आचार्य मनिष र. जोशी
सचिव

Prof. Manish R. Joshi
Secretary

ज्ञान-विज्ञान विमुक्तये

सत्यमेव जयते

आज़ादी का
अमृत महोत्सव

विश्वविद्यालय अनुदान आयोग
University Grants Commission
(शिक्षा मंत्रालय, भारत सरकार)
(Ministry of Education, Govt. of India)

No. F. 2-3/2022(QIP)   07th August, 2024/ 16 श्रावण, 1946

सार्वजनिक सूचना

Subject: - SOPs for operationalization of National Credit Framework (NCrF) in Higher Education, Vocational Education, Training and Skilling (VETS) and school education.

UGC notified the National Credit Framework (NCrF) on 10.04.2023 and requested all HEIs to adopt NCrF in their respective institutions.

Following the notification of NCrF, the Ministry of Education constituted a High-Level Committee (HLC) to formulate Standard Operating Procedures (SOPs) to implement the NCrF. The HLC developed SOPs for the implementation of NCrF.

I am happy to share a copy of SOPs for Operationalization of NCrF in Higher Education, Vocational Education, Training and Skilling (VETS) and School Education. HEIs are hereby requested to make use of SOPs for the implementation of the NCrF.

(मनिष जोशी)

SOPs For Operationalization Of

National Credit Framework (NCrF)

in Higher Education, Vocational Education, Training and Skilling (VETS) and School Education

August 2024

TABLE OF CONTENTS

FOREWORD

प्रो. म. जगदीश कुमार
अध्यक्ष
Prof. M. Jagadesh Kumar
Chairman

विश्वविद्यालय अनुदान आयोग
शिक्षा मंत्रालय, भारत सरकार
University Grants Commission
Ministry of Education, Govt. of India

Foreword

I am pleased to introduce the Standard Operating Procedures (SOPs) for operationalising the National Credit Framework (NCrF). The NCrF, notified by the UGC, marks a significant step towards our shared vision of a dynamic,-inclusive, lifelong education system that empowers learners with relevant skills and knowledge for the 21st century. NCrF, for the first time, enables creditisation of all forms of learning from the school level onwards and ensures mobility between vocational education, training and skilling to general education and vice versa.

Realising the need for Standard Operating Procedures (SOP) to implement the NCrF, the Ministry of Education constituted a High-Level Committee (HLC). The HLC, with the help of three sub-committees viz. for school, vocational, skill and higher education, drafted the SOPs. The SOPs provide a clear guide to facilitate the assignment, accumulation, storage, transfer, and redemption of credits across school, higher, and vocational education and training.

Equivalence and recognition of learning across different educational levels are essential for mobility. SOPs address this effectively with the help of the National Higher Education Qualification Framework (NHEQF), National Skill Qualifications Framework (NSQF) and National Curriculum Framework (NCF). This will pave the way for seamless lateral entry and credit transfer, promoting flexibility and optimising learning pathways for students on all levels of education.

The document encourages multiple entry and exit, recognition of prior learning and work-embedded programmes that offer opportunities for learners to develop skills and seamlessly integrate them into formal learning pathways. The SOPs will empower educational institutions to become hubs for skill development and offer learners diverse learning pathways.

I congratulate Dr. N.S. Kalsi, Co-Chairman, and members of HLC for drafting the SOPs to operationalise the NCrF with the help of three Sub-Committees. I am also thankful to the three Sub-Committees for bringing out the SOPs headed by Prof. Rajive Kumar, Chairman of the Sub-Committee on Higher Education, Ms Nidhi Chhibber (IAS), Chairperson of the Sub-Committee on School Education and Dr Neena Pahuja, Chairperson of Sub-Committee on Vocational Education, Training and Skilling (VETS).

I extend a warm invitation to all the country's higher educational institutions to use the SOPs to make their institutions knowledge-driven, skill-centric, and future-ready.

Prof. M. Jagadesh Kumar

New Delhi,
April 2024

PREFACE

Skill India
कौशल भारत-कुशल भारत

Dr. Nirmaljeet Singh Kalsi
IAS (Retd.)
Chairperson

राष्ट्रीय व्यावसायिक शिक्षा और प्रशिक्षण परिषद
कौशल विकास और उद्यमशीलता मंत्रालय
भारत सरकार
चतुर्थ तल, कौशल भवन, चाणक्यपुरी,
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NATIONAL COUNCIL FOR VOCATIONAL EDUCATION AND TRAINING
Ministry of Skill Development and Entrepreneurship
Government of India
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New Delhi-110023

PREFACE

Hon'ble Prime Minister envisions India as a global leader in highly skilled manpower. Policies and Frameworks like the National Education Policy 2020 and the National Credit Framework (NCrF) aim to foster knowledge, innovation, skill development, and the competitiveness of "Made in India" products globally. This integration of education and skills has not only spurred economic growth but also enhanced India's standing as a skilled workforce and manufacturing services leader.

The National Credit Framework (NCrF) embodies the spirit of National Education Policy 2020 by providing a comprehensive credit framework that integrates learning in various dimensions of academics, Vocational Education, Training and Skilling (VETS) learning, as well as experiential learning. The NCrF aims to create an integrated educational ecosystem that enhances flexibility and mobility across academic and vocational training. NCrF will establish a credit system that acknowledges and recognizes all forms of learning, enabling students to tailor their education paths to their needs and aspirations. This framework supports lifelong learning, ensuring that individuals can continuously acquire and upgrade their skills in line with evolving industry demands and personal growth objectives.

Implementing NCrF is crucial for creating an ecosystem that meets the evolving needs of learners, industries, and the global landscape. To ensure standardized implementation of NCrF across educational institutions, Standard Operating Procedures (SOPs) were deemed necessary by regulators and stakeholders. Accordingly, a High-Level Committee was constituted by Government of India for this purpose which established three sub-committees to develop detailed SOPs for higher education, school education and vocational education, training and skilling (VETS) for various aspects of education and skilling under the NCrF.

These SOPs facilitate and will serve as a practical guide for credit assignment, accumulation, transfer, and redemption of credits across school, higher, and vocational education and training, removing barriers and empowering students to chart their own paths. The SOPs outline clear and simple processes for integrating academic and vocational education, ensuring transparency, quality assurance, and pave the way for seamless lateral entry and credit transfer, promoting flexibility and optimizing learning pathways for students on all levels of education.

These SOPs clearly outline and encourage multiple entry and multiple exit options,

recognition of prior learning and work embedded education programmes that offer opportunities for learners to develop skills and seamlessly integrate them into formal

learning pathways. With a firm commitment to multi-disciplinarity, holistic education, and the empowerment of every student/ learner, the operationalization of NCrF through these SOPs herald a new dawn in Indian education and Vocational Education, Training and Skilling (VETS) ecosystem.

I extend my gratitude to Prof. M. Jagadesh Kumar, Chairman, UGC, the esteemed Chairman, High-Level Committee (HLC), for his visionary leadership and guidance in formulation of these SOPs. I am thankful to Prof. Rajive Kumar, Member Secretary, AICTE, and Chairperson, Sub-Committee on Higher Education, Dr Neena Pahuja, Executive Member, National Council for Vocational Education and Training (NCVET) and Chairperson Sub-Committee on Vocational Education, Training and Skilling (VETS) and Ms. Nidhi Chibber Chairperson, CBSE, and Chairperson Sub-Committee on School Education. I acknowledge their invaluable contributions in formulation of this SOP in such a short timeframe.

I am also thankful for the valuable contributions of all other members of the High-Level Committee namely Ms Prachi Pandey, Joint Secretary, Department of School Education, Ms. Rina Sonowal, Joint Secretary, Department of Higher Education, Prof. Rangan Banerjee Director, IIT, Delhi, Prof. Ajay Kumar Sharma Director NIT, Delhi Prof. Yogesh Singh Vice-Chancellor, University of Delhi, Shri Nilambuj Sharan Senior Economic Adviser, Ministry of Skill Development & Entrepreneurship, Ms. Trishaljit Sethi Director General Training, MSDE, Prof. Manish Joshi Secretary, UGC, Prof Dinesh Prasad Saklani, Director, National Council of Educational Research and Training (NCERT), Prof. Saroj Sharma, Chairperson, National Institute of Open Schooling, Ms. Smita Srivastava, Director, Ministry of Higher Education, and Dr N. Gopu Kumar, Joint Secretary, UGC and Member Secretary of HLC. The members of the High-Level Committee (HLC) worked relentlessly on these SOPs, providing their valuable inputs, insights and support in bringing out this report. Their collective expertise and swift action were crucial in the development of this SOP.

I am also thankful for the valuable support of Dr. Vinita Aggarwal, Executive Member with Col Gunjan Chowdhary and Col Santosh Kumar, Director along with Ms. Sarika Dixit, Senior consultant and Mr. Abhinav Mishra and Ms. Srishti Jha, Consultants at NCVET for their persistent help and assistance in preparing this document.

I am confident that these well-crafted SOPs will be a vital tool for implementing the National Credit Framework (NCrF), guiding all stakeholders with precision. It is my fervent hope that this document serves as a catalyst for meaningful changes and mark a pivotal step toward innovation, excellence, and inclusivity in education and skill development, promising a transformative journey that will enrich individual lives and strengthen societal foundations driving us closer to the realization of the transformative vision outlined in the NEP 2020.
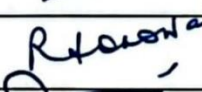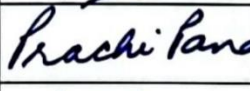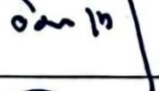
(Dr. Nirmaljeet Singh Kalsi)

HIGH LEVEL COMMITTEE (HLC)

The Ministry of Education, Govt. of India, vide letter no. 5-1/2023-U1A-Part (1) dated 10th May 2023 constituted a High-Level Committee (HLC) to oversee the implementation and removal of any difficulties of the National Credit Framework (NCrF).

The composition of the HLC is as follows:

S. No.	Name and Designation		Signature
1.	Prof. M. Jagadesh Kumar Chairman, University Grants Commission (UGC)	Chairman	
2.	Dr. N. S. Kalsi Chairperson, National Council for Vocational Education and Training (NCVET)	Co-Chairman	
3.	Ms. Rina Sonowal Joint Secretary, Dept. of Higher Education	Nominee of Higher Education, MoE	
4.	Ms. Smita Srivastava Director, Ministry of Education	Nominee of Higher Education, MoE	
5.	Ms. Prachi Pandey Joint Secretary, Dept. of School Education, MoE	Nominee of School Education, MoE	
6.	Shri Nilambuj Sharan Senior Economic Adviser, Ministry of Skill Development & Entrepreneurship	Nominee of MSDE	
7.	Ms. Trishaljit Sethi Director General Training, MSDE	Member	
8.	Ms. Nidhi Chibber Chairperson, CBSE	Member	Transferred out
9.	Prof. Rangan Banerjee Director, IIT, Delhi	Member	
10.	Prof. Ajay Kumar Sharma Director NIT, Delhi	Member	
11.	Prof. Yogesh Singh Vice-Chancellor, University of Delhi	Member	
12.	Prof. Manish Joshi Secretary, UGC	Member	
13.	Prof. Rajive Kumar Member Secretary, AICTE	Member	
14.	Prof. Saroj Sharma Chairperson, National Institute of Open Schooling	Member	
15.	Prof Dinesh Prasad Saklani, Director, National Council of Educational Research and Training (NCERT)	Member	
16.	Dr. N. Gopukumar Joint Secretary, UGC	Member Secretary	

SOP for OPERATIONALIZATION OF NATIONAL CREDIT FRAMEWORK (NCrF) in HIGHER EDUCATION

1. Introduction:

The National Education Policy 2020 envisions a disruptive transformation in education system to make India a 'global knowledge superpower- Vishwa Guru'. It lays emphasis on making the education more holistic, multidisciplinary, and effective by integrating general (academic) and vocational/ skill education while ensuring the vertical and horizontal mobility of students and learners between academic and vocational streams. To realize the intent and objectives of National Education Policy 2020, the Government of India constituted a High-Level Committee (HLC) to formulate the National Credit Framework (NCrF). 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 were part of the HLC. The NCrF provides for creditization of all learning including academic, vocational/ skills & experiential learning, and assignment, accumulation, storage, transfer & redemption of credits, subject to assessment; removes distinction between subjects 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 National Credit Framework, duly approved by the Government, has been notified by UGC on 10th April 2023. Subsequently, the Department of Higher Education vide its order dated 10th May 2023 constituted a High-Level Committee (HLC) to oversee the operationalization and implementation of NCrF. The first meeting of the committee was held on 8th June 2023 wherein, three different sub-committees, each catering to requirements of school education, higher education and vocational education were constituted.

1.I.   The Sub-Committee for Higher Education was constituted to develop SOPs and guidelines for operationalization of NCrF in Higher Education **(composition at Annexure I)**. The TOR of the Committee are as follows:

   i.   Create SOP for integrating Higher Education with vocational education, training & skilling;

   ii. Create an SOP on establishing equivalence within and between Higher Education and Vocational Education, Training & Skilling for a NCrF level, including the requirement of additional learning, if any;

   iii. Create SOP for the assignment, accumulation of credits for courses/ qualifications/ programs earned in the same assessment band, and also setting up of broad learning outcomes for each NCrF level as defined under NCrF;

   iv. Suggest a detailed credit transfer mechanism for establishing entry eligibility in academics at different levels for various streams in consultation with other regulators, subject to fulfilment of their defined conditions;

   v.   Define the specific modalities for catering to students with the varying pace of learning and defining special assessment criteria, including the basis of assigning and assessing credits, for students and learners with exceptional achievements/ performance in games and sports, performing/ fine arts, social work, NCC, or another similar subjects/ category;

   vi. SOP for Recognition of Prior Learning (RPL) in higher education including Technical education.

The Committee has been empowered to include any other TOR which it considers important for the formulation of the overall report.

The sub-committee for higher education held three meetings viz. 1st meeting on July 18th, 2023, 2nd meeting on August 7th, 2023 and the 3rd meeting on August 9th 2023. The subcommittee also sought comments,

suggestions and recommendations from all the IITs. Based on all the recommendations in NCrF, National Higher Qualification Framework (NHEQF) and Academic Bank of Credit (ABC) document and on suggestions given by the members of the committee, and the comments received from the IITs, the following SOPs and guidelines are recommended for implementation of NCrF in Higher Education Institutions (HEIs):

2. **The National Credit Framework (NCrF) notified by UGC shall act as the broad enabling and guiding frameworks which shall be supplemented by these SOPs and guidelines for all organizations and institutions. The NCrF is available at https://www.ugc.gov.in/Ncrf.aspx. The following references in the NCrF may be referred to and read with this document for detailed understanding of this SOPs/Guidelines:**

   i. Section 3.2.5- learning hours- components of learning- detailing components that need to be considered as part of the notional learning hours for counting credits.

   ii. Section 3.2.5, Table 2- elaborates the learning hours per year across the various academic grades in Higher Education, School and Vocational Education, Training and Skilling.

   iii. Section 3.2.9, Table 3-details out the NCrF levels for different academic Grade/Vocational Education, Training and Skilling and the Assessment Bands and equivalence.

   iv. Section 3.2.10, Figure I- the NCrF caters to creditization of three dimensions of learnings i.e Academic Education (School and Higher), Vocational education, Training and Skilling and relevant experiential learning & proficiency/professional levels achieved.

   v. Section 3.3.2, para I-Table 4; Para – II, Table 5; Section 3.3.3 -Table 6: Detail the NCrF levels and credit assignment in School education, Higher education and Vocational Education, Training and Skilling respectively.

   vi. Section 3.3.4, Table 7- Credit Assignment for Relevant Experience and Professional/ Proficiency Level Acquired including the calculation of overall credit earned.

   vii. Section 3.4.1, Table 8- refers to National Credit Framework Levels (NCrF) and corresponding Academic Levels (National School Education, National Higher Education Qualifications Framework), and Vocational Education and Skills Levels (National Skill Qualifications Framework) and conditions for academic equivalence.

2.I **Apart from the provisions of NCrF, the following provisions of various other Guidelines may also be referred to:**

2.I.i. **Major Relevant Guidelines notified by UGC/Higher Education**

   a. Table 2 (Minimum credit requirement to award degree under each category) of document Curriculum and Credit Framework for Undergraduate Programmes: https://www.ugc.gov.in/pdfnews/7193743_FYUGP.pdf to understand the structure of the Undergraduate Program in the.

   b. National Higher Education Qualifications Framework (NHEQF): https://www.ugc.gov.in/NHEQF.aspx

   c. UGC (Establishment and Operationalization of Academic Bank of Credits (ABC) Scheme in Higher Education) Regulations, 2021: https://www.ugc.gov.in/academic_bank_of_credits.aspx

   d. Curriculum and Credit Framework for Postgraduate Programmes https://www.ugc.gov.in/pdfnews/4682468_Curriculum-and-Credit-Framework-for-Postgraduate-Programmes.pdf

e.   Guidelines for Multiple Entry and Exit in Academic Programmes offered in Higher Education Institutions: https://www.education.gov.in/sites/upload_files/mhrd/files/upload_document/abc_doc.pdf

f.   UGC Guidelines for Higher Education institutions to offer Apprenticeship/ lnternship embedded Degree programmes: https://www.ugc.gov.in/pdfnews/9105852_ugc-guidelines_ApprenticeshipInternship.pdf

g.   Guidelines for providing Skill Based Education under National Skills Qualifications Framework: https://www.ugc.gov.in/pdfnews/6556003_Guidelines-for-providing-Skill-Based-Education-under-NSQF.pdf

h.   UGC Credit Framework for Online Learning Courses through Study Webs of Active Learning for Young Aspiring Minds) Regulations, 2021. https://www.ugc.gov.in/pdfnews/2727945_SWAYAM-Regulations-2021.pdf

2.II.   Relevant Guidelines notified by NCVET:

i.   National Skill Qualification Framework (NSQF) Notification (https://ncvet.gov.in/wp-content/uploads/2023/07/National-Skills-Qualification-Framework-notification-June-2023.pdf)

   a.   Section 5.1 and Annexure I: to understand Level Descriptors to determine the Learning outcomes of at NSQF level.

   b.   Section 5.2 and 5.3: refer to defining National Occupation Standards (NOS) and Micro-credentials (MC)

   c.   Section 5.4 and Annexure II: explains the minimum entry criteria and minimum range of notional hours for both short-term and Long-term training required to achieve the learning outcomes prescribed for a particular NSQF level.

ii   Guidelines for Recognition and regulation of Awarding Bodies (AB): https://ncvet.gov.in/wp-content/uploads/2023/01/Guidelines-for-Awarding-Bodies.pdf

iii.   Guidelines for Recognition and Regulation of Assessment Agencies' (refer https://ncvet.gov.in/wp-content/uploads/2023/01/Guidelines-for-Assessment-agencies.pdf)

iv.   Guidelines for Blended Learning for Vocational Education, Training & Skilling by NCVET:

   https://ncvet.gov.in/wp-content/uploads/2023/01/Guidelines-for-Blended-Learning-for-Vocational-Education-Training-Skilling.pdf

v.   Guidelines for Development, Approval & Usage of National Occupational Standards (NOS) & Micro Credentials (MC) by NCVET: https://ncvet.gov.in/wp-content/uploads/2023/07/Guidelines-for-Development-Approval-Usage-of-National-Occupational-Standards-NOS-Micro-Credentials-MC.pdf

vi.   Guidelines for Creditisation of Skilling & Training Courses & Qualifications of Multinational Companies (MNCs) and Leading Indian Enterprises by NCVET

vii.   Guidelines for Recognition of Prior Learning (RPL) by NCVET- https://ncvet.gov.in/wp-content/uploads/2023/08/Final-RPL-guidelines.pdf

viii.   Guidelines on Multiskilling and Cross-Sectoral Skilling by NCVET- https://ncvet.gov.in/wp-content/uploads/2023/01/Multiskilling-and-Cross-Sectoral-Skilling.pdf

3. SOP for integrating Higher Education, Technical Education and Vocational Education, Training & Skilling

3.I.

i.   Integration of higher education, technical education and vocational education, training & skilling is possible by removing the silos that exist among them and allowing students to earn, store, accumulate and redeem credits through the Academic Bank of Credit (ABC).

ii. Subject to the provisions of NCrF and National Higher Education Qualification Framework (NHEQF), every HEI is allowed imaginative and need based curricular structures and encourage creative combinations of subjects and disciplines.

iii. Every HEI must ensure flexibility for students to choose their learning trajectories and career choices and specify the broad learning outcomes for each course/ subject along with competencies, NCrF level and assessment bands as defined under NCrF and the flexibility so provided to students to attain those learning outcomes through different authorised sources/ platforms, thus allowing them to develop and follow their own academic and career paths.

iv. There is a need to transform education and training systems to prepare all learners for the emerging skill requirements for life, work, future of work and sustainable development. Therefore, vocational/ skill-based courses are to be made an integral part of the course/ curricular structure.

v.   All the Universities/ Higher Education Institutes may integrate the vocational education training & skilling (VETS) based courses/ qualifications as per the following guidelines:

3.II. Integration of VETS in Higher Education as part of Curriculum/ as Additional courses for their students enrolled in UG/ PG Programs

i.   As per the provisions in the NCrF, upto 50 percent of the total credit requirement of a UG/ PG program can be fulfilled by earning credits from the Skill based courses / Qualifications of appropriate NCrF levels (4.5 to 8).

ii. Every HEI may offer, as part of their UG and PG curricular structure, vocational and skill-based courses/ qualifications of the appropriate NCrF levels which are either designed/ developed by their HEI as per National Higher Education Qualification Framework (NHEQF) and approved by the highest academic body of HEI concerned or adopt the NSQF aligned and approved courses available on National Qualification Register (NQR) Portal at www.nqr.gov.in as per the requirement. Thus, such skill-based courses/ qualifications may be implemented in different ways by the HEIs for their students as given below:

a.   **As part of the UG/ PG curriculum** - Such courses/ qualifications, may be NHEQF or NSQF aligned, and are integrated as part of the curricular structure of the UG/PG program.

b.   **As additional courses/ qualifications, not integrated within the curriculum of a UG/ PG program or offered as a standalone course/ qualification** - The HEIs may offer relevant skill-based courses/ qualifications over and above their approved curricular structures with provision of additional credits. While additional course/ qualification may be related to the curricular stream of the student/learner, the standalone course/ qualification could be totally

unrelated to the curricular stream of the UG/PG Program. Such courses/ qualifications could either be NHEQF or NSQF aligned.

iii.   HEIs may offer Skill-based NHEQF courses/ qualifications developed by them with the approval of their highest Academic Body/ authority. The HEIs may also implement NSQF aligned and approved skill-based courses/ qualifications **to their enrolled UG/ PG students,** carry out assessments to ascertain the learning outcomes and issue their own certificates for such courses/ qualifications subject to successful assessment.

iv.   At present, the curricular structure/ design in Higher Education for their UG program is based on the guidelines for Four Year UG program, which includes Vocational Education, Training and Skilling as an important component of learning. The table in **Annexure 3** gives an illustration on how skill-based courses/ qualifications can be integrated with the curricular structure of a UG program. The skill-based courses/ qualifications can also be implemented as:

    a.   Ability Enhancement Course, Skill Enhancement Course, Value added common courses or as Summer Internship programs.

    b.   The foundational or upskilling courses/ qualifications which may form part of skill/ability enhancement courses.

    c.   As part of the Major or Minor stream in the curriculum.

