles exist in formal learning viz., age, geographic, financial, infrastructure or time related and so on. In this process, the student takes the responsibility for what they study, how they learn, the pace at which they learn, using the learning support they have and when the examinations they take etc. Thus, the learner has flexibility to learn and progress.
 - ii. In India, the National Institute of Open Schooling (NIOS) is the largest Open Schooling system in the world providing alternative schooling. It offers open basic education courses, vocational, life enrichment courses etc. It offers a range of courses equivalent to Grades III to the pre-degree level. The target group includes neo-literates, dropouts and general public. The NIOS curriculum is largely placed in the categories of equivalency or alternative schooling, life skills education & training, as well as training in income generation courses.
 - iii. NIOS is also offering various courses in collaboration with various institutions like ITDC, IMA, NHM, Moot, MoHFW, Sector Skill Council (SSCs). NIOS is also implementing various Govt projects for literacy (NLMA), digital literacy (PMGDISHA), ASHA assessment and Certification, Training Assessment & Certification in Community Health for untrained Health workers in collaboration with State Govt.
 - iv. NIOS offers elementary level courses under its Open Basic Education (OBE) programme for Level-A, Level-B and Level-C equivalent to Grade 3, 5 and 8 of the formal system, Secondary (Grade10) and Senior Secondary (Grade12).
 - v. So far, NIOS does not conduct 9th Grade examination. For admission to Grade X in NIOS, the entry requirement is Certificate of Grade VIII pass or self-certificate. The Self Certificate states that the learner has studied at Rome and find herself/himself eligible for study in Secondary (Grade 10tr).
 - vi. Similarly, there is no Grade XI examination in NIOS. For entry to Grade XII, the eligibility criteria are certificate of the Secondary examination from a recognized board. However, a gap of two years for certification at Senior Secondary level is required after passing of the secondary level.
 - vii. However, the National Credit Framework (NCrF) enables NIOS to conduct special assessments for Grade IX and XI or conduct an on demand examination as and when demanded by the students/ learners.
 - viii. # May be read as upto 20 credits from NCrF/NSQF program and balance credits from NHEQF based programs.

3.4.2. Credit Framework Enabling Entry Eligibility for Academic & Vocational Progression

- i. The credit points earned and accumulated can be used to determine the eligibility for taking admission in various programs at multiple levels, subject to fulfilment of the following broad principles laid down under NCrF and the acceptance of these credit points by the concerned agencies. While the detailed transfer mechanism indicating entry eligibility at various levels for various streams shall be defined by individual regulators, following conditions are required to be fulfilled:
 - a. It must be ensured that the student has acquired and accumulated the credit points needed for moving to a particular level after undergoing either skill based training or academic classes or through relevant experience. These credit points must have been accumulated from the adjacent (lower) assessment band. For e.g. A 10th pass student (who had cleared assessment band 'B') is eligible for appearing for 12th class examination (assessment band 'C') provided the student has accumulated requisite credit points, either through an additional academic program or through vocational education & training/ skilling or through relevant experience as defined in the equivalence table or specified by the regulator/ autonomous institutions.
 - b. The student has undertaken and cleared the examination resulting in passing of the adjacent lower assessment band. E.g. For taking admission in a UG equivalent program (assessment band 'D'), the students must have accumulated enough credits in the previous assessment band 'C' (11th and 12th) and cleared the requisite exam leading to 12th class certification.
 - c. The educational institute providing the credits and the institute accepting the credits are in mutual agreement while transferring the credits, without the need for further equivalence certificate for each student. Since a similar program being offered by two different institutions may have variation, it is expected that the institutions permitting transfer of credits will have mutual understanding. The accepting institutes, if they so desire, may also supplement their program with a bridge course.
 - d. Once the eligibility criteria for various programs is established, the accepting institution may devise appropriate policy changes.
 - e. The NCrF enables and empowers establishing academic equivalence and defining the entry criteria for various academic and vocational programs. However, the process of admission into the admitting institution including conducting a merit based selections through entrance test/ examination or screening etc for an institute is subject to the guidelines specified by regulator or if the institution is autonomous, the internal

mechanisms established by the institution, subject also to availability of seats etc.

- f. As regards the assessment of the students with exceptional achievements/ performance in games and sports, performing/ fine arts, Social Work, NCC, or other similar subjects/ category is concerned, the same can be defined/ prescribed based on their level of competition (State level/ National level, International level/ Commonwealth/ Olympics/ World Championships etc), the level of representation (District/ State/ National/ International), medal/ distinction achieved in team/ individual events, and such exceptional performance can be treated equivalent to an assessment. The modalities, however, may be defined/ prescribed by the concerned regulator.

3.4.3. Establishing Multiple Entry and Multiple Exit (ME-ME) Pathways

The credit transfer mechanism will also enable a student/ learner to enter and exit the educational ecosystem, both general and vocational, at any point of time. In such cases due weightage is given to work experience gained or any other training undertaken by the learner. The proposed equivalence by virtue of this National Credit Framework highlights how a student can accumulate necessary credits that will allow a student to re-enter the mainstream education.

While NCrF is an enabling framework, the detailed guidelines of ME-ME shall be as defined/ prescribed by the concerned regulator. The standardization of content/ curriculum although seems to be an ideal approach, however, given the diversity of the country, the same may not be feasible. The regulators or the autonomous body concerned may however prescribe the criteria for ME-ME which may include an entry or exit module as per the NCrF level of the program.

E.g. A 5th grade student with total accumulated credit points of 200 over the years and undertaking certain bridge course is eligible to appear for 8th class examination. Once the student clears it, he will be grade 8th pass and can continue with 9th grade onwards through mainstream education.

- E.g.**
- i. In case of the **undergraduate degree of either three- or four-year duration**, the possible multiple entry and exit options are below:
 - a. Certificate after completing one year in a discipline or field including vocational and professional areas.
 - b. Diploma after two years of study; or
 - c. Bachelor's degree after a three-year programme
 - d. Bachelor's degree with research/ honours/ Engineering in case of a 4-year bachelor program

E.g. For the Master's programmes:

- a. A two-year programme with the second year devoted entirely to research for those who have completed the three-year Bachelor's programme.
- b. A one-year Master's programme for students who are completing a four-year Bachelor's programme with honours or Honours with Research; and
- c. An integrated five-year Bachelor's/Master's programme with an option to exit at the end of the third year with a Bachelor's degree, with entry to a 2-year Master's programme in another HEI.

E.g. Learner after completing first year of M. Tech program, shall be eligible for an M. Voc degree, upon exit. Having M. Voc degree, however, is not mandatory for entry into an M. Tech program.

The responsibility of detailing out the multiple entry- multiple exit options for the general education and the vocational education and training/ skilling shall be the responsibility of concerned regulators. The regulator/ autonomous institutions like IITs and IIMs may also take a view on the level of standardization of subjects and content being implemented in various institutions (both school and higher) for the enablement of seamless student mobility, however, the NCeF does not prescribe any such condition for mobility of students.