3.III.   Offering Standalone Skill-Based NHEQF courses/ qualifications by HEIs to the learners beyond their regular UG/ PG students

i.   HEIs may offer Skill-based NHEQF courses/ qualifications developed by them with the approval of their highest Academic Body/ authority **to the students/ learners beyond their regular UG/ PG students** subject to their jurisdiction as permitted by their Statutes.

ii.   The learners may be issued an HEI Skill Certificate by the HEI concerned with Skill India branding for such NHEQF courses/ qualifications.

3.IV.   Offering Standalone Skill-Based NSQF courses/ qualifications by HEIs to the learners beyond their regular UG/ PG students

i.   In case any HEI wants to operate in the VETS ecosystem and offer the NSQF aligned and approved Skill based courses / qualifications of appropriate NCrF levels 4.5 and above as standalone courses, to learners beyond their regular enrolled UG/ PG students, the HEI may do so if it is a recognised Awarding body (AB) of NCVET.

ii.   As an AB, HEIs may implement NSQF aligned and approved skill-based courses/ qualifications, to the students/ learners beyond their regular UG/ PG students subject to their jurisdiction as permitted by their Statutes, and issue NCVET certificates, with Skill India branding, for such courses/ qualifications subject to successful assessment.

iii.   As an AB, HEI may also develop an NSQF course/ qualification with the approval of National Skills Qualification Committee (NSQC). NSQC includes members /representatives from UGC and AICTE

iv.   As an AB, the HEIs may also adopt NSQF aligned and approved qualifications out of more than 1300 courses / qualifications of NCrF level 4.5 and above (including 340+ future skill qualifications) in various sectors (list available at www.nqr.gov.in).

v.   As long as the NSQF courses are being offered as part of the curricular structures which are duly approved by the highest academic body concerned of the HEI, no approval of NCVET would be necessary. The HEIs may implement and carry out the assessments in respect of the NSQF courses, assign credits and award certificates. The credits earned from such vocational/ skill-based courses from an HEI would not require further validation or approval from NCVET.

vi.   The credits assigned to the NSQF aligned course/ qualification integrated within curriculum or offered as additional/ standalone course/ qualification would be same as the credits specified in the NQR.

vii.   To ensure quality and adherence to the required industry standards while implementing the NSQF courses, the HEIs would ensure that all the essential requirements of infrastructure, teachers/ trainers, assessors, skill/ practical labs/ workshops, and learning material etc are met with in accordance with the prescribed guidelines with respect to the courses/ qualifications concerned. In case the HEIs do not have the adequate facilities and resources to implement the course/ qualification, they may seek the assistance and support from the Sector Skill Councils, the Awarding Bodies or the Assessment Agencies concerned.

viii.   All skill based courses certificates by any HEIs or any other institution would have a common branding of **Skill India with Logo.**

ix.   Any credit from NSQF aligned skill-based courses earned by a student/ learner from an HEI, which remained unredeemed/ un-utilised, can be used for issuance of a skill certificate by the concerned HEI within the timespan prescribed and such certificate shall carry the name and level of the courses so completed. However, the skill certificate issued will be that of the HEI concerned and not an NCVET certificate unless the HEI is a deemed AB/ AB. Such certificate will also carry a Skill India Logo.

x.   In case of professional courses regulated by the statutory bodies (UGC, AICTE, NCVET, NCTE etc.), their norms standards and guidelines shall apply while offering and implementing the skill-based courses/ qualifications.

xi.   All the HEIs implementing skill-based courses/ qualifications whether as part of the curriculum or for outside their regular UG/PG program for other learners shall ensure registration on Academic Bank of Credit (ABC) as well as share data with Skill India Digital Hub (SIDH) regarding the Skill-based courses/ qualifications as per the prescribed process. The HEIs to also ensure registration of their students/ learners on the ABC through the APAAR id.

xii.   Bridge courses may be conducted offline or online or bended mode or through SWAYAM portal or similar online platforms duly recognised by the regulator concerned for the purpose.

xiii.   For offering and creditising the courses conducted by an educational technology company (known as edTech companies) and making these as part of the curriculum, the guidelines of the respective regulators shall apply.

xiv.   To enable the interested HEIs to seamlessly design, develop and offer NSQF courses and qualification without the need to approach NCVET, the NCVET Council has already decided to grant the status of deemed awarding bodies to all the Institutes of National Importance (INIs), including all IITs, NITs, IISERs, NIDs, IIMs, Central Universities and Deemed Universities etc. These deemed AB HEIs would have full powers to act as a dual Awarding body (AB) with PAN India jurisdiction.

xv. The deemed Awarding Bodies will also have access to all the available Vocational Education, Training and Skilling resources including model curriculum, e-content, Training of Trainers (ToT) & Training of Assessors (ToA) resources, skill training assistance and support from the Sector Skill Councils, Awarding Bodies and Assessment Agencies concerned in implementation of the NSQF aligned and approved courses/ qualifications.

xvi. The other interested HEIs may also get the status of a recognised awarding body for the purpose of developing and implementing the NSQF aligned Qualification in their authorised jurisdictions to the learners other than their regular students. For this purpose, a simplified process of Awarding Body recognition has been put in place by NCVET for HEIs.

xvii. If a student from vocational education wishes to enter the general education at the next higher NCrF level or vice-versa, an expert committee of the HEI concerned (as detailed in the SOPs of Higher Education) may identify any gaps between the skill and education and suggest suitable bridge courses for establishing the eligibility or for admitting the students to general education/ vocational education.

xviii. The details of parameters and provisions for integration of VETS courses/ qualifications in Higher Education Institutions/ Universities including General Universities and Skill Universities are given in the Annexure-2. The detailed guidelines for implementation of Skill based qualification/course in Higher Education Institutes may also be referred to in the SOPs for operationalising of NCrF in Higher Education.

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4. SOP on establishing equivalence within and between General/ Higher Education and Vocational Education, Training & Skilling for a level and flexibility to earn credits

4.I.

i. Every HEI should clearly provide its students, the percentage or number of credits that can be earned from outside the parent institution, semester-wise/ per semester (which may differ as per the category of courses i.e. core courses, multidisciplinary courses, skill based courses etc.) or in a programme or as may be applicable. It may be noted that as per NCrF up to 50% of the total credit requirement for a program can be earned from the skill based courses/ program.

ii. The HEI may need to undertake appropriate mapping of their curricular programs to establish equivalence for credits earned from different credit awarding bodies. While establishing Academic Equivalence, the institution may also prescribe additional requirements, if so required.

iii. Learning outcomes of courses, competencies achieved and the NCrF levels attained shall be the basis for drawing equivalence for considering lateral entry of students/ learners as well as for the purpose of counting the credits earned from outside the parent university/ HEI. Therefore, carefully framing the 'Learning Outcomes and Competencies' of each course is important.

iv. Every University/Autonomous institution will frame curriculum as per the guidelines given in NHEQF clearly specifying the outcomes and competencies of the courses. Following are the points which may be taken into consideration while framing the Learning Outcome of the courses:

   a. Every course (paper) must have well defined learning outcomes and competencies which are measurable and duly aligned with NHEQF/ NSQF.
   b. Such learning outcomes and competencies of a course must have co-relation with the course objectives.
   c. Learning outcomes and competencies must be framed from the perspective of what the

student will be able to do after completion of the course, stating

- what knowledge & understanding he/she will be able to develop/ describe,
- what practical/ hands-on skills he/she will be able to demonstrate,
- where and how he/she will be able to apply the knowledge and skills so acquired.
- what analysis he/she will be able to do
- what new innovation can be done, created or developed using the knowledge and skills so gained.

Note: each course (i.e. paper) may or may not have all the five attributes stated above.

v. An expert committee will be formed at the institutional level to examine the equivalency of the credit on the basis of the learning outcomes, numbers of credits to be considered at the multiple entry levels etc.

vi. For determining Academic Equivalence, a HEI:

   i. can undertake direct assessment in the Learning outcome prescribed and issue relevant award (Certificate/Diploma/Degree) in case the learner clears the assessment.

   ii. may determine the additional/bridge courses that a learner needs to undertake to earn an award.

vii. Credits from a foreign university may be counted subject to the recommendations of the expert committee regarding equivalence of the credit in accordance with the relevant Guidelines of UGC/AICTE.

viii. Credits are generally transferred along with grades but there are several systems of awarding grades nationally and internationally. Institutes must devise a mechanism by constituting a committee of experts in that area to decide the equivalency of grades.

ix. The National Higher Education Qualifications Framework (NHEQF) may be referred for learning outcomes and competencies for different NCrF levels. (https://www.ugc.gov.in/pdfnews/7193743_FYUGP.pdf)

x. Flexibility to earn credits- Students and learners should be able to earn credits by –

   a. studying courses offered by various academic institutions and platforms (such as SWAYAM/SWAYAM Plus or any other platform duly recognised by the concerned regulatory body), subject to assessment – anytime, anywhere and any level of learning;

   b. Undergoing skill/vocational courses in a formal set up;

   c. experiential learning in an informal set up (for awarding Credits for such experiential learning, the HEI concerned will need to conduct assessment).

   d. Experiential learning in a formal set-up in the form of internship or apprenticeship, work-embedded program as part of the curriculum.

   (Please refer to https://www.ugc.gov.in/pdfnews/9105852_ugc-guidelines_ApprenticeshipInternship.pdf)

4.II. Credits and credit mobility -

i. Credits will be calculated in the following manner:

   a. One credit is equivalent to one hour of teaching [lecture or tutorial] or two hours of practical work/ field work, or three hours of experiential learning per week. Accordingly, one Credit would mean equivalent of 15 hrs of theory or 30 hrs of workshop/ lab work or 45 hours of

experiential learning in a semester. (one year or 1200 hours of learning works out to be 40 credits, which on an average is 30 hours per credit including lectures and tuorials, practical work/ field work, and experiential learning)

    b.   For internship/field work, the credit weightage for equivalent hours is 50% of that for lectures/tutorials.

    c.   For apprenticeship, the credits would be calculated in terms of duration instead of notional hours. A three-months apprenticeship programme will earn 10 credits. It is important that in all such cases the learning outcomes with NCrF levels need to be pre-defined and subsequently assessed for award of credits.

ii.   As per NCrF, the minimum number of credits that can be awarded in a year is 40. Typically for a 3-year and 4-year degree programmes, minimum number of credits are 120 and 160 respectively.

iii.   Institutes offering minor degree, in a 3/ 4 year UG program, may suitably decide 24 to 32 credits for the minor degree within 120/ 160 credits only and may award degree in major with minor.

5. SOP for the accumulation of credits for courses/ qualifications/ programs earned in the same assessment band

5.I.

i.   All credits for courses/ qualifications/ programs are to be accumulated in the Academic Bank of Credit (ABC).

ii.   Every Higher Education institutions (HEI) will register on the Academic Bank of Credit (ABC) portal.

iii.   Every HEI shall ensure that their students register on the ABC portal and create an APAAR (Automated Permanent Academic Account Registry) Id for the purpose of accumulating the credits and redeeming them for award of Certificate/ Diploma/ Degree.

(refer to https://www.ugc.gov.in/pdfnews/9327451_Academic-Bank-of-Credicts-in-Higher-Education.pdf)

iv.   Credits stored in ABC portal are normally valid for seven years. After seven years, re-entry into a programme of study will be based on the validation/ re-validation of prior learning outcomes through fresh assessment. In case of VETS courses, the validity of the credits earned may vary, which will be defined within the course/ qualification itself.

6. SOP for establishing entry eligibility in academics at different levels for various streams & for Transfer of Credits

6.I.

i.   All HEIs and their students who are registered on ABC portal shall be enabled to opt for credit transfer and migration through this portal.

ii.   Admission to programmes of study can be conducted as per the entry criteria transparently based on merit. Merit may be drawn by conducting a common entrance test if there are large number of aspirants for fewer seats. Appropriate mechanism in this regard may be devised by the HEI concerned.

iii.   Lateral entry into the programme of study at a particular NHEQF level will be based on the validation of prior learning outcomes through a pre-defined assessment, including those achieved

outside of formal learning or through learning and training in the workplace or in the community, through continuing professional development activities, or through independent/ self-directed/ self-managed learning activities. The guidelines issued by the UGC and AICTE for general and engineering programes respectively in respect of Recognition of Prior Learning (RPL), work-embedded degree programs or apprenticeship embedded engineering / vocational programs would be followed by the HEIs in this regard.

iv. Lateral entry and credit transfer between/ among HEIs for a student who has completed the required NHEQF/ NSQF courses for a particular NCrF level can be done based on the fulfilment of the eligibility criteria to enter the next higher level as well as having the pre-requisites of the courses of the lateral entry level. For example, a student after completion of NCrF Level 4.5 in HEI - 1 may opt for lateral entry into Level 5 in HEI- 2 if she/ he has fulfilled the pre-requisites of the courses listed to be offered/ studied at NCrF Level 5 in HEI-2. The academic council of the HEI-2 admitting the students would be the authority to decide if the student fulfils the pre-requisites or should be allowed entry to Level 5 in HEI-2 by provisioning bridge the courses to overcome such gap.

v. Lateral entry to an institution shall be permissible subject to vacancies or provision of supernumerary seats available in that particular course/ programme and the admission criteria to be followed in a transparent manner as mentioned above.

vi. Vacancies or number of seats opened for lateral entry shall be determined by:

   a. The number of vacancies created by the exit of the students at the end of an even semester;
   b. The student-teacher ratio required to be maintained;
   c. Availability of adequate infrastructure; and
   d. Other factors which are relevant in the teaching learning process.

vii. In case of lateral entry into any odd semester of the UG programme through the merit of the qualifying examination, the following points may be considered:
   a. Mapping of at least the core courses and the NCrF levels of the relevant programme (completed by the student where such programme of study is offered);
   b. If the core courses are common, the student may be considered for lateral entry in another HEI without any difficulty;
   c. If the core courses are not common, but the receiving HEI still decides to let the student enter, it should have a mechanism for bridging the gap through a bridge course;
   d. Every HEI should display on its website the eligibility criteria for lateral entry and the mode of admission/ entry/ selection for the same.

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7. SOP for modalities for catering to students with the varying pace of learning and defining special assessment criteria for exceptional students

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7.I.

i. The National Education Policy 2020 emphasises upon student centricity, flexibility and choices. Accordingly, HEIs should make provision for allowing students to learn at their own pace, as far as possible.

ii. Every HEI should allow students to earn more or less credits than the prescribed for a semester to cater to fast and slow learners. The minimum and maximum credits that can be earned per semester can be specified by the HEI keeping in view the minimum credits required for academic progression to the next higher level as well as the maximum duration required for completion of a programme of study.

iii.   An HEI can also devise and follow a special assessment criterion for the students with exceptional achievements/ performance in games and sports, performing/ fine arts, social work, NCC, or another similar subjects/ category, so that they are able to pursue their talent and passion concurrently with the academic/ vocational/ technical education. The special assessment for such students should be very objective, transparent and credible which may include the mode, criteria, methodology, schedule, and other attendant matters relating to assessment and related implications.

8.   SOP for Recognition of Prior Learning (RPL) in higher education

8.I.

i.   The NEP 2020 envisions the recognition of all forms of prior learning with a focus on non-formal, informal, and experiential learning outcomes creating new routes for learners to be integrated with main-stream education, resume formal studies. The NCrF has enabled provision for Recognition of Prior Learning (RPL) thereby creditizing the existing knowledge and skills of the students, learners and the workforce acquired through various formal, non-formal or traditional or any other methods.

ii.   The process for recognizing the learning that has been developed through experiential learning including relevant experience and proficiency/ professional levels acquired and/or previous formal, non-formal, and informal learning contexts shall be subject to assessment of their existing knowledge, skills, competencies, and learning outcomes.

iii.   Evidence of possessing the necessary skills and knowledge is to be assessed against the learning outcomes of the recognized formal programmes prescribed under the NHEQF/ NSQF. Thus, RPL is based on the Learning Outcome (LO) based assessment approach recognizing learning through informal methods, and providing access and opportunity for further education and skilling.

iv.   The assessment of such learners shall have to be very objective, transparent and credible and may include the mode, criteria, methodology, schedule, and other attendance matters relating to assessment and related implications. The procedure to assign credits for relevant experience and professional/ proficiency levels acquired is given in detail in clause no. 3.3.4 of the National Credit Framework available at https://www.ugc.gov.in/Ncrf.aspx.

v.   RPL shall have reference to NHEQF/ NSQF levels and level descriptors prescribed therein. Credits earned by the student/ learner through RPL shall be multiplied by the weightage of the NCrF level for calculating the credit points earned.

vi.   The guidelines issued by the UGC and AICTE for general and engineering programes respectively with respect of Recognition of Prior Learning (RPL), programs would be followed by the HEIs in this regard.

9.   Guideline for assessment and award of Certificate/ Diploma/ Degree

9.I.   Assessment strategy:

a.   Every HEI should develop effective mechanisms for assessing learning outcomes.
b.   Assessment is mandatory for creditisation of every course and has to be done to determine whether the student/ learner has achieved the desired/ prescribed learning outcomes for that course after its completion. Therefore, the mode and system of assessments have to be guided by the learning outcomes.

c.   The NEP 2020 emphasizes upon formative and continuous assessment rather than summative assessment. The scheme of assessment may have components of various types of assessments, such as formative assessments, summative assessment, norm referenced assessments, criterion referenced assessments, industry validation assessment, AI based assessment, diagnostic assessments, peer to peer randomised assessment, ipsative or self-referenced assessments, self-assessment after self-learning etc. The HEIs may opt for appropriate assessment strategies as applicable, as per details in the NCrF.

d.   In case of exit after completion of Level 4.5 or 5, an additional minimum 4 credits skill-based course as an Exit module will be undertaken by the Student/ Learner to be offered by the HEI, to award the UG certificate or UG diploma, as the case may be. HEI may make provision to earn the credits of such Exit Module during the semester preceding their planned exit, if a student so desires. The Exit Module may be framed keeping in view the skills set required for the relevant employability options.

e.   If a student has earned credits from multiple HEIs, normally the degree would be awarded by the last HEI attended by him subject to fulfilment of other conditions required for award of degree. However, the award of degree can be mutually decided by the HEIs.

f.   In case of NSQF aligned and approved VETS courses, the prescribed assessment strategy/ methodology for vocational/ skill qualifications may be followed in consonance with the relevant guidelines.

10. Guidelines relating to teaching learning and flexibility

10.I.   **Flexibility and choices** of subjects (in disciplines/ institutions) provided to students may be with respect to the following:

a.   Choice of disciplines as major and minor

b.   Choice of multidisciplinary courses to enable a holistic and comprehensive understanding of the subjects and disciplines.

c.   Inclusion of choices of courses that will enable students to enhance their employability, life skills as well as rootedness to culture, ethics, constitutional values etc. to provide holistic education.

d.   Courses on the Indian Knowledge System

e.   Provisioning for range of skill courses that can lead to a vocation/ profession/ job employment, if the student so desires. Such skill courses must include the skills which are relevant in the local context and are desirable in line with 'vocal for local'.

f.   Embed internship, apprenticeship, work, research, projects, outreach within the degree / diploma / certificate structure.

g.   The minimum credits to be earned from each category of courses may be as prescribed under the UGC Curricular and Credit Framework/ National Higher Education Qualification Framework (NHEQF).

h.   The UGC "Curriculum and Credit Framework for Undergraduate Programmes" and "Curriculum and Credit Framework for Postgraduate Programmes" may be referred for curricular contents and credit structure for UG and PG programs.

10.II. **Detailing of courses:** It is advisable to provide with clarity the following in respect of every course (paper) so as to enable students and prospective learners of a course to make informed choices:

a. Course objectives and

b. Learning Outcomes

c. Credits and NCrF level

d. Eligibility criteria for entry

e. Prerequisites for the courses, if any

f. Credits & credit distribution in terms of Lecture, Tutorial and Practical/ practicum/ fieldwork components i.e. LTP

g. Skills/ practical component of the course

h. The occupational path it may lead to, if any

Percentage for core courses, departmental elective courses, non-departmental courses and skill based courses must be clearly spelled out to bring multidisciplinary culture and holistic education in the institutions.