The ME-ME options separately for higher education (both by UGC and AICTE) is at **Annexure III**.

3.4.4. International Mobility

The International equivalence and transfer of credits shall be enabled through various multilateral/ bilateral agreements between respective regulators of the countries concerned.

A uniform and standardised national framework for credit accumulation and transfer would lend credibility and authenticity to the credits being assigned and earned under various programs in India thereby making these credits more acceptable and therefore transferable internationally.

The demand for transparent sets of professional competencies, skills, and knowledge propelled by the globalization of economies enhanced the international mobility of students and professionals. Acceptance of equivalence of various qualifications between the countries, therefore, becomes vital to enable the international equivalence and mobility of students and professionals. In higher education, there could be variations in terms of course contents, levels of the courses, the assessments and grading systems, and titles of qualifications, which always remained a challenge to establish any equivalence of certificates, diplomas and degrees or allow transfer of credits between two institutions in different countries. This necessitates the requirement of a measurable method for establishing equivalence between qualifications to enable the identification of skills, comparisons, and mobility of learners and workers between countries.

The Qualification Frameworks, which provide for a way of structuring qualifications defined by not only the course curriculum, but the learning outcomes becomes the incredible method to measure the outcome of learning and thus for comparing qualifications to establish equivalence. Thus, the thrust towards developing National Qualifications Framework (NQF) focusing on learning outcomes/graduate attributes gained importance. Many countries developed National Qualification Framework (NQF) with learning outcomes as the focal point. Simultaneously, the pace to develop the Regional Qualifications Framework (RQF) also picked up due to the initiatives by the Organisation like Economic Co-operation and Development (OECD), World Bank, and International Labour Organization (ILO). International agreements that followed enabled the comparison of qualifications between the signatory countries encouraging the mobility of learners and professionals.

- **The Washington Accord** originally signed among six countries in 1989, represents an International Agreement among bodies responsible for accrediting undergraduate engineering degree programme. It recognizes the substantial equivalency of programmes accredited by those bodies and recommends that graduates of programmes accredited by any of the signatory bodies be recognized by the other bodies as having met the academic requirements for entry to the practice of engineering in the area of their jurisdiction. The Washington Accord facilitates the mobility of engineering graduates and professionals at the international level. As of now, there are 21 nations that are members of the Washington Accord. India became its permanent member on 13th June 2014. On completion of six years, the status of the National Board of Accreditation (NBA) as a permanent signatory to the Washington Accord it was extended for the next six years in June 2020 after a detailed review by an International Review Team appointed by the International Engineering Alliance, the Secretariat of Washington Accord.
- **The Bologna** Process launched in 1998-1999, established goals for reform in the participating countries, such as the three-cycle degree structure (bachelor, master's, doctorate), and adopted shared instruments, such as the European Credits Transfer and Accumulation System (ECTS). The Bologna Process is aimed to improve the effectiveness and efficiency of higher education in Europe in the context of a common European Higher Education Area. Learning outcomes form the premise for the Bologna education reform. Mobility of students by recognition of qualifications contributes to the mobility of students at an international level thereby the credit transfer from one institution to another is simplified.
- Based on the Bologna Process, a series of descriptors, as given below, for the three Bologna Process cycles were drafted which came to be known as Dublin Descriptors, as below:
 - o Knowledge and understanding.
 - o Applying knowledge and understanding.
 - o Making judgments.
 - o Communications skills and Learning skills.

- i. **Global Convention on the Recognition of Qualifications:** It concerns Higher Education and was unanimously adopted by the UNESCO General Conference at its 40th session on 25 November 2019. The Global Convention is designed to facilitate international academic mobility and promote inclusive access to higher education, by ensuring the right of individuals to have their higher education qualifications evaluated through fair, transparent, and non-discriminatory mechanisms. It also aims to strengthen international cooperation in higher education and contribute to raising the quality of higher education worldwide.
- ii. **Sydney Accord:** The Sydney Accord was signed in June 2001 for development and recognition of good practice in engineering education. The Sydney Accord is specifically focused on academic programmes dealing with engineering technology. The Accord acknowledges that accreditation of these academic programmes is a key foundation for the practice of engineering technology in each of the 11 countries/territories covered by the Accord.
- iii. **The Dublin Accord:** Originally signed in May 2002 for mutual recognition of the academic program/qualifications which underpin the educational base granting Engineering Technician titles. The Accord acknowledges that the educational base is a key foundation for practice as an engineering technician, in each of the 9 countries or territories covered by the Accord. The Dublin Accord is fostering the concept that for academic recognition, an accreditation system which remains independent of the institutions being accredited is essential. Critical issues- professional competency, accountability, benchmarked standards, quality assurance, and risk management-must be addressed

To enable, enhance and encourage such mobility, it is important that a nationally accepted and internationally comparable and acceptable framework be developed to facilitate transparency and comparability of higher education qualifications at all levels internationally.

The development of the National Credit Framework (NCrF) and the National Higher Education Qualifications Framework (NHEQF) will greatly facilitate our attempts in this direction.

The concerned regulator/autonomous institutions shall prescribe the relevant mechanism/guidelines for establishing such comparability and mutual agreement with counter parts in the other countries.

A committee to review the Sydney and Dublin accord in light of NEP, 2020 and integration of skill sets with knowledge based present education system and desirability to enter into these accords for recognition of Indian Engineering and vocational qualifications among member states for exploiting employment opportunities formulated at AICTE. In the meeting it was discussed that India could be signatory to Dublin Accord established for mutual recognition of engineering technician qualifications i.e. 3- Years Engineering Diploma and later explore the possibility of including B.Voc under this accord.

3.4.5. Enabling Requirements for a Job/ Employment

A well-structured and evolved Credit Accumulation & Transfer mechanism shall also enable prospective employers to not only verify the competencies achieved by a candidate in terms of credits but also map the job requirements with competencies required in terms of credits in a particular sector/subsector/occupation. This may convert credits into a ready currency in the job market enabling an individual to use them for recruitment and recruiters to notify jobs in terms of credits.

3.5. CREDIT STORAGE AND REDEMPTION THROUGH ACADEMIC BANK OF CREDITS

3.5.1. Mechanism for Credit Storage

The framework envisages a well-developed Academic Bank of Credits (ABC), encompassing the requirements of academic, vocational and Experiential learning including relevant experience and proficiency/ professional levels acquired. As per NEP 2020, Academic Bank of Credits (ABC), which shall be a national-level facility, will promote the flexibility of the curriculum framework and interdisciplinary/multidisciplinary academic mobility of students across the HEIs in the country with appropriate 'credit transfer' mechanism.