10.III. Innovative Pedagogy:

a. All HEIs shall encourage development and use of standardized frameworks as appropriate for educational content, technology, and pedagogy.

b. The pedagogy(ies) that may be used while teaching and learning a course will depend upon the nature of the course and its learning outcomes, mode/ platform of teaching-learning and the diversity of students in the classroom in terms of their academic (science/ arts/ social science stream), social, geographical (urban/rural, including regional), and cultural background as well as their learning styles and capacities.

c. The UGC Guidelines on Innovative Pedagogical Approaches & Evaluation Reforms may be referred to for determining the appropriate pedagogy for the course. (refer to https://www.ugc.gov.in/pdfnews/1031121_Guidelines-Innovative-Pedagogical-Approaches-Evaluation-Reforms.pdf)

Note: -

1. These SOPs/guidelines are model guidelines subject to local refinements by the HEIs. which are recommendatory. **However, any refinements in these guidelines/ SOPs can only be made conforming to the provisions of National Education Policy 2020, National Credit Framework (NCrF) and the National Higher Education Qualification Frameworks** through a due consultative process with the stakeholders**.**

2. All autonomous institutions like **IITs, IIMs, NITs, IISERS, etc. may also devise additional guidelines/ SOPs, wherever necessary,** through a due consultative process with the stakeholders.

3. All such guidelines/ SOPs may be **transparently displayed** on their websites.

Sub-Committee for Operationalization of NCrF in Higher Education

1.	Prof. Rajive Kumar, Member Secretary, AICTE	Chairman
2.	Prof. Manish Joshi, Secretary, UGC	Co-Chairman
3.	Prof. A. K. Bhakthavatsala NIT, Trichy	Member
4.	Prof. Prathap Haridoss, Dean, IIT Madras	Member
5.	Prof. J. Prakash, Dean, MIT, Anna University	Member
6.	Prof. K. Sankaran, Registrar, Amrita Vishwa Vidyapeeth	Member
7.	Prof. K. Ratnabali, Dean, University of Delhi	Member
8.	Prof. Jyotirmay Mathur, Dean, MNIT, Jaipur	Member
9.	Prof. Divesh Bhatia, IIT Delhi	Member
10.	Prof. Sudhir Singh Bhadauria, Rajiv Gandhi Proudyogiki Vishwavidyalaya, Bhopal	Member
11.	Mrs. Deepti Swarup, Deputy Secretary, NCTE	Member
12.	Col. Gunjan Chowdhury, Director, NCVET	Member
13.	Dr. N. Gopukumar, JS, UGC	Coordinator

Provisions and Parameters Applicable to Skill Universities and General Universities

The Government of India, vide its order no. MSDE (DGT)(19/09) 2022CD dated 10th April 2023, constituted a committee to examine various issues related to skill universities (SU) including the flexibility and norms for skill universities viz-a-viz the general universities.

Accordingly, a meeting was held on 2nd August 2023, wherein Chairperson UGC, Chairperson AICTE, Chairperson NCVET, Chairman, NETF & NAAC, and Senior Economic Advisor, MSDE were present. The following were discussed and agreed upon on various provisions and parameters applicable to skill universities and general universities:

S. No	Parameters	General Universities	Skill Universities
1.	Overall Regulation	By UGC under the UGC Act and Regulations	By UGC under the UGC Act and Regulations
2.	Types of programs	Multi-disciplinary	Primarily VETS
3.	% of Skill Based Program	As per UGC norms	Minimum 50% of program to be skill based
4.	% Skill based courses in a program	• As per UGC norms • Upto 25% inter-disciplinary subject • Upto 50% of skilling component in a program	Upto 70% of skilling component in a program
5.	Minimum Admission criteria	Minimum 10+2 / (12th Grade pass) or Equivalent	For Diploma - 10 Grade Pass or completed 2 year ITI after 8th
6	ME-ME Options and Entry Qualifications - Models	• ME-ME Options • 1st year UG- certificate • 2nd year UG- Diploma • 3rd year UG- Degree • 4th year UG- Degree with Honours and Honours with Research	In addition to ME-ME, can follow Integrated Model: • 10+2 years = ITI Certificate + 12 Grade • ITI certificate + 2 years= Diploma / UG Diploma • Diploma +1 year= BS degree • Diploma + 2 year= BS Degree with Hons
7.	NCrF Levels applicable	Level 4.5 and onwards	Level 3.5 and Onwards (as entry is allowed after 10th Grade)
8.	Level of Skill Courses/ Qualification/ Job Roles being offered	Level 4.5 and above • NHEQF courses - Level 4.5 & above (as per UGC guidelines) • NSQF Qualifications - Level 4.5 & above (As per NCVET guidelines)	• NHEQF courses - Level 4.5 & above (as per UGC guidelines) • AICTE Diploma Courses- Level 3.5, 4.0 and 4.5 (As per AICTE guidelines) • NSQF Qualifications- Level 3.5 & above (As per NCVET guidelines)
9.	Norms/Provision: Staffing and Infrastructure Norms	• NHEQF- UGC regulations • NSQF- NCVET Guidelines/ Norms, NSQC approved qualifications	• NHEQF- UGC regulations • NSQF- NCVET Guidelines/ Norms, NSQC approved qualifications
10.	Recognition of Prior Learning (RPL) Norms	• NHEQF- UGC regulations • NSQF- NCVET Guidelines/ Norms	• NHEQF- UGC regulations • NSQF- NCVET Guidelines/ Norms
11.	Internships and on the job training (OJT) Norms	• NHEQF- UGC regulations • NSQF- NCVET Guidelines/ Norms	• NHEQF- UGC regulations • NSQF- NCVET Guidelines/ Norms

12	Apprenticeship And Work/ Apprenticeship Embedded program	• Degree (Level 4.5-8)- UGC to decide, Regulations by UGC • Diploma (Level 4.5) - Regulations by AICTE • Diploma (VETS) (Level 4.5 - 5)- Guidelines by NCVET	• Degree (Level 4.5-8)- Regulation by UGC • Diploma (Level 4.5)- Regulation by AICTE • Diploma (VETS) (Level 4.5 - 5)- Guidelines by NCVET
13.	Standards, Norms and Parameters for the NIRF/ NAAC ranking	• As per Standards, Norms and Parameters by UGC and Chairman NAAC	• Standards, Norms and Parameters to be suitably modified in consultation with the stakeholder
14.	Provision for aspirational nomenclature	• General Degree, Diploma by UGC and • Diploma (VETS) By NCVET	• Degree, Diploma by UGC and • Diploma (VETS) By NCVET
15.	Embedding of VET/S in HE	• Multi-disciplinary courses/Employability Skills qualifications from NHEQF & NSQF	• Research and Development of higher order skills-based qualifications

Note: AICTE is regulating 3 years Diploma or one tear advance diploma programs where entry level is 3 and 6 respectively. All diploma or advance diploma programs may run either AICTE/ State Technical Education Boards approved or NSQF aligned and approved courses/ Qualifications of appropriate levels.

Skill Component in the Curricular Design for Four Year Undergraduate Program (FYUGP)

21

S. No	Broad category of Course	Minimum Credit Requirement	Minimum Credit Requirement	
		3-year UG	**4-year UG**	
1	Major (Core)	60	80	Upto 50% of these could be from Skill based Courses
2	Minor Stream can be 2	12+12	16+16	These may also be skill based courses
3	Multi-disciplinary	9	9	
4	Ability Enhancement course	8	8	
5	Skill Enhancement Course	9	9	These are Employability Skills/ Soft Skills, Life Skills
6	Value added course common for all UG	6-8	6-8	
7	Summer internship	2-4	2-4	
8	Research Project/ Dissertation	-	12	
	TOTAL	**120**	**160**	

SOP FOR OPERATIONALIZATION OF NATIONAL CREDIT FRAMEWORK (NCrF) in VOCATIONAL EDUCATION, TRAINING and SKILLING (VETS)

1. High Level Committee for Operationalization of NCrF

1.1. The National Credit Framework, duly approved by the government has been notified by UGC on 10th April 2023 (https://www.ugc.gov.in/Ncrf.aspx.). The NCrF has been adopted by NCVET on 12th May 2023. Subsequently, the Dept. of Higher Education vide its order dated 10th May 2023 constituted a High-level Committee (HLC) to oversee the operationalization and implementation of NCrF. The NCrF provides for creditization of all learning including academic, vocational/ skills & experiential learning, and assignment, accumulation, storage, transfer & redemption of credits, subject to assessment; removes distinction between subjects and establishes academic equivalence between vocational & general education while enabling mobility within & between them, and its operationalization through the Academic Bank of Credits (ABC).

1.2. The first meeting of the committee was held on 8th June 2023 wherein, three different sub-committees each catering to requirements of School Education, Higher Education and Vocational Education were constituted.

2. Formulation of Sub-Committee for Operationalization of NCrF in VETS-

2.1. The Sub-Committee constituted to operationalize NCrF in Vocational Education and Training/Skilling **(composition at Annexure I**) with the following ToR:

a) The sub-committee will function under the overall ambit of National Credit Framework (NCrF) and National Skills Qualification Framework (NSQF) from level 1 to 8;

b) Creating a SOP for integrating Vocational Education, Training & Skilling in school, higher and technical education,

c) Detailing the process for developing flexible curricular structures, multi-disciplinary credits vs. academic/ other credits to be earned under a program,

d) Prescribe learning outcomes for various academic/ vocational program corresponding to appropriate NCrF credit Levels and Level Descriptors,

e) Detailing the Multiple Entry-Multiple Exit (ME-ME) options including the requirement of any additional entry or exit modules.

f) Creating a SOP on establishing equivalence/ academic equivalence in vocational education and training/ skilling, including the requirement of additional learning.

g) Suggest a process methodology for assignment of credits for individual Qualifications, programs, National Occupation Standards (NOSs) and Micro-Credentials (MCs) in terms of learning hours for theory, practical and Experiential learning including relevant experience and proficiency/ professional levels acquired for calculation of credits earned.

h) Creating SOP for integration of components for employability skills, soft skills and life skills modules, NOSs and MCs etc in Vocational Education, Training & Skilling ecosystem.

i) Creating SOPs for credit assignment, credit transfer and redemption, credit validation and expiry, creditisation of digital/ online learning in Vocational Education, Training & Skilling.

j) Creating 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.

k) Suggest a detail transfer mechanism for establishing the entry eligibility in academics at different levels for various streams in consultation with other regulators, subject to fulfilment of their defined conditions.

l) Define the specific modalities for catering to students with varying pace of learning and defining special assessment criteria including 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.

m) SOP for Recognition of Prior Learning (RPL) in VETS. Also, further detail out the assessment process to handhold the Assessment ecosystem, to include a process which is non-invasive and free from language and culture bias, explore introduction of Competency Cards, etc.

n) SOPs for considering relevant experiential learning and attaining higher proficiency/ professional levels for assignment of additional credit points subject to assessments in the Vocational Education, Training & Skilling ecosystem.

o) SOPs for verification and mechanism for redemption of credits accumulated and stored in ABC. Prescribing the validity of credits earned for a VE program.

p) Recommendations for Operationalisation of ABC in Vocational Education, Training & Skilling.

3.   Major provisions of the NEP and NCrF with special reference to integration of VETS into education and higher education

3.1. The **National Education Policy 2020 (NEP 2020)** envisions making education more holistic and effective by inculcating more "*experiential, holistic, integrated, inquiry-driven, discovery-oriented, learner-centred, discussion-based, and flexible*" learning and by removing hard separation between the various disciplines like Arts, Science & Commerce and also between curricular, co-curricular and extra-curricular activities. NEP 2020 with its motto of "equitable and inclusive education" lays emphasis on the integration of general (academic) education, and vocational education ecosystem with a view to reform mainstream academic as well as technical and vocational education and training (TVET) provision in India and provides avenues for life-long learning through enhanced opportunities. This also is in-line to fulfil the objectives of sustainable development goals (SDGs) both directly and indirectly.

3.2. To realize the intent of NEP 2020, the **National Credit Framework (NCrF)** is formulated by the Government of India and notified by UGC on 10th April 2023 and the same was further adopted by NCVET on 12th May 2023 to cater to the needs of all stakeholders including students, institutions and industries with an aim of creditization of learning from various dimensions i.e. academic, vocational skills, experiential learning including relevant experience and proficiency/ professional level.
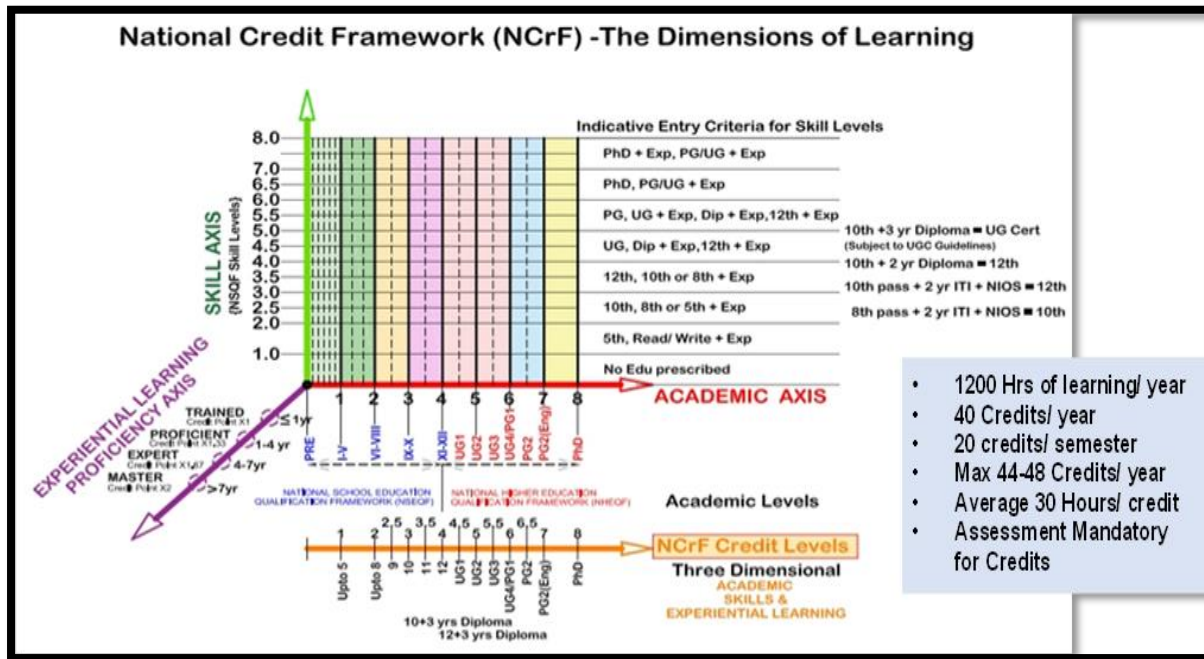
3.3. The **National Credit Framework (NCrF)** is an enabling framework and aims to integrate and creditize all kinds of learning acquired through different modes like **offline, online and blended** by removing any kind of distinction **between disciplines, subjects and curricular, extra-curricular and co-curricular activities** and encompasses **school education, higher education and vocational education and training /skilling** to ensure **flexibility, inclusivity, and mobility**.

3.4. NCrF enables the assignment, accumulation, storage, transfer and redemption of credit with multiple entry and multiple exit (ME-ME) options to facilitate academic equivalence and lifelong learning. NCrF supports the provisioning of on-demand learning, on-demand assessments and Recognition of Prior Learning (RPL) for learners, coming from non-formal/ informal ecosystems, or out of school students thereby allowing for Lifelong learning and mobility of learner both nationally and internationally.

3.5. As mentioned in the NCrF, predefined learning outcomes and assessment is the basis of creditization. The credit assignment is subject to achieving the prescribed learning outcomes determined by successful assessment. The assessment bands therefore hold crucial relevance in determining the accumulation and further transfer of credits. The NCrF is a meta framework that encompasses and integrates learning based on the different qualification frameworks

namely NHEQF, NSQF and NCF as highlighted in the following table alongwith various assessment bands:

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

Where NTC: National Trade Certificate, NAC: National Apprentice Certificate, CITS: Crafts Instructor Training Scheme, NIOS: National Institute of Open Schooling

4. References in the SOP drawn from the existing frameworks, guidelines, and documents:

4.1. The National Credit Framework (NCrF) notified by UGC shall act as the broad enabling and guiding frameworks which shall be supplemented by these SOPs and guidelines for all organizations and institutions. The NCrF is available at https://www.ugc.gov.in/Ncrf.aspx. The following references in the NCrF may be referred to and read with this document for detailed understanding of this SOPs/Guidelines:

    i. Section 3.2.5- learning hours- components of learning- detailing components that need to be considered as part of the notional learning hours for counting credits.

    ii. Section 3.2.5, Table 2- elaborates the learning hours per year across the various academic grades in Higher Education, School and Vocational Education, Training and Skilling.

    iii. Section 3.2.9, Table 3-details out the NCrF levels for different academic Grade/Vocational Education, Training and Skilling and the Assessment Bands and equivalence.

    iv. Section 3.2.10, Figure I- the NCrF caters to creditization of three dimensions of learnings i.e Academic Education (School and Higher), Vocational education, Training and Skilling and relevant experiential learning & proficiency/professional levels achieved.

    v. Section 3.3.2, para I-Table 4; Para – II, Table 5; Section 3.3.3 -Table 6: Detail the NCrF levels and credit assignment in School education, Higher education and Vocational Education, Training and Skilling respectively.

    vi. Section 3.3.4, Table 7- Credit Assignment for Relevant Experience and Professional/ Proficiency Level Acquired including the calculation of overall credit earned.

    vii. Section 3.4.1, Table 8- refers to National Credit Framework Levels (NCrF) and corresponding Academic Levels (National School Education, National Higher Education Qualifications Framework), and Vocational Education and Skills Levels (National Skill Qualifications Framework) and conditions for academic equivalence.

4.2. Apart from the provisions of NCrF, the following provisions of various other Guidelines may also be referred to:

4.2.1. Relevant Guidelines notified by NCVET:

    i. National Skill Qualification Framework (NSQF) Notification (https://ncvet.gov.in/wp-content/uploads/2023/07/National-Skills-Qualification-Framework-notification-June-2023.pdf)

        a. Section 5.1 and Annexure I: to understand Level Descriptors to determine the Learning outcomes of at particular NSQF level.

        b. Section 5.2 and 5.3: refer to defining National Occupation Standards (NOS) and Micro-credentials (MC)

        c. Section 5.4 and Annexure II: explains the minimum entry criteria and minimum

range of notional hours for both short-term and Long-term training required to achieve the learning outcomes prescribed for a particular NSQF level.

ii. Guidelines for Recognition and regulation of Awarding Bodies (AB): https://ncvet.gov.in/wp-content/uploads/2023/01/Guidelines-for-Awarding-Bodies.pdf

iii. Guidelines for Recognition and Regulation of Assessment Agencies' (refer https://ncvet.gov.in/wp-content/uploads/2023/01/Guidelines-for-Assessment-agencies.pdf)

iv. Guidelines for Blended Learning for Vocational Education, Training & Skilling by NCVET: https://ncvet.gov.in/wp-content/uploads/2023/01/Guidelines-for-Blended-Learning-for-Vocational-Education-Training-Skilling.pdf

v. Guidelines for Development, Approval & Usage of National Occupational Standards (NOS) & Micro Credentials (MC) by NCVET: https://ncvet.gov.in/wp-content/uploads/2023/07/Guidelines-for-Development-Approval-Usage-of-National-Occupational-Standards-NOS-Micro-Credentials-MC.pdf

vi. Guidelines for Creditisation of Skilling & Training Courses & Qualifications of Multinational Companies (MNCs) and Leading Indian Enterprises by NCVET.

vii. Guidelines for Recognition of Prior Learning (RPL) by NCVET- https://ncvet.gov.in/wp-content/uploads/2023/08/Final-RPL-guidelines.pdf

viii. Guidelines on Multiskilling and Cross-Sectoral Skilling by NCVET- https://ncvet.gov.in/wp-content/uploads/2023/01/Multiskilling-and-Cross-Sectoral-Skilling.pdf

ix. 20. Guidelines for Diploma Qualifications in Vocational Education, Training & Skilling: https://ncvet.gov.in/wp-content/uploads/2023/05/DiplomaGuidelines_20230515.pdf

4.2.2. Major Relevant Guidelines notified by UGC/Higher Education

i. Table 2 (Minimum credit requirement to award degree under each category) of document Curriculum and Credit Framework for Undergraduate Programmes: https://www.ugc.gov.in/pdfnews/7193743_FYUGP.pdf to understand the structure of the Undergraduate Program in the.

ii. National Higher Education Qualifications Framework (NHEQF): https://www.ugc.gov.in/NHEQF.aspx

iii. UGC (Establishment and Operationalization of Academic Bank of Credits (ABC) Scheme in Higher Education) Regulations, 2021: https://www.ugc.gov.in/academic_bank_of_credits.aspx

iv. Curriculum and Credit Framework for Postgraduate Programmes https://www.ugc.gov.in/pdfnews/4682468_Curriculum-and-Credit-Framework-for-Postgraduate-Programmes.pdf

v. Guidelines for Multiple Entry and Exit in Academic Programmes offered in Higher Education Institutions: https://www.education.gov.in/sites/upload_files/mhrd/files/upload_document/abc_doc.pdf

UGC Guidelines for Higher Education institutions to offer Apprenticeship/ lnternship embedded Degree programmes: https://www.ugc.gov.in/pdfnews/9105852_ugc-guidelines_ApprenticeshipInternship.pdf

vii. Guidelines for providing Skill Based Education under National Skills Qualifications Framework: https://www.ugc.gov.in/pdfnews/6556003_Guidelines-for-providing-Skill-Based-Education-under-NSQF.pdf

4.2.3. Major Relevant Guidelines notified by School Education/NCERT

i. National Curriculum Framework for school education https://ncert.nic.in/pdf/NCFSE-2023-August_2023.pdf)

    a. Section 1.4 on stage design refer to how the school curriculum in divided into 4 stages including curricular areas.

    b. Chapter 9 refer vocational education and integration

ii. Guideline issued for 10 bagless days by PSSCIVE for class 6th to 8th for school education (psscive.ac.in/storage/uploads/others/Guideline/pdf/english/guideline-for10Baglessdays-in-School in English.pdf)

The Sub-Committee constituted to operationalize NCrF in Vocational Education, Training and Skilling has been functioning under the overall ambit of NCrF and NSQF. This SOP details out the various aspects like development of qualifications/ courses/ vocational programs, NSQF alignment and approval of such qualifications/ courses/ vocational programs, assignment of credits to skill-based course/ qualifications, defining learning outcome and minimum entry criteria of a skill-based course/ qualifications, integration of skill-based course/ qualifications with general education amongst other.