ABC shall enable the integration of multiple disciplines of school education and higher education leading to the desired learning outcomes including increased creativity, innovation, higher order thinking skills and critical analysis. ABC shall provide significant autonomy to the students by providing an extensive choice of courses for a programme of study, flexibility in curriculum, novel and engaging course options across a number of higher education disciplines/ institutions.

'Academic Bank of Credits' (ABC) system intends to enable students across the nation in “fulfilling their thirst for knowledge by providing academic flexibility to pick and modify their educational paths, link diverse disciplines; and assist them in acquiring the proper foundations and building blocks for their ambitions”. The 'Academic Bank of Credits' (ABC) shall be an educational digital platform created to facilitate student's seamless mobility between or within degree-granting Higher Education Institutions (HEIs) and vocational education and training/ skilling through a formal system of credit recognition, credit accumulation, credit transfer, and credit redemption to promote distributed and flexible teaching and learning. The ABC guidelines have been notified by UGC and will be extended to cover the provisions related to school education as well.

3.5.2. Accumulation and Storage of Credits

The Academic Bank of Credits shall be a repository of all credits earned by a student. These credits shall be accumulated and redeemable provided the credits accumulated are within the same assessment band. The credits accumulated shall have a validity/ expiry which will be defined with respect to each program.

This will be the responsibility of independent regulators based on the type, relevance and future utility of a program amongst others. The validity of the credits should be in-sync with all the other regulatory policy and initiatives of the Government. Once redeemed the student shall not be able to use the same credits again for similar purpose.

3.5.3. Verification of Credits Earned

The verification of credits accumulated and stored in ABC will be done by respective regulators.

3.5.4. Redemption of Accumulated Credits

The ABC will promote equity, quality, flexibility, mobility, collaboration, transparency, and integration to improve the competitiveness and efficiency of India's education system. ABC shall provide services, including credit accumulation, credit transfer, credit redemption through the opening, closure and validation of accounts and shall enable multiple entry-multiple exit (ME-ME) options in a programme. Students who pursue education as freelancers or through open / home / online schooling can also accumulate credits. These credits can be deposited to student's ABC account. After the accumulation of credits, a student can redeem these in order to get any academic degree based on the norms set by the regulatory body/ institution. It works on the principle of ME-ME as well as "anytime learning, anywhere learning, and any level learning" as is emphasized in NEP 2020. It can facilitate the integration of campuses by creating student mobility within the university system. ABC can also help integrate skills into a credit-based system by providing a credit recognition mechanism. However, the Certificates/ Diploma/ degrees will have to be given by university, regulator or respective Awarding Body (AB) and not by the credit bank.

The ABC will act as a Bridge for Employability meaning that ABC will also enable the employers to access the credit accumulated and stored in order to establish the eligibility of a candidate for a particular job. For credit redemption, the process to be followed will be as per the Academic Bank Guidelines notified by UGC.

3.5.5. Credits Expiry and Renewal

'Credits earned by students shall be deposited in the respective Bank Account with ABC and shall be valid for a period as defined by the respective regulator or till it is redeemed. The redemption of credits shall be as per the provisions of ABC Guidelines or as stipulated by the regulator concerned/ autonomous institution.

3.6. Implementation of Operationalization Guidelines and SOPs

3.6.1. SOPs and Guidelines

While the NCrf lays down broad framework, enabling provisions and basic guidelines for achieving the intent of NEP has been included in this document along with the responsibility of implementing the provisions defined in the NCrf through detailed operational guidelines. NCrf provides enough scope to the Regulators and Autonomous Institutions to have Implementation SOPs, Guidelines on various aspects viz. Multiple Entry, Multiple Exit, entry and exit modules for implementing ME-ME, within the overall national credit framework the regulators and the autonomous institutions may have guidelines and SOP on the following:

- i. Developing flexible curricular structures, multi-disciplinary credits vs. academic/other credits to be earned under a program, assessment strategy and methods, establishing admission/ entry criteria for various programs etc.
- ii. Prescribing learning outcomes for various academic/vocational program corresponding to comparable NCrf credit Level.
- iii. Detailing the multiple entry-multiple exit options including the requirement of any additional entry or exit modules.
- iv. The detailed guidelines on establishing equivalence within and between general and vocational education and training/ skilling for a level, including the requirement of additional learning.
- v. The assignment of credits for individual programs in terms of learning hours for theory, practical and Experiential learning including relevant experience and proficiency/ professional levels acquired for calculation of credits for the program.
- vi. Defining the components for learning hours, over and above mentioned in NCrf.
- vii. SOPs for credit assignment, credit transfer and redemption, credit validation and expiry, creditization of digital/ online learning.
- viii. Determine the curriculum, syllabus, content, teaching and learning material for a program and its standardization across educational institutions, if the regulator or the autonomous body so decides.
- ix. SOP for accumulation of credits for courses/ qualifications/ programs earned in the

same assessment band, and also setting up of broad learning outcomes for each level and assessment bands defined under NCrf.

- x. Detailed transfer mechanism indicating entry eligibility at various levels for various streams shall be defined by individual regulators, subject to fulfilment of defined conditions.
- xi. Define the specific modalities for catering to students with varying pace of learning and defining special assessment criteria.
- xii. The basis of assigning and assessing credits for students with exceptional achievements/ performance in games and sports, performing/ fine arts, Social Work, NCC, or another similar subjects/ category.
- xiii. Detailed guidelines for Recognition of Prior Learning (RPL).
- xiv. SOPs for considering relevant experiential learning and attaining higher proficiency/ professional levels for assignment of additional credit points subject to assessments.
- xv. SOPs for verification and redemption of credits accumulated and stored in ABC.
- xvi. Detailed guidelines on Operationalisation of ABC for school education, higher education, technical education and vocational education and skills

3.6.2. Operationalization of NCrf by the concerned Regulators and Autonomous Institutions

During the course of public consultations, it has been emphasised by most of the stakeholders that for proper implementation of NCrf there is a need for detailed instructions for operationalization including micro detailing of certain aspects as prescribed in the NCrf. As already stated, the National Credit Framework is only an enabling framework and provides enough flexibility to the individual regulators and autonomous institutions to come up with detailed standard operating procedures and guidelines on the above-mentioned aspects of operationalization. For this purpose, the regulators and autonomous institutions may have to constitute various committees with representation of all stakeholders, including the members from all regulators, for avoiding any conflict in the SOPs, guidelines and instructions being issued by individual regulator and autonomous bodies and to ensure that all such guidelines and instructions are aligned to provisions laid down in the NCrf. Such an inclusive and holistic approach will also ensure that a continuous cross consultation and referencing so that there are no provisions in the operationalization guidelines by any regulator which are conflicting with or contradictory to philosophy and basic principles of NCrf.

3.6.3. Mechanism for Removal of Difficulties During Implementation

Though the high-level committee has tried its best to envision and include all types of use cases still it is felt that at the time of implementation a number of new aspects related to framework or use cases may come up requiring an appropriate resolution at inter-ministerial level.