This SOP will enable implementation of provisions of NEP and NCrF across Vocational Education, Training & Skilling ecosystem (VETS) including school education, higher and technical education.

5. Overview of VETS Ecosystem

5.1. Types of Skilling

Skill Development is defined as any domain specific demand led skill training activity leading to employment or improving employability, or any outcome-oriented activity that enables a participant to acquire a Skill, duly assessed and certified.

The Skill development also enables learner to get wage/self-employment leading to increased earnings, and/or improved working conditions, such as getting formal certification for hitherto informal skills, and/or moving from informal to formal sector jobs or pursue higher education/training and shall fall in the categories as per below.

5.1.1. Fresh Skilling/ Ab-initio Skilling

i. Short Term Training (STT)- The short-term trainings are trainings with a duration of less than one year or 1200 notional learning hours.

ii. Long Term Training (LTT)- the Long-Term trainings are those trainings with duration of equal to or more than one year or 1200 notional learning hours.

5.1.2. **Up-Skilling** is a type of skilling which enables ongoing expansion of knowledge and skill sets. These additional knowledge and skills improve the learner's current role, performance and can potentially advance them in their career path.

5.1.3. **Re-skilling** is a type of skilling to adapt to the new requirements of skills and knowledge to possibly expand the role of a learner in their workplace.

5.2. Types of Skill Based Course/ Qualifications

5.2.1. **Qualifications**- A Qualification comprises of a number of smaller units of learning with independent learning outcomes called National Occupational Standards (NOS). Just as each job role may require the performance of a number of tasks, the combination of all the NOSs corresponding to these tasks would form the Qualification for that job role.

5.2.2. **National Occupation Standards (NOSs)-** A NOS defines the measurable performance outcomes required from an individual engaged in a particular task and lists down what an individual performing that task should know and also do. These standards can form the benchmarks for various education and training programs. Each NOS defines one key function collating the related performance criteria in relation to the specific function in the job role concerned.

5.2.3. **Micro-credentials (MCs)-** The smaller units, namely Micro-Credentials may be developed within a sector or across sectors primarily focusing on upskilling. Micro-credential aims to certify achievement of coherent sets of skills and knowledge, specified by a statement of purpose, learning outcomes and strong evidence of need by industry, employers, or the Government.

5.2.4. **Nano-Credentials (NC):** are the smallest unit, developed to address highly specific and customized requirements of training, to either supplement the existing knowledge or bridge minor gaps of learning. NC will primary be used for up-skilling of learner. The duration of Nano-Credential could be upto 5 hours of learning including formative/ summative assessment. The NC are stackable to form a MC. Guidelines on these are presently under development.

5.2.5. **Apprenticeship embedded Training Program like NAPS**- NSQF aligned and approved courses wherein learners are engaged in both theory and industry-based learning, under the provisions of Apprenticeship Act.

5.2.6. **Flexi-Module Skill based courses** to cater to needs of both industry as well as trainees. Such courses allow industries to train candidates as per their skill set requirements and provides trainees with an industry environment aligned with the market demand and latest technology to undergo training. Such courses are tailor made customized courses, having market relevant content that meets the industry & local requirements.

5.2.7. Diploma Qualifications in VETS: The NSQF alignment & approval of Diploma & Diploma (Advanced) Qualifications pertaining to the Vocational Education & Skills sphere is being done to formalise higher-order qualifications, which will be an important step in enhancing aspirational value of vocational & general education.

5.2.8. Module on Employability Skills, Soft Skills and Life Skills - Specific modules like employability skills are integrated in the skill-based course to enhance the overall employability of the learner undertaking the skill training. At present, 4 types of modules of employability Skills, which have been NSQF aligned and approved, are available i.e 30 hours, 60 hours, 90 hours and 120 hours.

5.2.9. Long Term Qualifications being implemented by Directorate General of Training (DGT): Traditionally, the long-term skilling ecosystem is implemented by Directorate General of Training (DGT). Although, presently many other ABs have come up with their long-term programs as well. The DGT implements various programs/schemes like NTC (CTS), NAC and CITS through Government and Private Industrial training Institutes (ITIs).

  i. **The National Trade Certificate (NTC)** is a one or two-year duration long term skill certificate program. This certificate program is offered by Directorate General of Training (DGT) as on NCVET recognised Awarding body (AB). NTC is offered after Grade 8th (limited trades), Grade 10th (most trades) and after Grade 12th (future/ advance trades). NTC is offered to students who pass the All-India Trade Test (AITT) for Crafts Training Scheme (CTS).

  ii. **National Apprenticeship Certificate (NAC)**: For the National Apprenticeship Certificate (NAC) 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 ITI must be CITS certified. The duration of CITS program is 1 year and the eligibility for CITS is clearing NTC/ NAC/Diploma/Degree qualifications.

Specific templates for all these types of courses/learning module are available on www.ncvet.gov.in. These templates ensure a performance-based outcome-based modules to be defined for various parts of the learning together with their assessment methodologies.

5.3. Categories of Skill Qualification/ Courses
The skill-based qualifications/courses (as listed in section 5.2.) cater to different types of requirements detailed below:

5.3.1. Multi-skill Qualifications/Courses: Multi-Skilling promotes a wide range of competencies and knowledge in the workforce to build capacities for performing multiple independent tasks, which may even fall outside the domain of a particular sector or outside respective sub-sectors or defined job roles in a given sector.

5.3.2. Cross Sectoral Skill Qualifications/Courses: Cross-sectoral skilling enables the learner to apply a skill across diverse/ related sectors thereby enhancing his creativity, innovation, value, credibility and output.

5.3.3. Traditional/ Heritage Skill Qualifications/Courses: Courses meant to protect, conserve, enhance, create awareness and/or promote an existing heritage or traditional skill for passing it on from generations to generation to enable their continued existence as well as enhanced earning opportunities to those involved.

5.3.4. Future Skills Qualifications/Courses: Skills that are required to prepare future ready workforce for the Industries/OEMs with global presence in services or manufacturing economies of the world, in the upcoming areas such as EV manufacturing, AI/ML technicians, Drone technology production and service, industry4.0/5.0 health-tech etc.

5.3.5. MNC/OEM/Industry based Skill Qualifications/Courses: These are qualifications developed to encourage the MNCs participation including Original Equipment Manufacturers (OEMs), Original Design Manufacturers (ODMs), Value Added Resellers (VARs), and other industry bodies in filling the demand supply gap.

5.3.6. Work embedded Skill qualifications/Courses: These are the skill programs with a higher component of hands on, industry-based learning to make students industry-ready, while combining learning and on-the-job training, with the potential to earn while they learn.

5.3.7. They address **specific and customised requirements** of Schemes/Programs as well as for Persons with Disability (PwD).

5.4. Components of Skill based Qualifications/Courses

A skill-based course/ qualification may have the following components of learning:

i.   Lecture/ Theory/ Assignment
ii.   Practical/ Hands-on Skill Training
iii.   Internship/ Project work
iv.   Apprenticeship
v.   On the Job Training (OJT)
vi.   Assessment

5.5. Key Stakeholders in the VETS Ecosystem

5.5.1. Awarding Bodies (AB):

The key players in the skilling ecosystem in India are the Awarding Bodies, Assessment Agencies and Training Providers. An NCVET recognized Awarding Body is entitled to award NCVET certificate to trainees/ learners after successful completion of training and assessment of NSQF aligned and approved qualifications which are either developed or adopted by the Awarding Body.

DGT, which is also the first entity to be recognized as an AB and governed by the prescribed norms for an AB by NCVET, has been the oldest organization involved in implementing long term training through ITIs within the VETS space. The DGT has also been recognised as an Awarding Body by NCVET for implementing both short term and long-term skill courses. There are currently around 84 ABs approved by NCVET including DGT. The list of the all the NCVET recognised Awarding Bodies can be accessed https://ncvet.gov.in/awarding-bodies-3/

The Sector Skill Councils, Defence Training Bodies, and some of the Central and State Government bodies, including Higher Education Institutes (HEIs)/ Skill Universities/ Technical Universities/ State Skill Missions etc are already the recognised Awarding Bodies of NCVET. Indian National Institute (INI), Central Universities and selected Deemed Universities have been given the status of deemed Awarding Bodies. The ABs may including Universities, State School Board/ Technical Education Boards/ Vocational Education Boards, MNCs, Indian Industry Enterprise etc subject to fulfilment of the eligibility for the AB.

5.5.2. Assessment Agencies (AA):

An NCVET recognized Assessment Agency is authorized to assess trainees after completion of the trainees' training under an NSQC aligned and approved qualification. The recognized Assessment Agency is eligible to carry out assessments for NSQF aligned and approved qualifications in the sector allocated to the AA for which adequate capacity (Question Banks, SMEs, Industry connects, Governance processes etc.) has been demonstrated by the AA and such qualifications are being run under any schemes/ programmes funded by the Government of India as well as any fee-based programmes. Current there are around 56 approved AAs by NCVET. The list of the all the NCVET recognised Assessment Agencies can be accessed https://ncvet.gov.in/assessment-agencies/

5.5.3. Training Provider (TP)/ Training Centre (TC):

A TP/TC means a person or an organisation, which is affiliated by an awarding body recognized by the Council for providing Vocational Education, Training & Skilling and related activities with respect to a qualification/ course.

5.5.4. University Grant Commission (UGC)

UGC was established by an Act of Parliament in 1956 to coordinate, determine, and maintain standards of teaching, examination, and research in university education.

5.5.5. Higher Education Institutes (HEI)

HEIs are the educational institutes responsible for providing education beyond school level including Bachelors, Masters, Doctorate etc.

i. **University:** an institution that provides the highest level of education, in which students study for degrees and in which academic research is done
ii. **College Affiliated to a University:** an institution of higher education; part of a university.
iii. **Indian National Institute (INI):** an institute that "serves as a pivotal player in developing highly skilled personnel within the specified region of the country/state".
iv. **Deemed University:** Deemed University is an accreditation granted to higher academic institutions by Department of Higher Education, Ministry of Education, Government of India on the recommendations of UGC to provide them with the status of a university. They enjoy the academic status, privileges, and autonomy in terms of deciding their courses, fees, admission, etc., similar to any university in the country.

5.5.6. All India Council for Technical Education (AICTE)

AICTE was set up in November 1945 as a national-level Apex Advisory Body to conduct a survey on the facilities available for technical education and to promote development in the country in a coordinated and integrated manner.

The AICTE Act (1987) was constituted to provide for the establishment of an All India Council for Technical Education with a view to proper planning and co-ordinated development of a technical education system throughout the country, the promotion of qualitative improvements of such education in relation to planned quantitative growth, and regulation & proper maintenance of norms and standards in the technical education system and for the matters connected therewith.

5.5.7. The National Council of Educational Research and Training (NCERT):

The National Council of Educational Research and Training (NCERT) is an autonomous organisation set up in 1961 by the Government of India to assist and advise the Central and State Governments on policies and programmes for qualitative improvement in school education. The UGC has recently awarded the status of a 'Deemed University' to NCERT.

5.5.8. Central School Boards Like CBSE:

Entities responsible for public and private schools, controlled and managed by the Government. There are mainly three national boards in India- the Central Board of Secondary Education (CBSE), the Council for the Indian School Certificate Examinations (CISCE), and the National Institute of Open Schooling (NIOS). Apart from these, India also has several state and other/ private education boards like Indian Certificate of Secondary Education (ICSE), International Baccalaureate (IB), Cambridge International Examinations (CIE) etc.

5.5.9. State School Board/ Technical Education Boards/ Vocational Education Boards:

Each State has its own School Board/ Technical Education Boards/ Vocational Education Boards for determining the standard of education & Vocational Education, Training & Skilling and examinations/ assessments for the respective institutions in that state. Education boards play the role of a governing body for schools. Apart from fixing the curriculum and syllabus for the school in the subjects like math, science, language arts, social studies and skills, the boards are also responsible for decision-making at a macro level including monitor progress through conduct of assessments, examinations and declaring results.

5.5.10. Multinational Companies (MNCs), including, Original Equipment Manufacturer (OEM), Original Design Manufacturer (ODM), and Value-Added Reseller (VAR) and reputed Indian Industry Enterprise

The skill training being carried out by the globally reputed Multinational Companies (MNCs) and Leading Industry, including, Original Equipment Manufacturer (OEM), Original Design Manufacturer (ODM), and Value-Added Reseller (VAR) can also be the stakeholders to recognise, formalize and creditise their skill trainings/courses and training.

5.6. Process of enabling learning in VETS

5.6.1. Process of National Skills Qualification Framework (NSQF) Alignment and approval of skill-based qualifications/ courses.

    i.   The National Skill Qualifications Framework (NSQF) is an outcome based, competency and quality assurance framework which organizes skill-based qualifications/ courses in 8

levels based in the increasing order of skill /job role competencies and complexity. [Please refer to National Skill Qualification Framework Notification (https://ncvet.gov.in/wp-content/uploads/2023/07/National-Skills-Qualification-Framework-notification-June-2023.pdf)]

ii.   The NSQF has been notified on 6th of June 2023 in supersession of the earlier notification dated 27th December 2013 by the Ministry of Finance, Government of India as per the mandate under provisions para 16(f) of the notification No. SD-17/113/2017-E&PW dated 5th December 2018, notifying and constituting National Council for Vocational Education and Training (NCVET) and subsequent approval of National Credit Framework by the Government and notification of the same by University Grants Commission (UGC) dated 10th April 2023 and adopted by NCVET vide notification dated 12th May, 2023.

iii.   The NSQF is implemented through National Skill Qualification Committee (NSQC), which is the apex Committee responsible for approval of NSQF aligned VETS qualifications. The NSQC, constituted by the NCVET Council, comprises of the representatives from the select Central Ministries, University Grants Commission (UGC) and All India Council for Technical Education (AICTE), Director General Training (DGT), Central Board of School Education (CBSE), select State Skill Development Missions (SSDMs) (by rotation), select Industry Associations, the Awarding Bodies, and sectoral representatives'.

iv.   The National Skills Qualification Framework (NSQF) has the following provisions:

a.   **NSQF Level Descriptors**: The National Skill Qualification Framework (NSQF) is composed of levels 1 (one) to eight (8), where level one represents the lowest complexity while highest level i.e. level eight represents the highest complexity. Each NSQF level is defined and described by a set of level descriptors expressed in terms of learning outcomes in five domains, which describe in general terms, the minimum knowledge, skills, and attributes that a learner needs to acquire in order to be certified for that level.

The five dimensions include (1) Theoretical Knowledge and understanding; (2) Professional and Technical Expertise, Handson/ Practical Skills and their application; (3) Employability skills, aptitude/ mind-set, soft skills, digital/ financial/ legal literacy, entrepreneurship skills; (4) Broad learning outcomes (Performance Criteria and Process Orientation/ Required) (5) Responsibility level of the job. Refer section 4.2.1 (i) (a).

b.   **Standardization of Norms for Minimum Entry Criteria & Notional Hours of Learning/ Skilling:** Since every level of qualification/ job role is expected to lead to a defined level of skill competency, minimum entry requirements for undertaking training in a qualification of a particular NCrF level, including the academic credentials and/or previous Vocational Education, Training and Skilling undertaken, and the existing relevant work experience of the prospective student/ learner has been defined.

Additionally, minimum duration of the VETS training required for a particular level of skill competency has also been prescribed. The notional learning/ skilling hours may include theory, practical/ hands-on skill training, internship, apprenticeship, On the Job Training (OJT), employability skills, etc. To the extent possible these notional hours should be in multiple of 30/ 15 Hours depending on the type of skill-based qualifications/ courses. The table is at **Annexure II.** (refer section 4.2.1 (i) (b)).

c. **Each NSQF aligned and approved course should also be expressed in terms of the credits to be earned subject to successful assessment.** "Credit" is recognition that a student/learner has successfully completed a prior course of learning, corresponding to a qualification/ course at a given NCrF level. As defined in the NCrF, 1200 Hrs per year of learning in VETS shall be awarded 40 Credits subject to assessment, or 30 hours of learning is awarded 1 credit. However, for internship and apprenticeship (including designated and optional trades and apprenticeship schemes of the Government) the duration will be specified in months and for every month of learning 40/12 = 3.33 credits will be assigned.

d. NSQF enables every skill-based qualification/ course to **define and provide for the Occupational Maps and Progression Pathways** to enable both horizontal and vertical mobility of students/ learners. This also enables in defining the ME-ME pathways within VETS for a learner.

The NSQF enables **International Comparability and Mobility** by providing for a way of structuring qualifications defined by not only the course/ qualification curriculum, but the learning outcomes, and therefore becomes a reliable/ credible method to measure the outcome of learning and for comparing courses/qualifications to establish international equivalence. NSQF enables wider recognition and acceptance of Indian education and skilling by other countries and vice-versa through international equivalence, promoting exchange with foreign skilling bodies and institutions. The NSQF alignment and approval process takes into consideration the National Classification of Occupation (NCO) code which is also mapped with International Standards for Classification of Occupation (ISCO) codes to enable international mobility. To facilitate international mobility the NSQF clearly spells out the standardized criteria for minimum entry requirements including the relevant experience, the minimum notional hours required for training in a Skill qualification as well as detailed level descriptors which are a tool to define learning outcomes for a qualification pegged at a particular NSQF level. For newer Qualifications for which the there is no NCO/ISCO codes, which are normally categorised as 'Others', the skill taxonomy shall facilitate the mobility.

e. **Assessment of all NSQF aligned and approved qualification** shall be done by the NCVET recognized Assessment Agencies or the Dual Awarding Bodies recognised by NCVET for Awarding and Assessment functions. In case the assessment has not been conducted by a NCVET recognized Assessment Agency, no NCVET certification shall be permissible and shall not be issued by the

awarding body or any other agency. No credits shall be permissible for such standalone skill based NSQF aligned and approved qualifications/ courses.

f. **Certification for skill based qualifications/ courses will be done by the NCVET recognized Awarding Bodies** after successful assessment of the student/ learner in the NSQF aligned and approved qualifications/ courses, in the standard approved formats issued by NCVET from time to time.

g. The NSQF alignment and approval of skill-based qualifications/ courses is subject to submission in an appropriate pre-defined standard qualifications/ courses templates approved by NSQC & NCVET called as **qualification files** which are also available on www.ncvet.gov.in.

h. The NSQF aligned and approved skill based qualifications/ courses can be implemented **in offline, online or blended mode subject to the Guidelines issued by NCVET available at** https://ncvet.gov.in/wp-content/uploads/2023/01/Guidelines-for-Blended-Learning-for-Vocational-Education-Training-Skilling.pdf

i. The **Validity of a NSQF aligned and approved qualification/ course** to be offered to the students/ learners is generally three years, unless otherwise specified, with a provision of extension subject to appropriate justification. Any skill-based qualifications/ courses whose implemented has been initiated by the institutions after the expiry of its validity is not permissible.

v. To enable the integration of existing NSQF aligned and approved Long Term Qualifications (LTT), DGT qualifications/ courses being implemented under Craftsman Training Scheme (CTS) and Craft Instructor Trainor Scheme (CITS) have been restructured to align also with the National Occupation Standards (NOS) and rationalized to 1200 learning hours, with 150 Hours of on-the-job training/ project work and 240 hours of a language course (for academic equivalence of grade 10th or 12th) or a short-term training to bring these skill based qualifications/ courses in line with the proposed National Credit Framework.

vi. The NSQF aligned and approved qualifications are implemented by the Awarding Bodies and the Vocational Education, Training & Skilling conducted either through their own Training Centers (TCs) or through their affiliated Training Providers (TPs). The outcomes of such Vocational Education, Training & Skilling are assessed either by the NCVET recognised Assessment Agencies (AA), duly onboarded by the AB concerned or by the Awarding Bodies themselves, in case the ABs concerned have been recognised as dual category Awarding Bodies. The learners/students are awarded the NCVET skill certificates and assigned credits for the course/ qualification for which the Vocational Education, Training & Skilling has been conducted.

5.7. Assessment of NSQF aligned and approved skill-based qualifications/ courses

i.   **Assessment** is an umbrella term that incorporates standardized tests and many other forms of evaluation to ascertain if the required pre-defined learning outcomes at the given NCrF levels have been achieved. It refers to a wide range of methods that educators use to assess learners at different levels of learning. Assessment refers to the systematic gathering of information that evaluates, measures, and documents, with evidence, the performance of learners to give a clear picture of their academic & skill readiness, learning progress, and acquisition of skills. Assessment for a NSQF aligned and approved qualifications shall be undertaken through a NCVET recognized AAV (refer section 5.6.1.(vi)).

ii. The NCrF defines the basic principle of learning as **'achieving the prescribed learning outcomes for a level determined by successful assessments**. The assessment methodology for a skill-based course/ qualification/ program should be clearly defined as per the prescribed learning outcomes as laid down in the NCrF/NSQF and the corresponding Level Descriptors (LDs).

iii. The **evidence and record** of all assessment, including video evidence especially for hands-on skills, is to be maintained and shall be the responsibility of the concerned school/HEI/Awarding Body. The assessment for practical/ Lab work should include **video recording** of the same.

iv. A Student/Learner can accumulate, store, transfer and redeem the Credits earned within the **same assessment band for progression** into another assessment band or use these credits as partial/ full requirement for award of any Certificate or Diploma or degree.

v.   NCVET has already notified guidelines on '**blended learning'** as well as detailed assessment methodology for undertaking different types of assessment that can be applicable to not only VETS qualification but also for other academic programs.

vi. The assessment/ assessment methodology can be of various types and can be customised depending on the requirement. Various types of assessment methods which could be deployed in combination are detailed in the **annexure III** and may be implemented as per the guidelines/ instructions issued by NCVET or the respective regulators from time to time.

vii. **Recognition of Prior Learning (RPL):** National Credit Framework (NCrF) allows the certification, assessment and creditisation of prior learning of learners. The methodologies being used in VETS in alignment with NCrF is the Recognition of Prior Learning (RPL). RPL refers to an assessment process to evaluate a person's existing skill sets, knowledge, competency, and experience gained either by formal, non-formal or informal learning and skilling.