Therefore, for issuing clarifications, taking care of the unforeseen use cases which concern all regulators and autonomous bodies, resolving any initial hiccups and ensuring smooth implementation of the National Credit Framework, the government may continue the functioning of High-Level Committee with its current composition or by altering its members for next one year, for ironing out and resolving the initial implementation issues while also taking steps for capacity building of the stakeholders.

The HLC having members from all concerned ministries, regulators & institutions shall ensure removal of any difficulty and bridging of any policy/ framework gaps during the implementation process. This committee shall also enable inter regulator/inter institutional discussions & deliberations to remove any doubts, issue any clarifications and resolve any conflicts.

It is recommended that after one year a Standing Committee on national credit framework maybe constituted by the government drawing members from all regulators and ministries concerned for overseeing the smooth implementation of NCrF at all levels.

3.7. Indicative Roles and Responsibilities of the Stakeholders

The Stakeholders namely Administrative Ministries and Departments, concerned Regulators for Higher Education, School Education and Vocational Education, various School Boards at central and state level, Institutes of National Importance (INIs), Universities, Colleges, Training centres and faculty/ teachers/ trainers will require to play their part in implementation of NCrF.

Table 9: The indicative roles and responsibilities are as mentioned below:

STAKEHOLDER INVOLVED	RESPONSIBILITIES
Administrative Central Ministry/ Department MSDE and DoSEL, DoHE MoE	- Get the final report on National Credit Framework submitted by the high-level committee approved by the competent authority and notify the same. - Constitute the inter-ministerial committees to formulate the communication strategy, including communication with the state governments, for creating public awareness for implementation of NCrF. - Create awareness through conduct of conferences, workshops and other means on the provisions of NCrF and how it is to be implemented by various stakeholders. - Ensure effective implementation of the provisions laid down in NCrF by respective bodies under the central as well as the state government and the respective regulators. - Effective monitoring of implementation of NCrF
Regulators (UGC/AICTE/NCVET) School Boards (CBSE/NIOS/State)	- The regulators/ INIs/ Autonomous institutes to prescribe and notify various operationalization guidelines SOPs, and other provisions related to implementation of various provisions of NCrF - Designing courses, qualifications and programs with clear learning outcomes for various academic/vocational programs as provided under national education policy and NCrF with appropriate Credit Levels. - Expand the scope of operation of academic bank of credits to include school education and vocational education, training& skilling by setting up a committee of regulatory bodies concerned who will participate in the academic bank of credits. - Operationalization of ABC and mandating ABC to all the bodies - Enabling/ Developing flexible curricular structures for multi-disciplinary holistic learning and effective integration and embedding of vocational education, training and skilling with general education. - Frame and issue detailed SOPs for credit assignment including creditization of digital/ online/ blended learning. - Prescribe SOPs/Guidelines for - Entry criteria for various programs - Establishing equivalence between programs - ME-ME options applicable along with entry/exit module - Creditization of Additional programs - Design and develop outcome based assessment methodologies and SOPs as per the provisions of NCrF.

STAKEHOLDER INVOLVED	RESPONSIBILITIES
	ix. SOPs for considering relevant experiential learning and attaining higher proficiency/ professional levels for assignment of additional credit points x. Assignment and storage of credits for school education, skill education and experiential learning as per the expanded scope of Academic Bank of Credit and for proper operationalization of ABC. xi. Lay down/ prescribe admission guidelines with ME-ME options for various programs/courses in line with the provisions of the NCrF. xii. Develop guidelines for credit accumulation, storage and transfer for various purposes for different programs/courses. xiii. SOP for verification and redemption of credits accumulated and stored in ABC xiv. Assessment guidelines for assessment of students with accelerated or slow pace of learning, exceptional achievements/ performance in games and sports, performing/ fine arts, social work, NCC, or another similar subjects/ category and assignment of credits to such learners
HEI- Autonomous Institutes/ Universities VE- Awarding Bodies	i. Design of programs and courses prescribing credits for theory, practical and experiential learning including the learning outcomes. ii. Assignment and accumulation of credits subject to successful assessment for achieving the prescribed learning outcomes. iii. Creating awareness about National Credit Framework and various provisions for the stakeholders including students, institutes and industry iv. Design and implement flexible and multi-disciplinary curricular structures and detail programs to be offered which are outcome based with embedded vocational education and skill components at various NCrF credit levels. v. Design and develop assessment methodologies, guidelines and SOPs for outcome-based learning including assessment types and methodologies as per the provisions of NCrF. vi. Guidelines for establishing entry criteria for various course/programs. vii. Provide for ME-ME options with additional requirement of entry/exit modules if any. viii. Detailed guidelines for establishing equivalence between two programs/courses/ Qualifications/ National Occupational Standard (NOS) from various Universities/Institutions/ Awarding Bodies etc.

STAKEHOLDER INVOLVED	RESPONSIBILITIES
	ix. Implementation and monitoring of guidelines, standard operating procedures and mechanisms designed for implementation of provisions of NCrf. x. Creation of adequate digital infrastructure and ICT guidelines for effective implementation of National Credit Framework (NCrf) including ABC. xi. Take all other steps for the Operationalization of national credit framework guidelines and all its provisions in totality.
Affiliated Institutions/ Schools/ Training centre	i. Create awareness about provisions of NCrf for the faculty, students, parents, resource person and others. ii. Implement SOPs/ Guidelines as prescribed by concerned regulator/Boards/Universities. iii. Operationalise ABC including any ICT infrastructure required for the same. iv. Capacity building of Faculty/ Teachers/Trainers/ students.

4. SECTION 4: SPECIAL PROVISIONS IN NATIONAL CREDIT FRAMEWORK

4.1. Provisions for Creditization of Special Cases of learning: Educational Acceleration

The framework would be considered as successful only if it is responsive to the special needs of various groups of students and learners. The respective regulators would make provision for such exceptional cases. Some of the use cases to be covered are given below:

I. Provision for educational acceleration and its creditization

- a. Education acceleration is one of the established mechanisms for gifted children. The practice of educational acceleration has been used to match high level student's general abilities and specific talents with optimal learning opportunities
- b. Acceleration occurs when students move through traditional curriculum that rates faster than the normal pace. Among the many forms of acceleration are grade skipping or class skipping, early entrance to school or college and subject based acceleration, for example when a 5th standard student takes an 8th standard mathematics or social science or a language course
- c. For educational acceleration the following activities have been undertaken/ planned under the national education policy:
 - i. NCERT & SCERTs when framing the national or state curricular and pedagogical framework for early childhood care and education will factor the aspects of educational acceleration.
 - ii. PARAKH as well as CBSE, NIOS and other School Boards of assessment in the country **will design/ create/ prescribe special assessment methods to facilitate** the assessment of **such fast track learning trajectories** for gifted children.
 - iii. UGC, AICTE and NCVET may also develop their own mechanisms, including special assessment methods, for enabling assessments of such fast track learning trajectories for such gifted students, independent of the learning hours spent by them.
 - iv. In such cases **instead of the learning hours** it is the **pre-defined learning outcome subject to very strict, high-standard assessment** that would establish that the intended learning outcomes have been fully achieved which would decide the assignment of credit levels and the credits.