The assessment via RPL may also be undertaken for all NOSs/Performance Criterion (PCs) of a program/Skill-based qualification/course to ensure that the student/learner has achieved the requisite learning outcomes at a particular NCrF level. The RPL process is

also video recorded to ensure the credibility and integrity of the RPL process as also the higher efficacy and effectiveness of the assessment.

5.8. Certification of Skill-based VETS courses/ qualifications

i. Skill based NSQF aligned qualification/course would be awarded a suitable **award i.e Skill Competency Certificate,** based on the prescribed learning outcomes at a given NCrF level, determined through the successful assessments.

ii. All Certifications for undergoing the **NSQF aligned and approved Skill-based VETS** courses/ qualifications with assessment by the recognised Assessment Agency shall be **branded with the 'Skill India' Logo** along with the **NCVET Logo**, on the certificate to be visible prominently, as may be prescribed by NCVET from time to time.

iii. Also, all other NHEQF aligned skill based qualifications/courses being run by the HEIs, even if it is not NSQF aligned and approved qualification, shall be mandatorily **branded with the 'Skill India' Logo**.

iv. As per the guidelines already in place all Vocational Education, Training and Skilling qualifications being conducted by any Ministry, or a Body under the Ministry shall be on the NSQF aligned and approved Qualification and shall be branded with the 'Skill India' Logo. Any Vocational Education, Training and Skilling conducted out of the funds of the State exchequer shall also be branded with 'Skill India' Logo.

v. The certification for NSQF aligned and approved courses (NCVET Certificates) shall be the responsibility of the Awarding Body concerned and will be implemented through the **Skill India Digital Hub (SIDH)** Portal of Ministry of Skill Development & Entrepreneurship, Government of India which is a national common platform for convergence and consolidation of all activities relating to Vocational Education, Training, and Skilling ecosystem.

vi. While School Boards/HEIs can implement the NSQF aligned and approved qualifications, **for NCVET certificate**, the concerned School Board/ HEI need to seek recognition as an Awarding Body.

vii. Any credits from NSQF aligned skill-based qualifications/courses earned by a student/ learner from a School/HEI, which remained unredeemed/ un-utilised, implemented can be used for issuance of a skill certificate by the concerned school/HEI within the timespan

prescribed, and such certificate shall carry the name and level of the courses so completed. However, the skill certificate issued will be that of the HEI/ School Board concerned and not an NCVET certificate unless the HEI/ State School Board is a NCVET recognised Awarding Body/ a deemed Awarding Body.

5.9. Registration of an Awarding Body in the Academic Bank of Credits (ABC) and Registration of the Student/ Learner in the Academic Bank of Credits (ABC) and Issue of APAAR id to the <u>Student/ Learner</u>

i.   For management and record of the credits earned by the student/ learner every Awarding body shall also be required to register itself on the ABC. An authenticated list of the TCs/ TPs of the Awarding Body shall also be added and got registered by the Awarding Body in the Academic Bank of Credits (ABC). In addition, every learner/student will be required to register themselves on the Academic Bank of Credit (ABC) portal either directly & linked to the Digilocker, or through the Awarding Body in a batch mode. For such registration the student/ learner will be provided with a permanent, unique academic ID also known as Automated Permanent Academic Account Registration id (APAAR id). The guidelines notified by the UGC and respective regulators in this regard shall be applicable.

ii.   All entities implementing skill-based courses whether as part of the curriculum or for outside their regular UG/PG program for other learners shall ensure registration on Academic Bank of Credit (ABC). The information regarding skill-based qualifications/courses shall also be shared with/ populated on the Skill India Digital Hub (SIDH) portal as per the prescribed process, including an API based integration. Same APAAR ID of student will be used across his courses in General Education and in Skilling courses.

iii. **Skill India Digital Hub (SIDH) is a comprehensive digital platform** relating to Vocational Education, Training and Skilling aimed at synergizing and transforming the skills, education, employment, and entrepreneurship landscape of India. SID is an important arm of Digital Public Infrastructure (DPI) for skilling, education, employment, and entrepreneurship ecosystem of India. Driven by the vision to make skill development more accessible, inclusive, affordable, innovative, and personalized in its embodiment, focusing on digital technology and Industry 4.0/ Industry 5.0 and future skills, this state-of the- art platform is a breakthrough in accelerating the skilling of youth, creditisation of all skilling/ learning, match-making between the demand and supply of skilled workforce, talent hiring, facilitating lifelong learning and ensuring overall career advancement of youth and workforce.

iv.   In respect of the Certification of Skill-based courses/ qualifications the Higher Education Institutes (HEI) including Universities and affiliated Colleges are also required to **share their data** in respect of the student/ learner of Skill-based courses/ qualifications through API integration with SID.

v. The credits earned by the student/ learner for every qualification/course successfully completed and assessed shall be stored in the ABC against the APPAR id of the student/ learner. These credits can then be used for redemption and credit transfer. A Student/Learner can store, accumulate, transfer and redeem the Credits earned within the same assessment band for progression into another assessment band or for earning the award of Certificate, Diploma or Degree.

6. NCrF implementation in VETS/ Skill based qualifications/courses.

6.1. Assignment of Credits

6.1.1. As per NEP and NCrF, all types of learning can be creditized including academic, Skill based qualification/course as well as the experiential learning. Such skill-based courses/ qualifications can be either a stand-alone course/ qualification/ subject or it can be integrated/ embedded within a UG/ PG level curriculum of HEI/ university or in a school subject.

6.1.2. As mentioned in the section 5.6.1, all the NSQF aligned and approved Skill-based courses/ qualifications are generally in the multiple of 30hrs or 15 hours. The individual NOSs of a course/ qualification can be in multiple of 15 or 30 hours, while a Micro-Credential (MC) can be in multiple of 7.5 hours. As mentioned in the NCrF document, on an average 30 notional hours of learning is equal to 1 credit and hence courses/ qualifications represented in either multiple or factor of 30 enable easy calculation and accounting for creditization of all NSQF aligned and approved courses/ qualifications. All the Vocational Education, Training and Skilling courses/ qualifications are already following this process.

6.1.3. **As mentioned in the section earlier, a skill-based course/ qualification may have the following components of learning:**

a)	L= Theoretical learning/ Lecture	calculated in Hours
b)	P= Practical learning/ Hands-on learning of Skills	calculated in Hours
c)	O= On the job training (OJT)	calculated in Hours
d)	I= Internship	calculated in Months
e)	A=Apprenticeship	calculated in Months

6.1.4. The theoretical learning/ lecture, practical learning/ hands-on learning of skills and OJT components within a qualification/course are calculated in terms of notional learning hours while the apprenticeship/ and internship components are calculated in terms of their duration in months. For creditization of a skill-based course/ qualification, considering all types of programs, the following formula may be used:

No of Credits earned for a course/ qualification = **(L+P+O)/30 + (I+A)*(40/12)**

6.1.5. The credit assignment for internship/ apprenticeship (including schemes like NAPS and NON-NAPS) will be dependent on their duration in months instead of the notional learning hours. Thus, 3 months of internship/ apprenticeship will be equal to 10 credits. While 12 months of internship/ apprenticeship will earn 40 credits subject to assessment.

6.1.6. The NCrF provides for creditisation of all types of learning in three dimensions/ axis namely Academics on the X-axis; Vocational Education, Training and Skilling on the Y-axis; and Experiential learning, including work experience and proficiency levels achieved on the Z-axis. The standardized entry norms notified in the NCrF aligned NSQF guidelines take into consideration the relevant experiential learning of the Student/ Learner on Y-axis in VETS while considering their eligibility for entry to a NSQF course/ qualification at every NCrF/NSQF level.

6.1.7. **The Blended Learning/ Digital Learning/ Online Learning:** NCrF provides for creditization of skill based NSQF courses/ qualifications irrespective of the mode of its delivery, i.e. Offline, Online and hybrid/blended learning, subject to the Blended Learning Guidelines for Vocational Education, Training and Skilling as mentioned in para 4.2.1 (iv) of the SOP. The Creditization method for the blended learning programs is at **Annexure IV.**

6.1.8. The online courses offered by learning platforms which are recognized or authorised by the respective regulators/ Government shall earn credits/ can be creditized subject to the provisions/ conditions laid down by the respective regulators.

6.1.9. **Creditization of Exceptional Achievements/ Performance:** NCrF also provides for special provision with respect to creditization of the exceptional achievements/ performance of the students/ learners in games and sports, performing arts, fine arts, social work, Indian Knowledge System (IKS), NCC, or other similar subjects/ categories.

    a. There are two possible ways the learning activities can be undertaken by the student/learner:

        i. **As part of the curriculum as a subject**: The credits & level for this would be in accordance with the curricular structure prescribed by the school board/ university/ autonomous institute which shall be creditized at the same NCrF level as that of the course. For e.g., a music/arts courses/ qualifications undertaken in 1st year UG shall be of NSQF level 4.5.

        ii. **As a standalone learning activity:** The concerned authority / entity, as applicable, will determine the mechanism for credit calculation. The assessment criteria for all these activities are to be well defined. In case of the assessment of special/ exceptional skills the entities/agencies of national/ international repute and integrity may be considered for grant of a Deemed Assessment Agency status by the regulator concerned, if so required. In such standalone activities, the NSQF level will be determined based on outcome pre-defined for the Recognition of Prior

Learning (RPL) and Level Descriptors or any other criteria in special/ exceptional cases as may be determined by the concerned authority/entity. The general minimum conditions applicable before, during and after such learning activity are as follows:

Pre- Assessment (1)	During Assessment (2)	Post- Assessment (3)
1. Minimum notional learning hours to be indicated.	1. Implementation and Execution	1. Any additional assessment requirement
2. Learning Outcomes to be clearly defined together with entry requirement/ and NCrF Level.	2. Conduct Assessment to ascertain the credible, visible and measurable outcomes/ achievements with integrity	2. Credit assignment as per NCrF
3. Assessment methodology to be clearly specified		

A suggested concept of a mechanism for credit assignment with NCrF levels for each of such activity or a group of such activities is at **Annexure V.**

6.1.10. NCrF provisions that credits are subject to achieving the pre-defined/ prescribed learning outcomes determined through successful assessments. Accordingly, the learners with **varying pace of learning, both fast and slow can earn credit for undergoing Skill-based courses/ qualifications/ training programs.** The credits for such a training program will be as per the actual duration of the qualification and not as per the extended or shortened hours to compensate the learning pace of the learner.

A learner with fast pace of learning (also called as education acceleration) can be permitted to be assessed for the NSQF levels without completing the prescribed number of notional learning hours. However, clearing the assessment band would be mandatory. Similarly, for learner with slow pace of learning like in case of learners with intellectual disability (ID), the actual learning hours may have to be extended to accommodate the pedagogical requirements of the student/ learner. This is provisioned while defining the Skill-based courses/ qualifications.

6.1.11. **Creditization of Skill Based Diploma Qualifications**: The long-term Vocational Education, Training and Skilling ecosystem comprises of qualifications implemented by DGT through Industrial Training Institutes as well as the qualifications submitted by other recognised Awarding Bodies, with duration of more than 1200 hours. With the concurrence of UGC and AICTE, the NCVET has formulated detailed guidelines on NSQF alignment and approved Diploma and Diploma (advance) specific to skilling ecosystem. These qualifications are higher level Vocational Education, Training and Skilling course/ qualification, not leading to degree. However, these can be considered for lateral entry into degree programs. The following entry criteria and duration is applicable to such courses/ qualifications:

Type	Entry Requirement	Duration (in years or hours)*	Years of Learning	NCrF Level	Credit Points Earned Yearly	Cumulative Credit Points
Diploma	10th pass	3 years/ 3600 hrs	1st Year	3.5	140	480
			2nd Year	4	160	
			3rd Year	4.5	180	
	Lateral Entry (in second year of Diploma): 12th pass in relevant subject or 2 year NTC/NAC after 10th in relevant trade	2 years/ 2400 hrs	2nd Year	4	160	340
			3rd Year	4.5	180	
Diploma (Advanced)	12th pass in relevant subject or 2-year NTC/NAC after 10th in the relevant trade	2 years/ 2400 hrs	1st Year	4.5	180	380
			2nd Year	5	200	

6.2. Accumulation and Storage of Credits

6.2.1. As mentioned above, every student undergoing a NSQF aligned course/ qualification is required to have a unique **APAAR id.** The APAAR id can be created by a) student himself using Digi locker; b) Awarding body and c) Training partner through the Awarding Body;

6.2.2. The Awarding Body is additionally also required to **register itself as well as provide the student/ learner details in the Skill India Digital Hub (SIDH)** to enable issuance of NCVET certificate for the NSQF aligned and approved Qualification/ course on which the student/ learner has been trained and assessed.

6.2.3. The AB concerned also needs to ensure that details of the **courses/ qualifications** (Qualification/ NOS/ MC Code) **along with the assessment credentials** including the NCrF Level, the credits earned, validity of the credits and Marksheet/grade be made available on the **ABC portal.**

6.2.4. The credits earned within the same assessment band can **be accumulated and added**. Further, the credits accumulated and stored in the ABC may also be calculated in terms of Credit Points which is multiplication of the total credit earned with the NCrF level at which the credits are earned.

6.2.5. In case of experiential learning and the proficiency levels achieved, the overall credit points earned will be Credit points earned for the job-role multiplied by the weightage factor which is to be prescribed by the concerned regulator/ the professional body. One such factor as mentioned in the notified NCrF Report could be 'number of years of experience' of attaining the required Qualification for a Job Role (refer Table 7 of the NCrF Report). This axis would have to be developed in close collaboration and understanding of the trade bodies involved. A separate set of guidelines would be developed and issued once the stakeholders in school education, higher education and vocational education, training and skilling develop a comprehensive understanding of NCrF report and its implementation attains a level of maturity.

6.2.6. The accumulated credits stored in ABC are redeemable, for a suitable award i.e Skill Competency Certificate, Diploma or Advance Diploma as may be prescribed by the regulator concerned.

6.3. Transfer and Redemption of Credits

6.3.1. The credits earned by a learner are transferable for redemption. These credits earned can be utilized for establishing entry/eligibility criteria for a program/employment opportunity; or for establishing Academic Equivalence between two different types of program, and for enabling Multiple Entry-Multiple Exit options.

6.3.2. Learning outcomes of courses, competencies achieved and the NCrF levels attained shall be the basis for considering the eligibility of students/ learners for lateral entry as well as for the purpose of counting the credits earned. Therefore, carefully framing the **'Learning Outcomes and Competencies'** of each course/ qualification/program is important.

6.3.3. For credit transfer, it is important to undertake **appropriate mapping of the curricular structures** of the programs between institutions to establish Equivalence for credits earned from different credit awarding bodies on their courses/ qualifications. While establishing Academic Equivalence, the institution may also prescribe additional learning/ credit requirements, including that of a bridge course, if so required. The institution accepting the credits from the previous institution may also prescribe/devise suitable mechanism for admission of the students to a program.

6.3.4. In the long-term VETS ecosystem, DGT and other ABs will work out the system for allowing an 8th /10th grade pass student/ learner a lateral entry in the 2nd year of 2-year CTS program of DGT (in certain specified trades) after accumulating the requisite credits in the relevant trade (equivalent to 9th /11th grade) in the relevant trade. The lateral entry will however, subject to assessment criteria as determined by the designated authority, as suggested in the NCrF.

6.3.5. In case of Short-Term Training (STT), the credit transfer will be in accordance with the entry criteria prescribed in NSQF notification in form of entry criteria for various NSQF levels for academic Equivalence. The award issuing authority, e.g. a school board can further prescribe additional requirements, including that of a bridge course in language, if felt necessary for such academic equivalence.

6.3.6. For establishing equivalence, the credit transfer between Boards/Universities/ Autonomous Institutions is possible based on the mapping of programs and courses offered. The Universities/ Colleges will accept 10th + 2-year ITI pass out who has secured 12th certificate through NIOS/ any other designated agency, at par with other 12th pass candidates for entry into 1st year of a UG program. School Boards, including CBSE, will accept 8th + 1 or 2 years ITI plus certification through NIOS/ any other designated agency of 9th/10th Grade for admission into regular school at 10th/11th Grade.

6.3.7. The avenues of Multiple Entry Multiple Exit to enable lifelong learning opportunities for Students/Learners for skill-based courses/ qualifications (NSQF aligned and approved-LTT qualifications), are detailed in NSQF notification dated 6th June 2023.

6.3.8. The validity of a NSQF aligned and approved courses/ qualifications is generally three years, unless otherwise specified in the particular course/ qualification, with provision for further extension after proper justification.

However, the validity of the credits earned after undergoing training in a NSQF aligned and approved qualification will depend on the type of VETS qualification. In General, the validity of credits earned through a VETS qualification, unless otherwise specified in the qualification, shall be as below:

i.   General/lifelong learning/cognitive learning: Lifetime validity

ii. Conceptual learning with detailed skills: 7 years validity

iii. Conceptual learning with skills on Future Technologies: 3 years Validity

In case a student/ learner wishes to redeem the credits earned after the validity of the credits for a Skill-based course/ qualification has expired, the student/ learner may go for re-validation of the credits of the course/ qualification through a well-defined assessment mechanism like RPL. The revalidation of the credit earned by a learner/student is primarily applicable for redemption in case of academic education including the school and higher education. Such credits after the validity period would be reflected as 'Require re-validation for redemption' on ABC. The concerned institution, undertaking such assessment for revalidation may also recommend additional bridge module while doing the re-validation process. The responsibility of the re-validation of such courses along with assessment and credits will be that of the concerned regulator and appropriate mechanism for the same may be prescribed/developed. In context of employment/job, it shall be the responsibility and discretion of the employer to access the eligibility and credentials of the candidate for a particular position and the validity of credit even if expired may not be a relevant criteria for an employer.

7. Implementation and Integration of Skill-based courses/ qualifications in Education

i.   NCrF enables integration of Vocational Education, Training and Skilling into education to address the vision of NEP and NCrF of holistic and multi-disciplinarity education. Accordingly, a wide range of skill-based courses/ qualifications may be integrated/ embedded into education having pre-defined Learning outcomes and assessment criteria. The process of developing, approval, and implementation of NSQF aligned and approved Skill-based courses/ qualifications is detailed in the section 5.2 and 5.6.

ii. The NSQF aligned skill-based courses/ qualifications can be offered offline, online or in blended mode to ensure better reach, as per requirement subject to the regulatory guidelines in this regard. The courses/ qualifications can be introduced as either as a separate course/subject or as part of another course/subject.

iii. In case of blended learning, the Learner may use the support digital/ e-content/ material, for example videos of factory tour, or warehouse tour etc., which may consume some hours. The ratio of online vs offline learning against the various components of Skill-

based course/ qualification is customizable as per the need of the qualification and implementing institution.

iv. While integrating the NSQF aligned and approved course/qualification with education the credits of the NSQF aligned skill-based course shall be computed as per the credits assigned for the NSQF aligned and approved Qualification as given in section 6.1.

7.1. Implementation and Integration of Skill-based courses/ qualifications in Higher Education

7.1.1. The NCrF enables the Universities/ Higher Education Institutes to integrate and embed the vocational education training & skilling (VETS) based courses/ qualifications. This integration can be done in any of the following ways:

A. **Integration of VETS in Higher Education as part of Curriculum/ as Additional courses for their students enrolled in UG/ PG Programs**

i. As per the provisions in the NCrF, up to 50 percent of the total credit requirement of a UG/ PG program can be fulfilled by earning credits from the Skill based courses / Qualifications of appropriate NCrF levels (4.5 to 8). Such Skill-based courses/ qualifications may be implemented in different ways by the HEIs for their enrolled students as given below:

  a. **As part of the UG/ PG curriculum** - Such courses/ qualifications, may be NHEQF or NSQF aligned, and are integrated as part of the curricular structure of the UG/PG program.

  b. **As additional courses/ qualifications, not integrated within the curriculum of a UG/ PG program or offered as a standalone course/ qualification -** The HEIs may offer relevant skill-based courses/ qualifications over and above their approved curricular structures with provision of additional credits. While additional course/ qualification may be related to the curricular stream of the student/learner, the standalone course/ qualification could also be totally unrelated to the curricular stream of the UG/PG Program but supports the holistic development of the learner. Such courses/ qualifications could either be NHEQF or NSQF aligned.

ii. HEIs may offer Skill-based NHEQF courses/ qualifications developed by them with the approval of their highest Academic Body/ authority. The HEIs may also implement NSQF aligned and approved skill-based courses/ qualifications **to their enrolled UG/ PG students,** carry out assessments to ascertain the learning outcomes and issue their own certificates for such courses/ qualifications subject to successful assessment.

iii. At present, the curricular structure/ design in Higher Education for their UG program is based on the guidelines for Four Year UG program, which includes Vocational Education, Training and Skilling as an important component of learning. The table in **Annexure VI** gives an illustration on how skill-based courses/ qualifications can be integrated with the curricular structure of a UG program. The skill-based courses/ qualifications can also be implemented as:

a. Ability Enhancement Course, Skill Enhancement Course, Value added common courses or as Summer Internship programs.

b. The foundational or upskilling courses/ qualifications which may form part of skill/ability enhancement courses.

c. As part of the Major or Minor stream in the curriculum.

B. Offering Standalone Skill-Based NHEQF courses/ qualifications by HEIs to the learners beyond their regular UG/ PG students

i. HEIs may offer Skill-based NHEQF courses/ qualifications developed by them with the approval of their highest Academic Body/ authority **to the students/ learners beyond their regular UG/ PG students** subject to their jurisdiction as permitted by their Statutes.

ii. The learners may be issued an HEI Skill Certificate by the HEI concerned with Skill India branding for such NHEQF courses/ qualifications.

C. Offering Standalone Skill-Based NSQF courses/ qualifications by HEIs to the learners beyond their regular UG/ PG students

i. In case any HEI wants to operate in the VETS ecosystem and offer the NSQF aligned and approved Skill based courses / qualifications of appropriate NCrF levels 4.5 and above as standalone courses, to learners beyond their regular enrolled UG/ PG students, the HEI may do so if it is a recognised Awarding body (AB) of NCVET.

ii. As an AB, HEIs may implement NSQF aligned and approved skill-based courses/ qualifications, to the students/ learners beyond their regular UG/ PG students subject to their jurisdiction as permitted by their Statutes, and issue NCVET certificates, with Skill India branding, for such courses/ qualifications subject to successful assessment.

iii. As an AB, HEI may also develop an NSQF course/ qualification with the approval of National Skills Qualification Committee (NSQC). NSQC includes members /representatives from UGC and AICTE

iv. As an AB, the HEIs may also adopt NSQF aligned and approved qualifications out of more than 1300 courses / qualifications of NCrF level 4.5 and above (including 340+ future skill qualifications) in various sectors (list available at www.nqr.gov.in)

7.1.2. As long as the NSQF courses are being offered as part of the curricular structures which are duly approved by the highest academic body concerned of the HEI, no approval of NCVET would be necessary. The HEIs may implement and carry out the assessments in respect of the NSQF courses, assign credits and award certificates. The credits earned from such vocational/ skill-based courses from an HEI would not require further validation or approval from NCVET.

7.1.3.   The credits assigned to the NSQF aligned course/ qualification integrated within curriculum or offered as additional/ standalone course/ qualification would be same as the credits specified in the NQR.

7.1.4.   To ensure quality and adherence to the required industry standards while implementing the NSQF courses, the HEIs would ensure that all the essential requirements of infrastructure, teachers/ trainers, assessors, skill/ practical labs/ workshops, and learning material etc are met with in accordance with the prescribed guidelines with respect to the courses/ qualifications concerned. In case the HEIs does not have the adequate facilities and resources to implement the course/ qualification, they may seek the assistance and support from the Sector Skill Councils, the Awarding Bodies or the Assessment Agencies concerned.

7.1.5.   Any credit from NSQF aligned skill-based courses earned by a student/ learner from an HEI, which remained unredeemed/ un-utilised, can be used for issuance of a skill certificate by the concerned HEI within the timespan prescribed and such certificate shall carry the name and level of the courses so completed. However, the skill certificate issued will be that of the HEI concerned and not an NCVET certificate unless the HEI is a deemed AB/ AB. Such certificate will also carry a Skill India Logo.

7.1.6.   In case of professional courses regulated by the statutory bodies (UGC, AICTE, NCVET, NCTE etc.), their norms standards and guidelines shall apply while offering and implementing the skill-based courses/ qualifications.

7.1.7.   All the HEIs implementing skill-based courses/ qualifications whether as part of the curriculum or for outside their regular UG/PG program for other learners shall ensure registration on Academic Bank of Credit (ABC) as well as share data with Skill India Digital Hub (SIDH) regarding the Skill-based courses/ qualifications as per the prescribed process. The HEIs to also ensure registration of their learners on the ABC through the APAAR id.

7.1.8.   Bridge courses may be conducted offline or online or blended mode or through SWAYAM portal or similar online platforms duly recognised by the regulator concerned for the purpose.

7.1.9.   For offering and creditising the courses conducted by an educational technology company (known as edTech companies) and making these as part of the curriculum, the guidelines of the respective regulators shall apply.

7.1.10. To enable the interested HEIs to seamlessly design, develop and offer NSQF courses and qualification without the need to approach NCVET, the NCVET Council has already decided to grant the status of deemed awarding bodies to all the Institutes of National Importance (INIs), including all IITs, NITs, IISERs, NIDs, IIMs, Central Universities and Deemed Universities etc. These deemed AB HEIs would act as a dual Awarding body (AB) with PAN India jurisdiction. To enable INIs and Central Universities for this AB recognition, a simple format for 'Expression of Interest' has been developed for giving them formal and full recognition as an AB (Dual Category) and their on-boarding on Skill India Digital Hub (SIDH).

7.1.11. The deemed Awarding Bodies will also have access to all the available Vocational Education, Training and Skilling resources including model curriculum, e-content, Training of Trainers (ToT) & Training of Assessors (ToA) resources, skill training assistance and support from the

Sector Skill Councils, Awarding Bodies and Assessment Agencies concerned in implementation of the NSQF aligned and approved courses/ qualifications.

7.1.12. The other interested HEIs may also get the status of a recognised awarding body for the purpose of developing and implementing the NSQF aligned Qualification in their authorised jurisdictions to the learners other than their regular students. For this purpose, a fast track process of recognition along with simplified application form for Awarding Body recognition has already been put in place by NCVET for HEIs.

7.1.13. If a student from vocational education wishes to enter the general education at the next higher NCrF level or vice-versa, an expert committee of the HEI concerned (as detailed in the SOPs of Higher Education) may identify any gaps between the skill and education and suggest suitable bridge courses for establishing the eligibility or for admitting the students to general education/ vocational education.

7.1.14. The details of parameters and provisions for integration of VETS courses/ qualifications in Higher Education Institutions/ Universities including General Universities and Skill Universities are given in the **Annexure-VII.** The detailed guidelines for implementation of Skill based qualification/course in Higher Education Institutes may also be referred to in the SOPs for operationalising of NCrF in Higher Education.

7.2. Implementation and Integration of Skill-based courses/ qualifications in School Education

7.2.1. At present, the following provisions in the curricular design in Schools (as per CBSE) in context of VETS are available:

i. As per the National Curricular Framework (NCF), out of the 8 curricular areas one is vocational education. The NCF mandates that any vocational course introduced in the school education system needs to be NSQF aligned and approved. The students also have flexibility of choosing the subject of their choice from these 8 curricular areas as prescribed in NCF.

7.2.2. The General provisions applicable for integration of VETS in education shall be applicable for school education as well.

7.2.3. The integration of VETS in school shall as per the provisions prescribed in the SOP for operationalization of NCrF in School Education being finalized by the concerned Sub-Committee chaired by Chairman, CBSE.

7.2.4. Every School Boards may offer, as part of their NCF curricular structure, vocational and skill-based courses/ qualifications of the appropriate NCrF levels which are either designed/ developed by them as per National Curricular Framework (NCF) and approved by their highest State level academic body concerned or adopt the NSQF aligned and approved courses available on National Qualification Register (NQR) Portal at www.nqr.gov.in as per the requirement. Thus, such Skill-based courses/ qualifications may be implemented in different ways by the School Education Boards for their own students as given below:

a. **Skill based course integrated as part of the school curriculum**- Such courses/ qualifications are offered as integrated as part of the curricular structure in school education and could either be NSQF aligned or as per the National Curricular Framework (NCF) for school education.

b. **Skill-based courses/ qualifications as additional course/ qualification or as standalone course not integrated within the curriculum of Schools-** The Schools may offer relevant skill-based courses/ qualifications over and above their defined curricular structure with provision of additional credits. Such courses could either be NSQF aligned or NCF aligned for school education. \

7.2.5. As long as the NSQF courses are being offered as part of their curricular structures which are duly approved by their highest academic body concerned, no approval of NCVET would be necessary. The School Boards may implement and carry out the assessments in respect of the NSQF courses, assign credits and award certificates. The credits earned from such vocational/ skill-based courses from a School Board would not require further validation or approval from NCVET. The credits assigned to the NSQF aligned course/ qualification integrated with School curriculum or offered as additional/ standalone course/ qualification would be same as the credits specified in the NQR.

7.2.6. Integration of VETS in School Education to learners beyond their regular school students: In case any the School Board wants to operate in the VETS ecosystem and offer the Skill based courses / qualifications of appropriate NCrF levels (upto NCrF level 4) as standalone courses, to learners beyond their regular school students, the following shall be applicable:

a. The School Board will have to get the status of a dual category recognised Awarding body (AB) of NCVET.

b. As an AB the school boards can either develop their own NSQF aligned courses/ qualifications and get the same approved by the NSQC or Adopt NSQF courses developed by other Awarding Bodies and duly approved by NSQC from www.nqr.gov.in after following the due prescribed process.

c. Offer such NSQF courses/ qualifications as standalone courses/ qualifications in their jurisdictions to the students/ learners beyond their regular school students.

d. NCVET certificate with Skill India branding shall be issued for such NSQF aligned and approved VETS courses/ qualifications.

7.2.7. School Boards are also encouraged to design/ develop the skill courses in collaboration with the industry to be creditised as NSQF Qualification approved by NSQC for offering to in the School Boards to students/ learners other than regular students, the same shall be permissible.

7.2.8. Any NSQF course/ qualification to be offered by a School Board other than as part of their NCF/ School curriculum/ programs would require approval from National Skills Qualification Committee (NSQC).

7.2.9. Such skill-based courses/ qualifications can also be implemented within the jurisdiction of the School Board concerned as permitted by the Statute as employability courses/ qualifications; skill enhancement courses/ qualifications or as skilling/ upskilling courses/ qualifications.

7.2.10. To ensure quality and adherence to the required industry standards while implementing the NSQF courses, the School Boards would ensure that all the essential requirements of infrastructure, teachers/ trainers, assessors, skill/ practical labs/ workshops, and learning material etc are met with in accordance with the prescribed guidelines with respect to the courses/ qualifications concerned. In case the School Board does not have the adequate facilities and resources to implement the course/ qualification, they may seek the assistance and support from the Sector Skill Councils, the Awarding Bodies or the Assessment Agencies concerned.

7.2.11. All the School Boards implementing skill-based courses/ qualifications whether as part of the curriculum or for outside their regular school curriculum for other learners shall ensure registration on Academic Bank of Credit (ABC) as well as share data with Skill India Digital Hub (SIDH) regarding the Skill-based courses/ qualifications as per the prescribed process. The School Boards to also ensure registration of their students/ learners on the ABC through the APAAR id.

7.2.12. All skill based courses certificates by school boards would have a common branding of Skill India with Logo.

7.2.13. The other interested School Boards may also get the status of a recognised awarding body for the purpose of developing and implementing the NSQF aligned Qualification in their authorised jurisdictions to the students/ learners other than their regular students. For this purpose, a simplified process of Awarding Body recognition has been put in place by NCVET for recognition of School Boards as dual awarding bodies.

7.2.14. If a student from vocational education wishes to enter the general education at the next higher NCrF level or vice-versa, the provisions of National Credit Framework (NCrF) would be applicable. In case of special cases not covered under the guidelines an expert academic committee of the School Board concerned may identify any gaps between the skill and education and suggest suitable bridge courses for establishing the eligibility or for admitting the students to general education/ vocational education.

7.3. In view of the provision laid down in the section 7.1 and 7.2, an SOP for Development, Alignment & Implementation of Skill Based Courses / Vocational Education, Training and Skilling based Qualifications in Higher Education & School Education have been further detailed out and is placed at annexure VIII.

Composition of the Sub-Committee to operationalize NCrF in of Vocational Education and Training/Skilling:

(a)	Dr Neena Pahuja, Executive Member, NCVET	Chairperson
(b)	Representative from UGC	Member
(c)	Representative from AICTE	Member
(d)	Representative from Dept of Higher Education	Member
(e)	Representative from Dept of School Education	Member
(f)	Dr Biswajit Saha, Director, Vocational Training, CBSE	Member
(g)	Dr TN Giri, Director, Vocational Education, NIOS	Member
(h)	Col Gunjan Chowdhary, Director, NCVET	Member Secretary

Apart from the above, **Dr. Vinita Aggarwal,** Executive Member NCVET, Ms. **Trishaljit Sethi,** DG-DGT and **Ms. Sarika Dixit**, Consultant Grade-II, NCVET were part of the meeting and supported in formulation of the SOP.

Annexure II: Table: Standard Norms for Minimum Entry Criteria & Range of Notional Hours etc for National Skill Qualification Framework (NSQF) aligned Qualifications.

NSQF Level attained after VETS Trg (STT/ LTT)	Short Term Training (STT)				Long Term Training (LTT)		
	Minimum entry criteria for undergoing Short Term Training (STT)		Minimum Range of Notional hours - In Multiple of 30)	Employability Skills (ES) to be Included in the notional hours	Minimum entry criteria for undergoing Long Term Training (LTT)	Minimum Range of Notional hours – In Multiple of 30)	Employability Skills (ES) – to be Included in the notional hours
	Min Education/ Vocational Education, Training and Skilling required for undergoing Short Term Training (STT)	Minimum Required Experience* for undergoing Short Term Training (STT)					
Level 1	☐ No formal education	No Experience	150-210 Hours	30 hours	No LTT course	Nil	Nil
Level 2	• No formal education • May require ability to read and write for some qualifications	No Experience However, 1 year relevant experience may be desirable for some qualifications	210-270 Hours	30 hours	No LTT courses	Nil	Nil
	Previous relevant Qualification of NSQF Level 1	No Experience					
Level 2.5	• 9th Grade pass • 8th Grade pass and pursuing continuous schooling	No Experience	240-300 Hours	30 hours	8th Grade Pass AND (for NTC only) 150 hours of project work	1200 hours	120 hours
	8th grade pass	1 year relevant experience					
	5th grade pass	4 year relevant experience					
	Ability to read and write	5 year relevant experience					
	Previous relevant Qualification of NSQF Level 2	6 months of relevant experience					
	Previous relevant Qualification of NSQF Level 1	1.5 year relevant experience					
Level 3	• Grade 10 pass • Grade 8 pass with two year of (NTC/ NAC) after 8th • Grade 8 pass and pursuing continuous schooling in regular school (in case of 2 year prog) • Grade 9 pass and pursuing continuous schooling in regular school	No Experience required.	270-390 Hours	30/ 60 hours	9th Grade Pass	1200 hours	120 hours
					8th Grade Pass	2400 hours AND (for NTC only) 150 hours of project work	180 Hours (min 90 hours module in 1st year)
	9th Grade pass	1 year relevant experience					

	8th grade pass	2 year relevant experience					
	5th grade pass	5 year relevant experience					
	Previous relevant Qualification of NSQF Level 2.5	1.5 year relevant experience					
	Previous relevant Qualification of NSQF Level 2	3 year relevant experience					
Level 3.5	• 11th Grade pass • 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	No Experience required	360-420 Hours	30 /60 hours	10th Grade Pass	1200 hours AND (for NTC only) 150 hours of project work	120 hours
	• 10th Grade pass • 8th grade pass with two years of any combination of NTC/NAC/CITS or equivalent.	One year relevant Experience required					
	8th Grade pass	3 year relevant experience					
	Previous relevant Qualification of NSQF Level 3	1.5 year relevant experience					
	Previous relevant Qualification of NSQF Level 2.5	3 year relevant experience					
Level 4	• 12th grade pass • Completed 2nd year of 3-year diploma (after 10th) • Pursuing 2nd year of 3-year regular Diploma (after 10th) • 10th grade pass with two years of any combination of NTC/NAC/CITS or equivalent. • 8th pass plus 2-year NTC plus 1-Year NAC plus 1-Year CITS • 10th grade pass and pursuing continuous schooling (for 2 year program) • 11th Grade Pass and pursuing continuous schooling	No Experience required.	390-480 Notional Hours of Training	30 hours/ 60 hours	11th Grade Pass or equivalent	1200 hours	120 hours
					10th Grade Pass or equivalent	2400 hours AND (for NTC only) 150 hours of project work	180 hours (min 90 hours module in 1st year)
	11th Grade Pass	1 year relevant experience					
	10th Grade Pass	2 year relevant experience					
	Previous relevant Qualification of NSQF Level 3.5	1.5 year relevant experience					
	Previous relevant Qualification of NSQF Level 3.0	3 year relevant experience					

Level	Entry Requirement	Experience	Notional Hours of Training		Minimum Education	Training Hours	Project/Internship Hours
Level 4.5	• Completed 1st year of 3-year/ 4-years UG • Pursuing 1st year of 3-year/ 4-years UG and continuing education • Pursuing 3rd year of 3-year diploma after 10th and continuing education • Completed 3-year diploma after 10 • Completed 1st year of 2 year diploma after 12th • Pursuing 2nd year of 2- year diploma after 12 and continuing education • 12th Grade pass with 1-year NTC/NAC • 10th grade pass with 3 year of any combination of NTC/NAC/CITS or equivalent.	No Experience required	450-510 Notional Hours of Training OR For UG Students - 450 Hours of Internship + project work with Assessment	60 Hours	12th grade pass or equivalent	1200 hours AND (for NTC only) 150 hours of project work	120 hours
					10th Grade pass or equivalent	3600 hours	240 hours (Min 90 hours module in 1st year)
	12th Grade Pass	1 year relevant experience					
	10th grade pass with 2 year of any combination of NTC/NAC/CITS or equivalent.	1 year relevant experience					
	8th Grade pass with 2-year NTC plus 1year NAC plus 1-year CITS	1 year relevant experience					
	10th Grade pass	3 year relevant experience					
	Previous relevant Qualification of NSQF Level 4	1.5 year relevant experience					
	Previous relevant Qualification of NSQF Level 3.5	3 year relevant experience					
Level 5	• Completed 2nd year of 3-year/ 4-years UG • Pursuing 2nd year of 3-year/ 4-years UG and continuing education • Completed 2nd year of diploma (after 12th) • Pursuing 2nd year of 2-year diploma after 12th	No Experience required	480 to 570 Notional Hours of Training OR For UG Students - 510 Hours of Internship + project work with Assessment	60 hours	Completed 3 year diploma after 10th Grade	1200 hours	120 hours
	12th pass with 2 year of any combination of NTC/NAC/CITS or equivalent.	No Experience required			Completed 1st year UG or equivalent	1200 hours	120 hours
	• Completed 3-year diploma after 10th • 12th Grade pass with 1-year of NTC/NAC • Completed 1st year of 3-year/ 4-years UG	1 year relevant experience			12th Grade pass or equivalent course	2400 hours	180 hours (Min 90 hours module in 1st year)
	12th Grade pass	2 year relevant experience					
	10th Grade pass	4 year relevant experience					
	Previous relevant Qualification of NSQF Level 4.5	1.5 year relevant experience			10 Grade pass plus 2 year NTC plus 1year relevant experience (only for CITS)	1200	120 Hours
	Previous relevant Qualification of NSQF Level 4	3 year relevant experience					

Level	Entry Qualification	Experience	Notional Hours of Training	Hours	Exit / Progression	Hours	Hours
					OR 10th grade pass plus 1 year NTC plus 2 year relevant experience (only for CITS)		
Level 5.5 UG Degree	• Completed 3rd year of 3-year/ 4-years UG • Pursuing 3rd year of 3-year/ 4-years UG and continuing education • Completed 12th grade with 1-years of NTC plus 1-year NAC plus 1-year CITS	No Experience required	540 to 600 Notional Hours of Training OR For UG Students - 550 Hours of Internship + project work with Assessment	60 hours/ 90 hours	Completed UG 1st year or equivalent	2400 hours	180 hours (Min 90 hours module in 1st year)
	• 12th Grade Pass with 2 years of any combination of NTC/NAC/CITS or equivalent • Completed 2nd year diploma after 12 • Completed 2nd year of 3-year UG	1 year relevant experience			Completed UG 2nd year or equivalent	1200 hours	120 hours
	• 12th Grade pass with 1-year NTC/ NAC • Completed 3-year diploma (after 10th)	2 year relevant experience					
	Completed 3-year diploma after 10th	2 year relevant experience					
	12th 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 6	• Pursuing first year of 2-year PG program after completing 3-year UG degree • Pursuing 1-year PG diploma after 3-year UG degree • Completed 4th year UG (in case of 4-year UG) • Pursuing 4th year UG (in case of 4-year UG) and continuing education	No Experience Required	570 to 660 Notional Hours of Training OR For UG/ PG Diploma Students - 600 Hours of Internship + project work with Assessment	90 hours	Completed UG degree (3 year) OR Equivalent	1200 hours	120 hours
	Completed 3-Year UG Degree	1 year relevant experience					
	• 12th Grade Pass with 2 years of any combination of NTC/NAC/CITS • Completed 2 year of diploma after 12th	2 year relevant experience					
	Completed 1st year of 2 year diploma after 12th Grade	3 year relevant experience					
	12th Grade pass	4 years of 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 6.5	• Pursuing PhD (after 4-year UG honours with research)	No Experience Required	630 to 690 Notional Hours of	90 hours	Completed 4 year UG degree	1200 hour	120 hours

Level	Qualification	Experience	Notional Hours of Training	Hours	OR		
	• Pursuing 2nd year of 2-year PG (after 3 year UG Degree) • Pursuing 1st year of 2-year PG (after 4 year UG Degree) • Completed 2-year PG degree (after 4 year UG)		Training OR For PG Students - 660 Hours of Internship + project work with Assessment		OR Completed PG Diploma after 3 year degree OR completed 1st year of 2 year PG program		
	• Completed 4-year UG program. • Completed 1st year of 2-year PG after 3-year UG degree	1 year relevant experience					
	Completed 3-years UG Completed 2-year Diploma after 12th Grade (in any field)	2 year relevant experience 3 years of relevant experience					
	12 Grade Pass with 2 years of any combination of NTC/NAC/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 7 PG Engg	Pursuing PhD	No Experience Required	660 to 750 Notional Hours of Training OR For PG Students - 720 Hours of Internship + project work with Assessment	120 hours			
	Pursuing 2nd year of 2-year PG after 4 year UG program Completed 2-year PG degree after 3-year UG	No Experience Required 1 year relevant experience					
	Completed 4-year UG degree	2 year relevant experience					
	Completed 3-year UG degree	3 year relevant experience					
	Previous relevant Qualification of NSQF Level 6.5	1.5 years relevant experience					
	Previous relevant Qualification of NSQF Level 6	3 years relevant experience					
Level 8 PhD/ More than 19 years	PhD in the relevant field	No Experience Required	750 onwards Notional Hours of Training OR 810 Hours of Internship & project	120 hours			
	PhD in any field	1 year relevant experience					
	2-year PG in relevant field	3 year relevant experience					
	2-year PG in any field	4 year relevant experience					
	3-year UG in relevant field or 4-years UG	5 year relevant experience					
	3-year UG in any field	6 year relevant experience					
	Previous relevant Qualification of NSQF Level 6.5	4.5 years relevant experience					
	Previous relevant Qualification of NSQF Level 7	3 years relevant experience					