II. Provision for Creditizing National/ International Achievers in Various Fields

- a. Creditization for achievers at the national and international levels in various fields is one of the objectives of National Education Policy 2020. The practice of creditizing national/ international achievers in various fields, including but not limited to sports & games, science, technology, social work, performing arts, fine arts, tradition & heritage, literature, Indian knowledge system etc. is required to promote excellence in various fields of national and international importance which in-turn will encourage promotion of high level general abilities and specific talents in such fields.
- b. The special achievements could be way of winning medals/ positions in national or international events, Padma or other awards conferred by the central or state governments or other recognised bodies, high impact high priority social work which could be duly assessed through independent assessment methods.
- c. The indicative list of various fields for such special achievers could be:
 - i. **Games and Sports**, for example National/ Federation Games, National Championships, Commonwealth/Asian Championships, Asian Games, World Championship, World Cup, Olympic Games, etc
 - ii. **Performing Arts**, viz dance drama, music, including Indian classical music,
 - iii. Master Craftsmen of **Heritage and Traditional Skills**,
 - iv. **Social work with high impact or in priority areas**, for example education, environment, healthcare, anti-drug, etc
 - v. **Special achievements in the Innovation and start-up ecosystem** with high impact or in priority areas for example innovation development of indigenous technologies in agriculture and rural development
 - vi. Special expertise in **Indian Knowledge System**: The tradition mentions 18 major vidyas, or theoretical disciplines; and 64 kalas, applied sciences or vocational disciplines, crafts. The 18 vidyas are: the four Vedas, the four subsidiary Vedas (Ayurveda - medicine, Dhanurveda - weaponry, Gandharvaveda - music and Silpa - architecture), Purana, Nyaya, Mimamsa, Dharmasastra and Vedanga, the six auxiliary sciences, phonetics, grammar, metre, astronomy, ritual, and philology — these formed the basis of the 18 sciences in ancient India.

- d. The learning outcomes will have to be pre-defined in each case at appropriate national credit framework levels along with the criteria for special achievements, and method of assessments to measure/ establish the achievement of the desired outcomes.

E.g. If a person has won a gold medal in the Olympic Games, his preparation and practice for this outcome and achievement could be equated with the skilling credits requirements (say 70% credits) for a B. Voc. degree in physical education. Just by accumulating 30 percent remaining academics credits (say in Hindi), the person could get vocational degree in physical education.

4.2. Provision for Recognition for Prior Learning (RPL)

There exists a large section of students/ learners/ persons/ workers who have acquired knowledge, skills, and work competencies through either informal or mix of formal and informal experiential learning including relevant experience and proficiency levels acquired or other learning through family/ traditional inheritance etc.

However, they have no formal certifications for the same. As a result, they are unable to be integrated with the formal education and skill ecosystem for further progression in the academic stream or through up-skilling or re-skilling. Moreover, they do not get appropriately paid and get limited opportunities for revenue generation for their knowledge and skills in the absence of any formal recognition of their skills and skill certifications.

E.g. Another example in the social work could be that a student, who has successfully planted 10 trees in his/her village and has successfully looked after these trees for a certain period, say one or 2 years, and the plants have survived well, he or she could be given certain credits for this work subject to the assessment with credible visual evidence by the village panchayat or the local forest Ranger or is the school principal that the trees planted have actually survived.

To enable such students/ learners/ persons/ workers, NCrf provides for 'Recognition of Prior Learning' (RPL) which refers to the process for recognising learning that have been developed from experiential learning including relevant experience and proficiency/ professional levels acquired and/or previous formal, non-formal and informal learning contexts subject to assessment of their existing knowledge, skills, competencies, learning outcomes. The Learning outcomes are appropriately assessed leading to the certification of the same through a pre-prescribed, well-defined, credible, objective and established process/ mechanism. RPL, therefore will enable such students/learners/persons/workers to formalise their previous formal, non-formal and informal learning and provide them the opportunities for personal and career development through career progression and skill upgradation by their integration into formal education and skilling ecosystem.

As envisaged under NEP 2020, the NCrf provides for earning and accumulation of credits through education, skill development and experiential learning including relevant experience and proficiency/ professional levels acquired on outcome-based assessment approach (rather than criteria based on

learning hours alone). However, for earning and accumulation of credits, assessment of students/ learners/ persons/ workers, corresponding to a particular NCrF level assessment is a mandatory requirement. The level descriptors clearly define the levels of knowledge, skills, competencies and learning outcomes for each Credit level under NCrF. Moreover, the National Higher Education Qualification Framework (NHEQF) and National Skill Qualification Framework (NSQF) level descriptors are also in place.

Thus, NCrF shall provide a gateway to the students/ learners/ persons/ workers to creditise their informal or mix of formal and informal experiential learning, including relevant experience and proficiency/ professional levels acquired or learning through other methods, into credits at pre-designated NCrF levels through a pre-defined, well-established outcome-based assessment process called Recognition of Prior Learning (RPL). This provision shall also enable the goal of lifelong learning, open further progression pathways to higher education for such persons and enhance the employability and/or entrepreneurial opportunities as envisaged under NEP 2020.

Under the framework of NCrF, the school education, higher education and vocational education shall establish their own mechanisms through a well-defined, credible, objective and established process/ for RPL evolving out of NEP principles of outcome-based learning and assessment.

The similar concept of RPL may also be extended to the general education, including school education and higher education domain, to create options for students/ learners/ persons/ workers to get assessed for a subject/ qualification at a NCrF level, subject to meeting the competency and outcome levels in-line with the level descriptors and regulatory compliances prescribed by the regulator concerned. Such a provision shall effectively provide them with opportunities and options of examination/ Assessment-On-Demand. NIOS is an example which offers option of Exam-On-Demand to the learners who have completed certain numbers of years of self-study or learning for assessment for a particular educational grade. Similar models shall be developed and adopted by CBSE and other state school boards etc. to provide RPL/examination/ Assessment-On-Demand options in school education as well.

The students should also have option to get themselves assessed for learning /subject/ skills acquired outside the formal education system. This shall, in the true sense, promote multidisciplinary learning and innovation while opening pathways from vocational education training & skills to general education, and vice versa to achieve the objective of holistic approach in education. The concept of On-Demand-Assessment (RPL on-demand) along with the general RPL would form the basic pillars of creditization of learning through informal/ non-formal/ other methods.

The NEP discusses the rich traditions & heritage of ancient Indian eternal knowledge and promotes the nurturing of traditional and heritage skills. It furthermore emphasizes on researching, enhancing and putting new uses through our education system. Recognition of Prior Learning (RPL) for various

traditional (indigenous) skills and occupations is an integral approach to acknowledge and recognise the potential of scholars of the Indian knowledge system, traditional and heritage skill masters, craftsmen and artists, exponents of classical music and performing and fine art forms, as also paving the way for the local artisans and craft persons for upskilling and mainstreaming them in formal education and skill sectors. NCrf shall empower them to improve and upgrade their skills and competencies.

However, the Recognition of Prior Learning (RPL) would require trained master assessors and assessors along with a well-defined, credible, objective, reliable, rational and established assessment processes. Such assessment shall also have to be carried out through credible assessment agencies and must be evidence based. In a few traditional and heritage skill areas, such assessments may be carried out using very unconventional methods like relying on the Guru-Shishya Parampara.

Globally recognised reputed industry bodies and OEMs, who are themselves the big consumers of the output of the skilling ecosystem, may also play a vital role as designated assessment agencies/ centres for some of the RPL. However, for enabling these suitable guidelines will be developed and notified by the respective regulators.

Thus, RPL is based on the Learning Outcome (LO) based assessment approach recognizing learning through informal methods, providing access and opportunity for further education and skilling.

In conclusion, credibility of RPL is based on the high quality assessment consisting of a well-defined, credible, objective, reliable and rational and established assessment processes. Assessment against pre-defined learning outcomes at pre-defined NCrf levels, as per Level Descriptors of respective regulator. Such RPL can be assessed through the dedicated assessment centres of with state of art infrastructure & robust assessment mechanism with proper evidence. RPL allows transition from training centres to higher education institutions in both directions and increase educational choices and career opportunities specially for the deprived section of the society.

The detailed guidelines for implementation of RPL will be developed and notified by the concerned regulators/ autonomous bodies for further enablement of abovementioned provisions as per requirements.

Name: A, **Job role:** Helper/ Assistant Automobile repairing Mechanic (level 2, 2.5, 3), **Age:** 22 ,
Education: Ability to read and write, **Experience:** 4 years

'A' gets enrolled in the RPL program and goes through the RPL assessment process. He was declared successful in the assessment and awarded with the RPL certificate of NSQF level 2.5 along with credits.

Name: B, Job role: Automobile repairing Mechanic (level 4.5) , **Age:** 25,
Education: 5th Grade pass, **Experience:** 6 years

'B' got to know that RPL can provide a certificate for his skills gained from work experience of 6 years in automobile repairing domain and got enrolled in the RPL program. After enrolment, a master assessor was assigned to him, and he goes through the RPL assessment process. Post clearing the assessment 'B' is awarded with the RPL certificate of NSQF level 4 along with credits.

4.3. Provisions for Creditization of Special Cases of learning: Divyangs/ Persons with Disability

The National Credit Framework supports the same level and number of credits for Divyangs (Loco, Visual, Mental etc.), even though it may require higher learning notional hours (Theory and/or Practical as the need be) with special assistance (like Audio Visual contents) for achieving the same outcome levels for these individuals.

These learners' basis the skilling level and certification attained post successful completion of assessments shall be competent to carry out various job roles like those by the general candidates.

4.4. Provision for special events like Hackathon, Olympiads

National Credit Framework (NCrF) also enables hackathons, and subject Olympiads. The provision and detailed guidelines would also be developed for handling hackathons, and subject Olympiads etc. for exceptional children/ students/ learners.

- a. **Hackathons, and subject Olympiads**, both would need special assessment methods and credit assignments on the basis of achievement of outcome based learning outcomes subject to such special assessment.
- b. For such special events, **instead of the learning hours**, it is the **learning outcome which would decide the assignment of credits and the credit levels**. However, the **assessment has to be very objective, credible, strict, above board and adhere to high standard** so as to keep the integrity of the NCrF, and the credits earned through **Hackathons, and subject Olympiads** intact.
- c. Assignment of credits as per the defined NSQF levels of the learning outcomes or the qualification, the commensurate NCrF level may be calculated on the basis the academic qualifications which are relevant for the respective skill learning outcome.
- d. In this type of RPL the organization will register for Hackathon based RPL (to be

conducted either internally or externally by the bodies recognized for such assessments. There will be submission of a Problem statement that may have cross sectoral and/or multi sectoral academic, NOSs/Skills involved. The Hackathon shall be aligned with standards created by respective regulators, institutes or Awarding Bodies. Awarding Body will validate the alignment of problem statement with Qualifications that are NSQF aligned. The assessments shall be carefully calibrated to measure the exact learning outcomes and commensurate credits add credit levels emerging out of the learning outcomes from the event.

5. OUTCOMES OF THE PROPOSED NATIONAL CREDIT FRAMEWORK: REALISING THE VISION OF NATIONAL EDUCATION POLICY 2020

The implementation of the National Credit Framework (NCrF) will have the following benefits/expected outcomes:

- i. NCrF will enable fulfilling the objective of NEP to ensure that there is no rigid separation between academic streams, extracurricular, and vocational streams in schools.
- ii. NCrF will also give due weightage to Experiential learning including relevant experience and proficiency/ professional levels acquired which is now included as a part of the overall learning hours.
- iii. NCrF enables embedding and integration of vocational and skilling at all levels of Education. In the form of exposure at early stages and in the middle school and quality vocational education, training and skilling at the secondary and senior secondary school, smoothly integrating into higher education. It will ensure that every student learns at least one vocation/ skill, earns credits for it and is exposed to several more vocation and skills.
- iv. NCrF will enable the required flexibility, so that learners have the freedom to choose their own learning trajectories and programmes, thereby defining their own career path according to their talents and interests.
- v. NCrF will ensure the unity and integrity of all knowledge by enabling multidisciplinary and holistic education across the sciences, social sciences, arts, humanities, and sports for a multidisciplinary world.
- vi. The framework enables a mix of arts, science, humanities, life skills including employability skills etc. Thus NCrF will encourage entire education system to be creative, innovative because of the multi-disciplinary approach to learning.
- vii. NCrF will also enable inter-transfer of students / learners between different streams/ subject/ curriculums/institutions/universities/boards/and education systems within India and also with overseas/ international educational institutions.
- viii. NCrF will bring connectivity and synergy in learning across all levels of education from school education to higher education.