Annexure III: Types of Assessment, and its Importance

i. **Diagnostic Assessments**: Diagnostic assessments evaluate an individual's understanding on the knowledge and skills of certain topic to enable clear understanding of what the candidate knowledge is.

ii. **Formative Assessments**: Formative assessments is a continuous learning-based evaluation, it's a technique to assess candidates' performance and progress simultaneously. Formative assessments are much simpler than summative assessments and uses lectures, in-class discussions, quick questions, surveys to evaluate students.

iii. **Summative Assessments**: Summative assessment is to evaluate candidates learning at the end of an instructional unit by comparing it against some standard or benchmark. Summative assessments include midterm exam, final project, paper, senior recital.

iv. **Ipsative Assessments:** Ipsative assessment is defined as a specific type of survey or assessment in which the participant is forced to select one option among other socially desirable options. ipsative assessment questions a person or compares a person with himself, highlighting the strengths and weaknesses of a person.

v. **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.

vi. **Criterion-referenced Assessments**: Criterion-referenced tests and assessments are designed to measure candidates' performance against a fixed set of predetermined criteria or learning standards — i.e., concise, written descriptions of what students are expected to know and be able to do at a specific stage of their education.

vii. **Peer-to-Peer Randomised Assessments**: Peer assessments or peer review provides a structured learning process for students to critique and provide feedback to each other on their work. It helps the candidates to develop lifelong skills in assessing and providing feedback to others, and also equips them with skills to self-assess and improve their own work.

viii. **Industry Validates (Of Effectiveness) Assessments**: In the vocation education, Industry validation of effectiveness of training is very important because ultimately the skills acquired are going to be used, acknowledged, and implemented in the industry. Therefore, this is considered as one of the best ways of outcome-based assessment in which the assessment is directly done by the employers.

ix. **AI based Assessments:** Artificial Intelligence based assessment provides constant feedback to supervisor/ instructor about how the candidate learns, the support they need and the progress they are making towards their learning goals. Ideally, AI in assessment is used to prevent human bias having an undue impact on the assessment.

x. **Self-Assessments**: Self-assessment provides candidates with an opportunity to self-evaluate or make judgments about their learning process and products of learning, based on criteria that they have agreed on with their instructor.

xi. **Assessments for Recognition of Prior Learning**: Recognition of Prior Learning is a method to assess the previous learning, functional competencies/ skills of a student/learner acquired through formal, non-formal and informal modes of learning, and is systematically evaluated against the learning outcomes and assessment criteria of a NSQF aligned and approved (NAAA) qualification (leading to the award of credit). The RPL therefore, is also a method to assess whether a student/ learners can demonstrate to meet the assessment requirements on a job-role/ qualification through knowledge, understanding of skills they already possess and they may or may not require undergoing a defined course of learning.

xii. **Game based assessments:** Game-based assessments offer a powerful, candidate-friendly alternative to traditional assessment testing. Game-based assessments are pre-hire assessments built as games to assess candidates' skills in a quick and engaging experience. Game-based assessments are flexible and can be administered on a standalone basis (through an enterprise portal) or via an ATS / HRIS (through API integration).

Annexure IV: General Mechanism for Creditization of Courses in Blended Learning format

Digital: Physical Learning Duration (in ratio and min.)	Types of Content	Assumptions
1 : 1 **(60 min = 60 min)**	• Recorded Live lecture/ Modules (Video) • PDF/ Text/ e-books • Lectures through Broadcast/ TV Channels (LIVE) • Meta-verse, AR/VR/XR, Digital Twins • Social Networking Tool • Actual Plant/ process videos	• Similar pace of delivery as the offline course • The meta-verse: adaptation of the content to a virtual environment is efficient. • Social Networking Tool (60 min = 12 modules/ micro nuggets of 5 min each)
(1: 2) to (1 : 1.11) **(30 to 54 min = 60 min)**	• Video Content • Web eLearning • Online curated self-learning • Presentation • Photographic Image – Instructional (60 min = 10-20 photographic images) • Illustration/ Graphic/ GIF • Virtual Labs • Animation • Simulation-based Drill & Practical • Online interactive mode (two-way) – AI/ Robot Led	• Concise content delivery without sacrificing essential information • Self-paced learning allows Students/Learners to progress at their own speed. • Presentation (60 min = 20-30 slides, each slide covers 2-3 min) • Assume each Picture contains content equivalent to 1000 words • Assuming a moderate level of complexity
(1 : 3.33) to (1 : 2) **(20 to 30min = 60 min)**	• Concise, targeted video content, • Web eLearning • Gamification	• Review the content 3 times for the appropriate learning • With targeted approach and leveraging multimedia elements, such as videos, animations, and interactive graphics • Assuming a moderate level of complexity
Based on specific application	• Meta-verse, • AR/VR/XR, • Digital Twins • Actual Plant/ process videos	• Depending on the level of interactivity and the amount of additional content or activities included, the duration of these course might increase slightly compared to the offline version.

Annexure V: Creditization of Special Provisions under NCrF

S. No	Particular	Conditions/ Assumptions/ Notional Hours	Learning Hours	Credit Mechanism and NSQF/NCrF Levels	AAs for assessment (Deemed/ Otherwise)
1.	Olympiads	i. pre-defined learning outcomes against desired learning ii. Assessment Criteria may be decided by the committee responsible for conduct of the Olympiad.	Based on the learning outcomes, the learning hours required to achieve this level of proficiency may be defined by the Committee	NCrF level shall be based on the academic entry requirements set for the Olympiad. Based on the learning hours required to achieve this level of proficiency, credits may be defined by the Committee	To be assessed through RPL. The entity / Organisation conducting the Olympiad could be considered for recognition as special category AA
2.	Hackathon	A problem statement may be designed and developed by the committee responsible for the conduct of the Hackathon. Learning Outcomes to be established in terms of required solution/s.	May be decided as per the committee planning the Hackathon.	NCrF level may be decided as per the defined learning outcomes, Level Descriptors etc. Based on the learning hours required to achieve these learning outcomes, credits may be defined by the Committee	The Organisation conducting the Hackathon must have a committee consisting of Academicians, Industry experts, Subject Matter experts etc.
3.	Performing Arts/ Music/ Dance Etc	For each, the progression from beginner to Advance level is pre-defined and there are well-defined standards of the same.	Involves hours of practices and hence the various levels may be considered as mark of progression.	NSQF level to be assigned by the bodies concerned based on the performance outcomes, Level Descriptors and other criteria like- • Level of certification in music/ dance • Award Winners like State awards, Padma Shri, Padma Vibhushan etc	Assessment could be direct or through RPL as per the defined progression. The entity of repute like a known music house, or authorised dance school can be identified/ recognised as special category AA for this.
4.	Sports & Games/	For each, the progression from beginner to Advance level is pre-defined and there are well-defined standards of the same.	Involves hours of practices and hence the various levels may be considered as mark of progression.	NSQF level to be assigned by the bodies concerned based on the performance outcome, Level Descriptors and other criteria like- • World record holders at district/ state/national/ international/ Olympic level • Medal Winners at district/state/ national/ international/Olympic level	Assessment could be direct or through RPL as per the defined progression. The entity of repute like a known sports authority or authorised training centre can be identified/ recognised as special category AA for this.
5.	NCC/NSS	i. Learning outcome i.e. Certificate A, B, C of NCC ii. Time spent during training in the NCC/NSS	Learning Hours in absolute hours be taken into account on different levels. Hours may be calculated based on attendance	The certificate A, B or C may be mapped with the academic level to draw equivalence. The credit to be calculated in terms of notional hour spent. NCrF level will remain the same as the academic level	As determined by the designated agency (AA/ NCC/ any other) Eg. Directorate of National Cadet Corps.
6.	Social Work	i. Project-based ii. Social Entrepreneurship ventures	The learning hours spend on field subject to evidence and measurable outcomes	NSQF level shall be decided through pre-assessment as per RPL process and may be allotted subject to clearing assessment	Assessment on basis of RPL or on basis of measurable evidence-based outcome assessed by an entity of repute.

Annexure VI: Skill Component in the Curricular Design for Four Year Undergraduate Program (FYUGP)

S. No	Broad category of Course	Minimum Credit Requirement	Minimum Credit Requirement	
		3-year UG	**4-year UG**	
1	Major (Core)	60	80	Upto 50% of these could be from Skill based Courses
2	Minor Stream can be 2	12+12	16+16	These may also be skill based courses
3	Multi-disciplinary	9	9	
4	Ability Enhancement course	8	8	
5	Skill Enhancement Course	9	9	These are Employability Skills/ Soft Skills, Life Skills
6	Value added course common for all UG	6-8	6-8	
7	Summer internship	2-4	2-4	
10	Research Project/ Dissertation	-	12	
	TOTAL	**120**	**160**	

Annexure VII: Skill-Based VETS courses/ qualifications in the General and Skill Universities/ HEIs

The Government of India, vide its order no. MSDE (DGT)(19/09) 2022CD dated 10th April 2023, constituted a committee to examine various issues related to skill universities (SU) including the flexibility and norms for skill universities viz-a-viz the general universities. Accordingly, a meeting was held on 2nd August 2023, wherein Chairperson UGC, Chairperson AICTE, Chairperson NCVET, Chairman, NETF & NAAC, and Senior Economic Advisor, MSDE were present. The following were discussed and agreed upon on various provisions and parameters applicable to skill universities and general universities:

S. No	Parameters	General Universities	Skill Universities
1.	**Overall Regulation**	By UGC under the UGC Act and Regulations	By UGC under the UGC Act and Regulations
2.	**Types of programs**	Multi-disciplinary	Primarily VETS
3.	**% of Skill Based Program**	As per UGC norms	Minimum 50% of program to be skill based
4.	**% Skill based courses in a program**	• As per UGC norms • Upto 25% inter-disciplinary subject • Upto 50% of skilling component in a program	Upto 70% of skilling component in a program
5.	**Minimum Admission criteria**	Minimum 10+2 / (12th Grade pass) or Equivalent	For Diploma - 10 Grade Pass or completed 2 year ITI after 8th
6	**ME-ME Options and Entry Qualifications - Models**	• ME-ME Options • 1st year UG- certificate • 2nd year UG- Diploma • 3rd year UG- Degree • 4th year UG- Degree with Honours and Honours with Research	In addition to ME-ME, can follow Integrated Model: • 10+2 years = ITI Certificate + 12 Grade • ITI certificate + 2 years= Diploma / UG Diploma • Diploma +1 year= BS degree • Diploma + 2 year= BS Degree with Hons
7.	**NCrF Levels applicable**	Level 4.5 and onwards	Level 3.5 and Onwards (as entry is allowed after 10th Grade)
8.	**Level of Skill Courses/ Qualification/ Job Roles being offered**	Level 4.5 and above • NHEQF courses - Level 4.5 & above (as per UGC guidelines) • NSQF Qualifications - Level 4.5 & above (As per NCVET guidelines)	• NHEQF courses - Level 4.5 & above (as per UGC guidelines) • AICTE Diploma Courses- Level 3.5, 4.0 and 4.5 (As per AICTE guidelines) • NSQF Qualifications- Level 3.5 & above (As per NCVET guidelines)

9.	Norms/Provision: Staffing and Infrastructure Norms	• NHEQF- UGC regulations • NSQF- NCVET Guidelines/ Norms, NSQC approved qualifications	• NHEQF- UGC regulations • NSQF- NCVET Guidelines/ Norms, NSQC approved qualifications
10.	Recognition of Prior Learning (RPL) Norms	• NHEQF- UGC regulations • NSQF- NCVET Guidelines/ Norms	• NHEQF- UGC regulations • NSQF- NCVET Guidelines/ Norms
11.	Internships and on the job training (OJT) Norms	• NHEQF- UGC regulations • NSQF- NCVET Guidelines/ Norms	• NHEQF- UGC regulations • NSQF- NCVET Guidelines/ Norms
12	Apprenticeship And Work/ Apprenticeship Embedded program	• Degree (Level 4.5-8)- UGC to decide, Regulations by UGC • Diploma (Level 4.5) - Regulations by AICTE • Diploma (VETS) (Level 4.5 - 5)- Guidelines by NCVET	• Degree (Level 4.5-8)- Regulation by UGC • Diploma (Level 4.5)- Regulation by AICTE • Diploma (VETS) (Level 4.5 - 5)- Guidelines by NCVET
13.	Standards, Norms and Parameters for the NIRF/ NAAC ranking	• As per Standards, Norms and Parameters by UGC and Chairman NAAC	• Standards, Norms and Parameters to be suitably modified in consultation with the stakeholder
14.	Provision for aspirational nomenclature	• General Degree, Diploma by UGC and • Diploma (VETS) By NCVET	• Degree, Diploma by UGC and • Diploma (VETS) By NCVET
15.	Embedding of VETS in HE	• Multi-disciplinary courses/Employability Skills qualifications from NHEQF & NSQF	• Research and Development of higher order skills-based qualifications

Note: AICTE regulates 3 years Diploma or one-year advance diploma programs where entry level is 3 and 6 respectively. All diploma or advance diploma programs may run either AICTE/ State Technical Education Boards approved or NSQF aligned and approved courses/ Qualifications of appropriate levels.

Annexure VIII: SOP for Development, Alignment & Implementation of Skill Based Courses / Vocational Education, Training and Skilling based Qualifications in Higher Education & School Education

1. NCrF enables integration of Vocational Education, Training and Skilling (VETS) into education to address the vision of NEP providing for holistic and multi-disciplinary education. Accordingly, a wide range of skill-based courses/ qualifications may be offered/integrated/ embedded into every stream of general education with pre-defined learning outcomes and assessment criteria.

2. There are different types of NSQF aligned and approved Vocational Education, Training & Skilling programs which can be implemented across HEIs and schools. The NSQF aligned qualifications and courses are offered for conducting both, the Short-Term training (STT) and Long-Term training (LTT). The short-term trainings are trainings with a duration of less than one year or 1200 notional learning hours. The Long-Term trainings are trainings with duration equal to or more than one year or 1200 notional learning hours.

3. All the Universities/ Higher Education Institutes (HEIs)/ School Boards are encouraged to integrate the vocational education training & skilling (VETS) based courses/ qualifications as per the guidelines. The mode of implementation of skill-based courses/qualifications must focus on enhanced curriculum and enhanced students/ learners engagement. As provided under the NCrF, the learning courses/ qualifications should flexible wherein learners have the flexibility to choose the course/program of their interest and choice enabling them to decide their career trajectory.

Integration of VETS in Higher Education

4. It has been observed that HEIs encounter certain challenges to implement the NSQF aligned & approved qualification as part of their UG/PG curriculum. These are listed below:

    a. The qualification selected by the HEIs for integration with the main-stream HEI curriculum may not be at the required NSQF levels of 4.5 for UG first year, 5 for UG second year, 5.5 for UG third year, 6 for UG fourth year/ PG first year, 6.5 for PG second year, and 7 for MTech 2nd tear courses, resulting in the Learning Outcomes of such qualifications not matching the appropriate year in the UG/PG program.

    b. The duration of the ab-initio full skilling qualifications at level 4.5 to 8, which corresponds to the UG/PG NCrF levels, tend to be higher and may not fit into the curricular structure of UG/ PG programs appropriately unless these are offered as a full semester internship or training programs.

    c. The NSQF qualifications are normally job market based courses/ qualifications leading to a job role. Therefore, prior experience is often a mandatory requirement under the NSQF ladder. However, while integrating such courses/ qualifications into the higher education such requirement of prior experience may not be possible to be met. Moreover, the certifications for such courses/ qualifications are done in the form of a job role which might be misleading.

5. Keeping in view of the challenges, the Skill based courses/ qualifications can be implemented in the Higher Education in different modes. As per the provisions in the NCrF, up to 50 percent of the total credit requirements of a UG/ PG program can be fulfilled by earning credits from the Skill based courses/ qualifications of appropriate NCrF levels (4.5 to 8). As per the SOP for operationalization of NCrF in Higher Education, such skill-based courses/ qualifications may be implemented in different ways by the HEIs for their students as given below:

a. **Model 1: Skill based courses/ qualifications are integrated as part of the UG/ PG curriculum:** The skill-based courses/ qualifications are offered as part of the curricular structure in higher education.

    A. HEIs may offer such skill-based NHEQF courses/ qualifications developed by them with the approval of their highest Authorised/Academic Body. Once integrated in the curriculum with the approval of the highest academic body of HEI, any skill based course/qualification is NHEQF aligned course.

    B. HEIs may offer any NSQF aligned and approved skill-based courses/ qualifications including NOS or MC with the approval of their highest Authorised/Academic Body. Even if a NSQF aligned and approved qualification/ NOS or MC are picked up by the HEI concerned for such integration, no approval of NCVET will be required and the certification shall also be done by the HE institution concerned subject to proper assessment for such courses/ qualifications/ NOS/ MC.

Where a qualification is being developed by a recognised Awarding Body (AB) of NCVET for integration in HEIs and is brought for NSQF alignment and approval, the following shall be applicable and ensured by the developing AB:

    i. The integration will be as per the curricular design and structure of the HEI course/ program.

    ii. A NOS/MC/Qualifications/ course being designed for integration shall be in the nature of a course subject name or a skill competency and doesn't have to be with the nomenclature of a job-role which could mislead the students or the employers.

    iii. However, if a student undertakes the full NSQF aligned and approved course/ qualification with the prescribed number of hours as a 5 to 7 months project or as internship, even as a job role based certification could be issued to such student along with the credits which he could use as part of the UG/ PG program.

    iv. Thus, the NSQF aligned and approved qualifications designed for integration with UG/PG programs, may span across at least one semester of study in the form of Internship Program/ Project. These qualifications/ courses must align with the overall curriculum design of the UG or PG course and be approved by the body of the higher education institution authorised by the regulator concerned. The entry requirements for such NSQF qualifications may not require any prior work experience thereby catering to the 'pursuing education' category as mentioned in NSQF parameters.

v. The Qualifications/ NOS/ MC shall be of appropriate level (Levels 4.5 to level 6 for a UG student and levels 6 to 7 in case of PG) depending on the field.

b. **Model 2: Skill-based courses/ qualifications offered as an additional course/ qualification for regular enrolled students of HEIs:** Such courses may not be integrated within the curriculum of UG/ PG program but are offered as optional/ additional courses, with additional credits and certifications for the regular students enrolled in UG/PG programs.

There could be two scenarios in such cases:

(a). Such qualifications/ courses could be NHEQF aligned- certification for such courses is to be done by the HEI concerned as per the NHEQF norms of staffing, infrastructure, nomenclature, guidelines/ regulations as may be applicable etc.

(b). Such qualifications/ courses could also be NSQF aligned. In this case also no approval of the NCVET will be necessary for **offering such NSQF courses/ qualifications as an additional course/ qualification for regular enrolled students of HEIs**. However, the following shall be applicable:

i. In case the HEI concerned is not a recognised AB of NCVET and directly implements the Qualification - no NCVET certificate will be given. However, to ensure the quality standards the related guidelines of NCVET with regards to the training standards, infrastructure including the requirement of labs and workshops, qualifications of trainers and instructors' delivery of the course with the practical and proper assessment of the learning outcomes will be followed by the HEI concerned.

ii. In case, the HEI concerned is a recognised AB of NCVET or the qualification is offered through a recognised AB of NCVET, NCVET certificate can be issued, and the **qualifications offered could be of any level**.

iii. The nomenclature of the qualifications/ NOS/ MC offered as standalone course, will be in the nature of a course subject name or a skill competency and doesn't have to be with the nomenclature of a job-role. However, it may be shown to be a job role if it fulfils all the requirements of an NSQF aligned and approved course/ qualifications including the entry qualifications, notional hours, previous experience or OJT, etc.

c. **Model 3: Skill-based courses/ qualifications offered as additional course/ qualification,** for students and learners **other than those enrolled for UG/PG course in the HEI, i.e.** from the open market**:** For this category of skilling the following shall apply:

i. HEIs would need to seek the recognition as an Awarding body (AB) from NCVET or implement the skill qualifications through NCVET recognised ABs. It may be mentioned that a very simplified process for recognition as awarding body has already been approved by NCVET for the higher education institutions and school boards.

ii. They may offer NSQF aligned and approved skill based courses/qualifications developed by them and got approved by National Skills Qualification Committee (NSQC).

iii. Alternatively, the HEI concerned may adopt the qualifications from other recognised Awarding Bodies of NCVET and conduct the training by following the detailed process and methodology provided in the SOP for Operationalisation of NCrF in Vocational Education, Training & Skilling.

iv. A national level NCVET skill competency certificate may be issued

v. NSQF aligned courses of any level can be offered subject to their adoption of such courses/ qualifications. Also, to ensure the quality standards the related guidelines of NCVET with regards to the training standards, infrastructure including the requirement of labs and workshops, qualifications of trainers and instructors delivery of the course with the practical and proper assessment of the learning outcomes will be followed by the HEI concerned.

vi. Registration of the institution and the students/ learners for the APAAR, in the Academic Bank of Credits (ABC) and on the Skill India Digital Hub (SIDH) shall will be mandatory.

vii. Even if the HEI is not a recognised Awarding body (AB) of NCVET, the HEI may offer its own NHEQF aligned skill-based courses which are duly approved by its highest awarding body to the students and learners **other than those enrolled for UG/PG course in the HEI, i.e.** from the open market. In such cases the HEI certification may be issued with credits. **However, in such cases the NCVET approved certificate shall not be issued by the HEI.**

5.1 The **ABs developing qualifications/ NOS to be offered as standalone courses as in Model 2 and Model 3 shall keep the above requirements in mind**.

6. **Integration of VETS in School Education:** The same principles shall apply to skill courses offered in schools by the School Boards concerned.