- ix. NCrf would enable availability of higher level vocational courses and qualification to students and learners enrolled in all higher education programmes, including the 3 or 4-year multidisciplinary Bachelor's programmes. The vocational education and skilling programs would also be available to students and learners and enrolled with NIOS, State Open Schools, adult literacy and life-enrichment programmes including availability of soft-skills and life-skills such as communication, cooperation, teamwork, and resilience.
- x. NCrf would enable different models of vocational education, training and skilling, internships and apprenticeships, by school education institutions as well as higher education institutions.
- xi. This Framework will provide the basis for Recognition of Prior Learning. Through NCrf, dropouts from the formal education system will be reintegrated into the mainstream by aligning their practical experience with the relevant level of the Framework and will also facilitate mobility across 'general' and 'vocational' education.
- xii. NCrf considers the multiple reasons leading to School/ Higher Education dropouts and enables suitable entry and reintegration paths for them, both in general education and vocational education, training and skilling. NCrf, therefore, promotes universalization of education from pre-school to secondary level and ultimately to higher education by ensuring more students returning and joining mainstream.
- xiii. NCrf is one single meta framework which is already aligned with all existing qualification frameworks including National Higher Education Qualification Framework (NHEQF) (by UGC/AICTE) and existing National Skills Qualification Framework (NSQF) (by NCVET).
- xiv. NCrf will help in filling the gaps between current state of learning outcomes and what is desirable to enhance the employability of a student, while also ensuring that the time invested by a student in learning either via education or through experiential learning or work experience does not go unaccounted.
- xv. NCrf will further strengthens and ensure implementation of the principles laid out in NEP. NCrf will enable improvement in the GER as has been envisaged by the Government.
- xvi. The NCrf will enable multiple entry-multiple exit options across the education ecosystem. NCrf will promote lifelong learning by enabling students and learners to

earn and store credits in a 'Academic Bank of Credits' as well as redeem the accumulated credits certificate, diploma or degree.

- xvii. NCrf will also help in addressing the long-standing issues associated with vocational education, training and skilling of not being aspirational. The NCrf permits mainstreaming of vocational programs with equal weightage and credits being given to vocational subject as to any other academic subject across school and higher education.
- xviii. NCrf focuses on establishing equivalence between general education courses and vocational education programs thereby leading to seamless integration between general and vocational education and training/ skilling.
- xix. NCrf is also easily adaptable by different streams like law, medical etc as required.
- xx. NCrf addresses the difficulties students are facing in respect of equivalence of certificates issues by various School Education Boards in India and abroad for the purpose of admissions in higher education institutions and employment in Central/State Government/ in other countries.
- xxi. NCrf will promote international equivalence of qualifications and courses as well as the mobility of students across international boundaries.

Table 10: Expected Outcomes of the National Credit Framework implementation

S No	NCrF BENEFICIARIES			
	STUDENTS	INSTITUTIONS	GOVERNMENT	INDUSTRY
1.	Creditization of all learning hours, including academic, vocational and Experiential learning including relevant experience and professional levels acquired,	Promotes unification of HEIs to promote multidisciplinary education	Increased enrolment of students (GER)	Short term future skills can be obtained as up-skilling
2.	Multidisciplinary and holistic education with flexible curricula	More diversified and rich student's knowledge base	Helps in fulfilling the national vision of complementing the demographic dividend	Re-Skilling and up-skilling of existing employees/ engineers
3.	Flexibility in duration of study/ courses through provisions of Multiple entry and exit / work option	Promotes stronger collaboration between institutions	To achieve Hon PM's Vision of making India the Skill capital of the World.	Allows students to attain NSQF approved foundational skills developed by industry & be more employable
4.	Provision for lifelong learning - any time anywhere learning	Simpler and uniform credit mechanism	Making vocational education and training/ skilling aspirational	Provision of Micro-credentials allows integration of quick educational upgradation/ up-skilling
5.	Removal of hard distinction between education stream thereby making study choices respectful and allowing for more than one award in same period.	Increased focus on research and innovation	Highly educated and trained workforce for Aatmanirbhar Bharat.	Helps cater to the future demand of skills and bridging skill gap
6.	Removes distinction between arts, science, social sciences, and commerce etc Students get credits for every academic/ skill/ experience	Promotes digital learning, blended learning and open distance learning	Could be extended to all kind of streams including agriculture, medical and law	Makes students more employable by more holistic design of study by including vocational education and training/ skilling
7.	Enhances the scope of core learning to include foundational and cognitive both.	Leveraging of institutional infrastructure		Have skill enhanced, multi/ cross-sectoral skilled pool of employable youth

Annexure I: Comparative Analysis of Credit Mechanism of IITs

	IIT Delhi	IIT Bombay	IIT Guwahati	IIT Madras
Credit Scheme	L-T-P (Lecture-Tutorial-Practical)	L-T-P (Lecture-Tutorial-Practical)	L-T-P (Lecture-Tutorial-Practical)	L-T-T-P (Lecture-Tutorial-Extended Tutorial-Practical)
Credit Weightage	Credits assigned to a course of format 3-1-2: $L+T+P/2 = 3+1+2/2 = 5$ credits I.e., 1 L = 1 credit 1 T = 1 credit 1P = 0.5 credit	1 L = 2 credit 1 T = 2 credit 1P = 1 credit	Credits assigned to a course of format 3-1-2: $L+T+P/2 = 3+1+2/2 = 5$ credits I.e., 1 L = 1 credit 1 T = 1 credit 1P = 0.5 credit	1 L = 1 hr = 1 credit 1 T 1 T 1P = 2.5 hr = 3 credits
Example: Engineering	1 Sem = 19 - 20 credits Total 148 -158 credits	1 Sem = 35 - 40 credits Total 280 -320 credits	1 Sem = 30 - 48 credits Total 240 -384 credits (5-6 courses/semester)	NA

Annexure II: Types of Assessments (Blended Learning Guidelines of NCVET)

1. **Assessment broadly can be classified into the following types:**
 - a. **Diagnostic assessments:** Diagnostic assessments are intended to help teachers identify what students know and can do in different domains to support their students' learning. These help teachers determine strengths of students in various areas to better address their specific needs.
 - b. **Formative assessments:** Formative assessment refers to a wide variety of methods that teachers use to conduct in-process evaluations of student comprehension, learning needs, and academic progress during a lesson, unit, or a course. Formative assessments help teachers identify concepts that students are struggling to understand, skills they are having difficulty acquiring, or learning standards they have not yet achieved so that adjustments can be made to lessons, instructional techniques, and academic support.
 - c. **Summative assessments:** Summative assessment is an assessment administered at the end of an instructional unit in a course. These assessments are intended to evaluate student learning by comparing performance to a standard or benchmark.
 - d. **Ipsative assessments:** Ipsative assessment involves comparisons between past and current work to identify a learner's growth over time, rather than progress toward an external set of criteria. Therefore, Ipsative assessment is an internal or self-referenced assessment.
 - e. **Norm-referenced assessments:** Norm-referenced tests report whether test takers performed better or worse than a hypothetical average student, which is determined by comparing scores against the performance results of a statistically selected group of test takers, typically of the same age or grade level, who have already taken the exam.
 - f. **Criterion-referenced assessments:** **Criterion-Reference tests measure** the performance of test takers against the criteria covered in the curriculum.
 - g. **Peer-to-Peer randomised Assessments:** Peers will be able to provide assessment in this case

- h. **Industry Validation of Effectiveness:** In the Vocation Education, Industry validation of effectiveness of training is particularly important.
- i. **Self-assessments:** To evaluate how much the learner has grasped by self-learning.
- 2. **Other Assessment Methods:** Conducting an assessment takes time, thought, attention, planning, and often collaboration. Each assessment tool, whether a short survey or detailed rubric, will be useful only insofar as it both addresses the outcomes well and is feasible to use.
 - a. **Rubrics:** For assessing qualitative student work such as essays, projects, reports, or presentations. Rubrics serve well to clearly denote the specific expectations for an assignment, for collecting data for assessment of student learning outcomes. and for student performance. Rubrics can be used for grading, for providing feedback to students, and for informing and encouraging students to think about their own learning.
 - b. **Portfolios and E-Portfolio:** Portfolios can provide a window into the process of student learning across a semester-long project that can be assessed (usually by using a rubric).
 - c. **Curriculum Mapping:** A good curriculum map can serve to focus assessment, and the improvements that follow, where it will be most useful, informative, or effective.
 - d. **Structured Interviews:** While time-consuming, structured interviews are useful when specific questions need to be asked. It also leaves room for unplanned topics or ideas to emerge.
 - e. **Student Experience Surveys:** Student experience in research universities (SERU), including administration of on-line census SERU Undergraduate and Graduate Surveys, can yield important information about student perceptions and experiences.

Annexure III: Multiple Entry Multiple Exit options by UGC & AICTE

I. Multiple Entry Multiple Exit (ME-ME) - UGC

ACADEMIC LEVEL	ENTRY QUALIFICATION *	EXIT QUALIFICATION AND CREDITS required for the level	NATIONAL CREDIT LEVEL (NCrF)
	Higher Education		
UNDER-GRADUATE 1st year (B. General/ B. Voc)	12 th pass certificate or equivalent state of education	Under-Graduate Certificate will be awarded and Minimum 40 credit-hours followed by an exit 4-credit skills-enhancement course	4.5
UNDER-GRADUATE 2nd year (B. General/ B. Voc)	Under-Graduate Certificate	Under-Graduate Diploma will be awarded and Minimum of 80 credit-hours followed by an exit 4-credit skills-enhancement course	5
UNDER-GRADUATE 3rd year (B. General/ B.Voc)	Under-Graduate Diploma	Bachelor Degree will be awarded and Minimum of 120 credit-hours	5.5
UNDER-GRADUATE 4th year (B. General/ B.Voc)	Bachelor's Degree (3 year)	Bachelor's degree (Honors/ Honors with Research); and Minimum of 160 credits, with minimum of 40 credits each at level 4.5, 5, 5.5 and 6 of the NHEQF	6
POST GRADUATE DIPLOMA Or 1st year of 2- year PG program	Bachelor's degree (3 years)	Post Graduate Diploma after completion of 1st year of 2-year PG program; and Minimum of 40 credits for individuals who have completed a bachelor's programme	6.0
MASTERS (M. General / M. Voc) 2 year of master program	Bachelor degree (after 3 years of UG)	Master's degree; and Minimum of 80 credits from the first and second years of the program, with minimum of 40 credits in the first year and minimum of 40 credits in the second year of the program at level 6.5 on the NHEQF	6.5
MASTER'S (General/ M. Voc) One year program after 4 year UG	Bachelor's degree (honors/ honors with research) or Post Graduate Diploma	Master's degree; and Minimum of 40 credits for individuals who have completed a bachelor's degree (Honors/ Honors with Research)	6.5
Master's programme (Eng M.E., M. Tech)	Bachelor's degree (honors/ honors with research)	Master's degree; and Minimum of 80 credits from the first and second years of the programme, with minimum of 40 credits in the first year and minimum of 40 credits in the second year of the programme at level 6 on the NHEQF	7
Ph.D.	PG Diploma OR Master's Degree OR a Bachelor's degree (honors with research)	Doctorate degree will include course work and a thesis with published work and/or creative work	8

*Admission will be open to those who have met the entrance requirements, including specified levels of attainment, in the programme admission regulations along with evaluation of documentary evidence (including the academic record and/or evidence relating to the assessment and validation of prior learning outcomes) of the applicant's ability to pursue an undergraduate programme of study.

ii. MULTIPLE ENTRY- MULTIPLE EXIT (ME-ME) IN HIGHER EDUCATION- AICTE

Academic Level	Entry Qualifications at various levels.	Exiting Qualifications at various levels	National Credit Level (NCrF)
9 th Grade	8 Grade pass	ξ 9th Class/ ξ 1 year of ITI after 8th class	2.5
10 th Grade	▲ 9 grade pass ▲ 1 year of ITI after 8 grade pass	ξ 10th Class ξ 2 Year of ITI after 8th Class	3.0
11 th Grade. /1 st yr. Diploma	10 grade pass / 2 Year of ITI after 8 grade pass + NIOS	ξ Class 11 ξ Certificate of Voc. (Eng) ξ Class 11+ + QPs/ NOCs enabling lateral entry in 2nd Year of Certificate of Voc.	3.5
12 th Grade. /2 nd yr. Diploma	▲ 10+ Certificate of Voc ▲ Class 11 ▲ Class 11+ QPs & NOCs	ξ Class 12 ξ Industrial Training Certificate (Eng) ξ Class 12+ QPs and NOCs enabling entry in UG Certificate	4.0
Final yr. Diploma/ 1 st yr UG Degree	▲ Class 12 ▲ 12+ Industrial Training Certificate (Eng) ▲ Class 12+ QPs & NOCs	UG Certificate (Eng.)	4.5
2 nd yr UG Degree	UG Certificate (Eng.)	UG Diploma (Eng.)	5.0
3 rd yr UG Degree	UG Diploma (Eng.)	B. Voc (Eng.)	5.5
Final yr UG Degree	B. Voc (Eng.)	B.E./B. Tech.	6.0
1 st Year PG (Eng)	B.E./B. Tech.	M.Voc (Eng.)	6.5
2 nd year PG (Eng)	M.Voc. (Eng.)	M. Tech	7
Ph.D.	M. Tech	Ph.D.	

Note:

At each entry, Institution/ University has to identify the educational gaps/ skill gaps and suitable bridge courses may be offered.

- To make the students employable after every exit, the skill component with progressive enhancement in skills in respective disciplines may be introduced in the curriculum right from the 1st year of the program by the concerned regulatory body/ University/ Technical Board, as the case may be.
- The levels of exit, assessed through and learning outcomes are the basis of equivalency, not the duration of the courses. For example: Dual Degree etc.

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