2024-2025

IMPLEMENTING THE NATIONAL CREDIT FRAMEWORK IN SCHOOLS

SOP FOR IMPLEMENTATION

CENTRAL BOARD OF SECONDARY EDUCATION

GUIDELINES FOR IMPLEMENTING NATIONAL CREDIT FRAMEWORK (NCRF) IN SCHOOLS

1. BACKGROUND

1.1   The National Education Policy (NEP) 2020 envisions a transformational shift in the education system of India. The Policy focuses on developing conceptual understanding and critical skills among students. For this purpose, school education is imagined as a flexible, multi-disciplinary endeavour, rooted in the country's ethos that would create self-sufficient learners capable of meeting the challenges of the 21st century.

1.2   The fundamental guiding principles of structuring education as espoused by NEP 2020 are:

    a.   recognizing, identifying, and fostering the unique capabilities of each student,

    b.   flexibility, so that learners have the ability to choose their learning trajectories and programmes,

    c.   no hard separations between arts and sciences, between curricular and extra-curricular activities, between vocational and academic streams, etc.

    d.   multidisciplinary and a holistic education across the sciences, social sciences, arts, humanities, and sports for a multidisciplinary world in order to ensure the unity and integrity of all knowledge;

    e.   emphasis on conceptual understanding rather than rote learning and learning-for-exams;

    f.   creativity and critical thinking to encourage logical decision-making and innovation;

    g.   ethics and human & constitutional values

h. promoting multilingualism and the power of language in teaching and learning;

i. life skills such as communication, cooperation, teamwork, and resilience;

(NEP 2020, Page 5)

The policy has conceptualised *imaginative and flexible curricular structures (that) will enable creative combination of disciplines for study.*

(NEP 2020, Page 37)

1.3 To address this, a High-level Inter-Ministerial committee on National Credit Accumulation and Transfer Framework was constituted and has presented its report as the *National Credit Framework (NCrF).*

2. KEY PRINCIPLES FROM THE NCRF:

2.1 The NCrF is the framework formulated for a unified credit accumulation and transfer for all forms of education in India.

This framework will allow students to earn credits towards by demonstrating their knowledge and skills in a variety of subjects and activities.

The framework is designed to be "enabling" rather than regulatory, leveraging the existing strengths and resources of regulatory bodies and autonomous institutions like universities, state school boards, state technical boards, and NIOS.

This approach enables NCrF to work in tandem with other regulatory and curricular changes happening in the educational system.

The NCrF recognizes the pervasiveness and benefits of online and distance learning and incorporates these modes of education as well.

The key premise of this framework:

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

b. For the purpose of credit calculations under National Credit Framework (NCrF), 30 notional learning hours will be counted as one Credit.

c. The students may take additional courses/ programs/subjects/projects beyond 40 credits to get additional credits for the same.

d. The total learning hours can be creditised, subject to assessment, and may include class room teaching/ learning, laboratory work/ innovation labs/ class projects/ assignments/ tutorials; sports and games, yoga, physical activities, performing arts, music, handicraft work, social work, NCC, bagless days; examinations/ class tests/ quizzes/ assessments; vocational education, training and skilling, minor/ major project work/ field visits in skill education as well as on the job training (OJT)/ internship/ apprenticeship/ Experiential learning including relevant experience and professional levels acquired etc.

e. This would close the gap in achievement of learning outcomes by shifting the classroom education to competency and learning outcome-based education and learning.

f. The assessment is thus mandatory for earning credits for all types of learning and progression to the next assessment band.

FOR SCHOOL EDUCATION, THE FOLLOWING ASSESSMENT BANDS WOULD BE APPLICABLE:

Academic Band/ Hours of Learning per year	Academic Grade/ Levels- School Education & Higher Education	Vocational Education Long Term Trg/ Short Term Trg (LTT/STT)	National Credit Framework (NCrF) Credit levels	Credits Earned/ year	Credit Points Earned	Assessment Stage and equivalence
2 year- Senior Secondary (1200 Hrs/yr)	**Class XII**	10th+2-Yr NTC/NAC/CITS, NSQF Level 4 STT	4.0	40	160	Class XII (CBSE/ School Boards/ NIOS)
	Class XI	10th+1-Yr NTC/NAC/CITS, NSQF Level 3.5 STT	3.5	40	140	Class XI (CBSE/ School Boards/ NIOS)
2 Year- Secondary (1200 Hrs/yr)	**Class X**	8th+2-Yr NTC/NAC, NSQF Level 3 STT	3.0	40	120	Class X (CBSE/School Boards/ NIOS)
	Class IX	8th+1-Yr NTC/NAC, NSQF Level 2.5 STT	2.5	40	100	Class IX (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	
3 year- Preparatory (1000 Hrs/yr)	**Class V**	NSQF Level 1 STT	1.0	33	33	Class V (thru School Boards/ NIOS)
	Class IV		0.8	33	26.4	
	Class III		0.6	33	19.8	
5 year- Foundational (800 Hrs/yr)	**Class II**		0.4	27	10.8	
	Class I		0.2	27	5.4	
	Pre-School (3 years)		0.1x3	27 x 3 =81	8.1	

Academic Band/ Hours of Learning per year	Academic Grade/ Levels- School Education & Higher Education	Vocational Education Long Term Trg/ Short Term Trg (LTT/STT)	National Credit Framework (NCrF) Credit levels	Credits Earned/ year	Credit Points Earned	Assessment Stage and equivalence
2 year- Senior Secondary (1200 Hrs/yr)	**Class XII**	10th+2-Yr NTC/NAC/CITS, NSQF Level 4 STT	4.0	40	160	Class XII (CBSE/School Boards/NIOS)
	Class XI	10th+1-Yr NTC/NAC/CITS, NSQF Level 3.5 STT	3.5	40	140	Class XI (CBSE/School Boards/ NIOS)
2 Year- Secondary (1200 Hrs/yr)	**Class X**	8th+2-Yr NTC/NAC, NSQF Level 3 STT	3.0	40	120	Class X (CBSE/School Boards/NIOS)
	Class IX	8th+1-Yr NTC/NAC, NSQF Level 2.5 STT	2.5	40	100	Class IX (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	

3. GENERAL GUIDELINES FOR IMPLEMENTING NATIONAL CREDIT FRAMEWORK (NCRF) IN SCHOOLS:

a. Attendance of students must be made mandatory. Minimum attendance in a session may be fixed (suggested - at least 75%).

b. The hours allocated to each academic year and credits earned per year may be fixed.

    {As per NCrF, total Notional Learning Hours for assignment of credits across school education, higher education and vocational education/skilling have been agreed to be 1200 Hrs per year for which the students/ learners shall be awarded 40 credits i.e., 30 Notional Learning Hours will be counted as one credit.}

c. The curriculum of each subject must be divided as per the hours allotted.

d. The credits shall be reflected in the Marks Statement/ Grade Card for final examinations, alongwith Marks and Grades

e. The credits earned shall be deposited in the Academic Bank of Credit of a student which will be linked with the APAAR Id and DigiLocker of the student, in future.

f. Credits can only be earned in full or No credit, i.e., student can earn full credits upon passing a subject after assessment or No credit for not fulfilling the assessment criteria.

g. The scheme of studies must be redesigned/ updated and should mention the credits and hours against each subject/component of assessment.

h. As per the scheme of studies of the respective Board, the no. of hours per subject may be fixed and accordingly credits to be earned per subject need to be fixed.

i. The curriculum of each subject must be divided as per the hours allotted. Each chapter may then be allotted Notional Hours accordingly. After the release of the National Curriculum Framework (NCF), hours may be allocated to each topic/ concept of the chapter.

j.   Each school period is usually of 45 minutes. Total learning hours per subject in school is approx. 160 hours and minimum 40-50 hours per subject is earmarked for project work, peer learning, self-study etc. Thus, totalling to 210 hours.

k.   The credits shall be reflected in the Marks Statement/Grade Card for final examinations, alongwith Marks and Grades

l.   The credits earned shall be deposited in the Academic Bank of Credit of a student which will be linked with the DigiLocker of the student.

m.   Credits can only be earned in full or No credit, i.e., student can earn full credits upon passing a subject after assessment or No credit for not passing a subject.

n.   Credits earned shall be independent of marks obtained.

4. IMPLEMENTING NATIONAL CREDIT FRAMEWORK (NCRF) IN SCHOOLS AFFILIATED TO CBSE IN CLASSES VI, IX & XI ON PILOT BASIS

4.1 KEY PRINCIPLES FROM THE NATIONAL CREDIT FRAMEWORK (NCRF):

a.   The NCrF is the framework formulated for a unified credit accumulation and transfer for all forms of education in India.

b.   This framework will allow students to earn credits towards by demonstrating their knowledge and skills in a variety of subjects and activities.

c.   The framework is designed to be "enabling" rather than regulatory, leveraging the existing strengths and resources of regulatory bodies and autonomous institutions like universities, state school boards, state technical boards, and NIOS.

d.   The NCrF recognizes the pervasiveness and benefits of online and distance learning and incorporates these modes of education as well.

e.   The key premise of National Credit Framework (NCrF):

f.   The total Notional Learning Hours for assignment of credits across school education, has been agreed to be 1200 hours per year for which the students shall be awarded 40 Credits.

g.   For the purpose of credit calculations under NCrF, 30 notional learning hours will be counted as one Credit.

h.   The students may take additional courses/ programs/subjects/projects beyond 40 credits to get additional credits for the same.

i.   The total learning hours can be creditised, subject to assessment, and may include class room teaching/ learning, laboratory work/ innovation labs/ class projects/ assignments/ tutorials; sports and games, yoga, physical activities, performing arts, music, handicraft work, social work, NCC, bagless days; examinations/ class tests/ quizzes/ assessments; vocational education, training and skilling, minor/ major

77

project work/ field visits in skill education as well as on the job training (OJT)/ internship/ apprenticeship/ Experiential learning including relevant experience and professional levels acquired etc.

j. This would close the gap in achievement of learning outcomes by shifting the classroom education to competency and learning outcome-based education and learning.

k. **The assessment is thus mandatory for earning credits for all types of learning and progression to the next assessment band.**

l. Assessment bands applicable to schools affiliated to CBSE:

Academic Band/ Hours of Learning per year	Academic Grade/ Levels- School Edu.	Credits Earned/ year	Assessment by
2 year- Senior Secondary (1200 Hrs/yr)	**Class XII**	40	CBSE
	Class XI	40	School
2 Year- Secondary (1200 Hrs/yr)	**Class X**	40	CBSE
	Class IX	40	School
3 year- Middle (1200 Hrs/yr)	**Class VIII**	40	School
	Class VII	40	School
	Class VI	40	School

m. National Credit Framework (NCrF) shall be introduced in CBSE Schools on pilot basis in classes VI, IX and XI from the present session, i.e., 2024-2025 onwards.

n. The guidelines for implementing NCrF in classes VI, IX & XI on pilot basis are as follows:

5. BELOW MENTIONED STEPS ARE TO BE FOLLOWED BY THE SCHOOLS/ PILOTING SCHOOLS FOR IMPLEMENTING NCRF IN CLASS VI (SESSION 2024-25):

a. Attendance of students must be made mandatory. Minimum attendance in a session must be 75%.

b. The hours allocated to each academic year and credits earned per year have been fixed (as per NCrF).

   {As per NCrF, total Notional Learning Hours for assignment of credits across school education, higher education and vocational education/skilling have been agreed to be 1200 hours per year for which the students/ learners shall be awarded 40 credits i.e., 30 Notional Learning Hours will be counted as one credit.}

c. The curriculum of each subject must be divided as per the hours allotted.

d. The credits shall be reflected in the Marks Statement/ Grade Card for final examinations, alongwith Marks and Grades

e. The credits earned shall be deposited in the Academic Bank of Credit of a student which will be linked with the APAAR Id and DigiLocker of the student, in future.

f. Credits can only be earned in full or No credit, i.e., student can earn full credits upon passing a subject after assessment or No credit for not fulfilling the assessment criteria.

g. **Tentative credits allotted for each subject in classes VI (for pilot phase only) are proposed as follows:**

S. NO.	MIDDLE SCHOOL	CREDITS
1	Language 1 (R1)	3
2	Language 2 (R2)	3
3	Language 3 (R3)	3
4	Mathematics	5
5	Science	7
6	Social Science	7
7	Art Education	3.5

8	Physical Education	3.5
9	Vocational Education/ Skill Modules	5
	TOTAL	40

h. The time allocation in middle school (as per table 4.4iii Pg. 138 of NCF-SE), is as follows:

	SUBJECTS	ANNUAL HOURS	ANNUAL PERIODS
1	R1+Library	65	97.5
2	R2	70	105
3	R3	75	112.5
4	Mathematics	115	172.5
5	Science	160	240
6	Social Science	160	240
7	Art Education	100	150
8	Physical Education	100	150
9	Vocational Education/ Skill Modules	110	165
		955	**1432.5**

i. After integrating NCrF and the proposed time allocation as per NCF-SE, the time allocated per subjects and the credits to be earned per subject in class VI are as follows:

#	SUBJECTS	ANNUAL HOURS (A)	ANNUAL PERIODS	SELF - STUDY/ PRACTICE/ PROJECT* (IN HOURS) (B)	TOTAL ANNUAL LEARNING HOURS (A + B)	CREDITS EARNED
1	R1+Library	65	97.5	25	90	3
2	R2	70	105	20	90	3
3	R3	75	112.5	15	90	3
4	Mathematics	115	172.5	35	150	5
5	Science	160	240	50	210	7
6	Social Science	160	240	50	210	7
7	Art Education	100	150	5	105	3.5
8	Phy. Education	100	150	5	105	3.5
9	Voc. Education/ Skill Modules	110	165	40	150	5
	TOTAL	**955**	**1432.5**	**245**	**1200**	40

Note: ***Annual learning hours include class room teaching/ learning, laboratory work/ innovation labs/ class projects/ assignments/ tutorials, examinations/ class tests/ quizzes/ assessments, minor/ major project work/ field visits as well as on the job training (OJT)/ internship/ apprenticeship, etc.**

6. BELOW MENTIONED STEPS ARE TO BE FOLLOWED BY THE SCHOOLS/ PILOTING SCHOOLS FOR IMPLEMENTING NCRF IN CLASS IX (SESSION 2024-25):

a. Attendance of students must be made mandatory. Minimum attendance in a session must be 75%.

b. The hours allocated to each academic year and credits earned per year have been fixed (as per NCrF).

c. As per the applicable scheme of studies of CBSE in class IX a student has to pass in 5 subjects (2 languages + 3 main subjects) to be declared 'PASS' and eligible for earning the credits.

d. 210 hours/periods have been allotted per subject. Thus, 1050 hours have been allotted to five compulsory subjects. 150 hours have been allotted to subjects of Internal Assessment, viz., Health & Physical Education & Work Experience and Art Education, which have been allotted 90 hours & 60 hours, respectively.

e. Each subject has been allotted 7 credits (@ 1 credit per 30 hours) whereas the subjects of Internal Assessment, viz., Health & Physical Education & Work Experience and Art Education, have been allotted 3 (2+1) and 2 credits, respectively.

f. Thus, a student passing class IX with 5 subjects, will be eligible for earning 40 credits.

g. In case a student opts for 6 or 7 subjects, the credits of these subject shall only be counted, if the student fulfils the assessment criteria of the Board i.e., s/he will be eligible for getting credits for these subjects only if s/he passes class IX as per the existing scheme of students.

h. Students passing class IX with 5/6/7 subjects will be eligible for earning 40/47/54 credits, respectively.

i. **Tentative credits allotted for each subject in classes IX (for the pilot phase only) are as proposed as follows:**

	SUBJECTS	ANNUAL LEARNING HOURS*	CREDITS
Compulsory Subjects with External Assessment/ Examination	Language 1	210	**7**
	Language 2	210	**7**
	Mathematics -Standard/ Basic	210	**7**
	Science	210	**7**
	Social Science	210	**7**
Subjects with Internal Assessment	Health & Physical Education and Work Experience	90	**3**
	Art Education	60	**2**
Optional Subject(s)	Skill Subject/ Language 3/ Any other subject	210	**7**
	Language 3/ Skill subject/ Any other subject		**7**
	TOTAL CREDITS EARNED		**40 - 54**

Note: *Annual learning hours include class room teaching/ learning, laboratory work/ innovation labs/ class projects/ assignments/ tutorials, examinations/ class tests/ quizzes/ assessments, minor/ major project work/ field visits as well as on the job training (OJT)/ internship/ apprenticeship, etc.

j. Sample curriculum of some Skill subjects (with allotment of hours to the units) is being annexed for perusal and reference.

k. Sample marks statement for class IX:

SUBJECT CODE	SUBJECT NAME	THEORY	PRACTICAL	MARKS	GRADE	CREDITS
184	English Lang. & Lit.	056	019	075	C1	**7**
002	Hindi - Course A	058	019	077	B2	**7**
041	Mathematics - Standard	046	018	064	B2	**7**
086	Science	052	019	071	B1	**7**

087	Social Science	057	020	077	B2	7
	Health & Physical Education and Work Experience	--	--	--		2
	Art Education	--	--	--		1
	Total Credits earned					**40**

Result: PASS

7. BELOW MENTIONED STEPS ARE TO BE FOLLOWED BY THE SCHOOLS/ PILOTING SCHOOLS FOR IMPLEMENTING NCRF IN CLASS XI (SESSION 2024-25):

a. Attendance of students must be made mandatory. Minimum attendance in a session must be 75%.

b. The hours allocated to each academic year and credits earned per year have been fixed (as per NCrF).

c. As per the existing scheme of studies of CBSE applicable in class XI, a student has to pass in 5 subjects (1 language (core) + 4 main Subjects/Electives to be declared 'PASS' and eligible for earning the credits.

d. 210 hours/periods have been allotted per subject. Thus, 1050 hours have been allotted to five compulsory subjects. 150 hours have been allotted to subjects of Internal Assessment, viz., Health & Physical Education, Work Experience, and General Studies, which have been allotted 90 & 60 hours, respectively.

e. Each subject has been allotted 7 credits (@ 1 credit per 30 hours) whereas the subjects of Internal assessment, viz., Health & Physical Education, Work Experience, and General Studies, have been allotted 3 & 2 credits, respectively.

f. Thus, a student passing class XI with 5 subjects, will be eligible for earning 40 credits.

g. In case a student opts for 6 subjects, the credits of these subject shall only be counted, if the student fulfils the assessment criteria of the Board i.e., s/he will be eligible for getting credits for these subjects only if s/he passes class XI as per the existing scheme of students.

h. Students passing class XI with 5/6 subjects will be eligible for earning 40/47 credits, respectively.

i. **Tentative credits allotted for each subject in classes XI (for the pilot phase only) are as proposed as follows:**

	SUBJECTS	ANNUAL LEARNING HOURS*	CREDITS
Compulsory Subjects (with External Assessment/ Examination)	Language 1	210	7
	Language 2/ Academic Elective	210	7
	Academic Elective/ Skill Elective	210	7
	Academic Elective/ Skill Elective	210	7
	Academic Elective/ Skill Elective	210	7
Subjects with Internal Assessment	Health & Physical Education	60	2
	Work Experience	30	1
	General Studies	60	2
Optional subject(s)	Any other subject (Language/ Academic/ Skill)		7
	TOTAL CREDITS EARNED		40 - 47

Note: *Annual learning hours include class room teaching/ learning, laboratory work/ innovation labs/ class projects/ assignments/ tutorials, examinations/ class tests/ quizzes/ assessments, minor/ major project work/ field visits as well as on the job training (OJT)/ internship/ apprenticeship, etc.

j. Sample marks statement for class XI:

Subject code	Subject Name	Theory	Practical	Marks	Grade	Credits
301	English Core	076	020	96	A1	7
042	Physics	065	028	93	A1	7
043	Chemistry	040	023	63	B2	7
044	Biology	065	030	95	A1	7
049	Painting	030	070	100	A1	7
500	Work Experience	--	--	--	A	2
502	Health & Phy. Edu.	--	--	--	A	2
503	General Studies	--	--	--	A	1
	Total Credits earned					40

Result: PASS

8. FOLLOWING STEPS AND GUIDELINES ARE TO BE FOLLOWED FOR IMPLEMENTING NCRF IN CLASS IX FROM SESSION 2025-26 (AS PER THE SCHEME OF STUDIES AND TIME TABLE MENTIONED IN NCF-SE)

8.1 FOR CLASS IX (AS PER NCF-SE):

a. As per NCF-SE, a student of class IX/X shall have to study:

-   3 languages (R1, R2, R3 – at least two of which are native to India.

-   7 subjects — Mathematics and Computational Thinking, Social Science, Science, Art Education, Physical Education and Well-being, Vocational Education, and Interdisciplinary Areas.

b. Thus, a student has to pass in each of the 10 subjects (3 languages + 7 subjects) to be declared 'PASS'.

c. Total hours allotted to class IX/X as per NCrF is 1,200. The proposed distribution of Hours/periods is as follows:

-   120 hours/periods have been allotted to each of the three languages as well as to the Interdisciplinary Areas (Environmental Education).

-   150 hours/periods each have been allotted to Mathematics & Computational Thinking, Social Science, Science and Vocational Education.

-   60 hours/periods each have been allotted to Art Education and Physical Education & Well-being

d. Each subject has been allotted credits @ 1 credit per 30 hours

e. Thus, a student passing class IX with 10 subjects, will be eligible for earning 40 credits.

f. Scheme of studies proposed in class IX-X as per NCF-SE is as follows:

Curricular Areas	Subjects	Examinations
Languages	Language 1	External Examination
	Language 2	External Examination
	Language 3	External Examination
Mathematics & Computational Thinking	Mathematics	External Examination
Science	Science	External Examination
Social Science	Social Science	External Examination
Art Education	Art Education	Local Assessment with External Examiner
Interdisciplinary Areas	Environmental Education	External Examination
Physical Education & Well-being	Physical Education	Local Assessment with External Examiner
Vocational Education	Vocational Education	Local Assessment with External Examiner

(Source: Figure 2.3i pg no. 79 of NCF-SE)

86

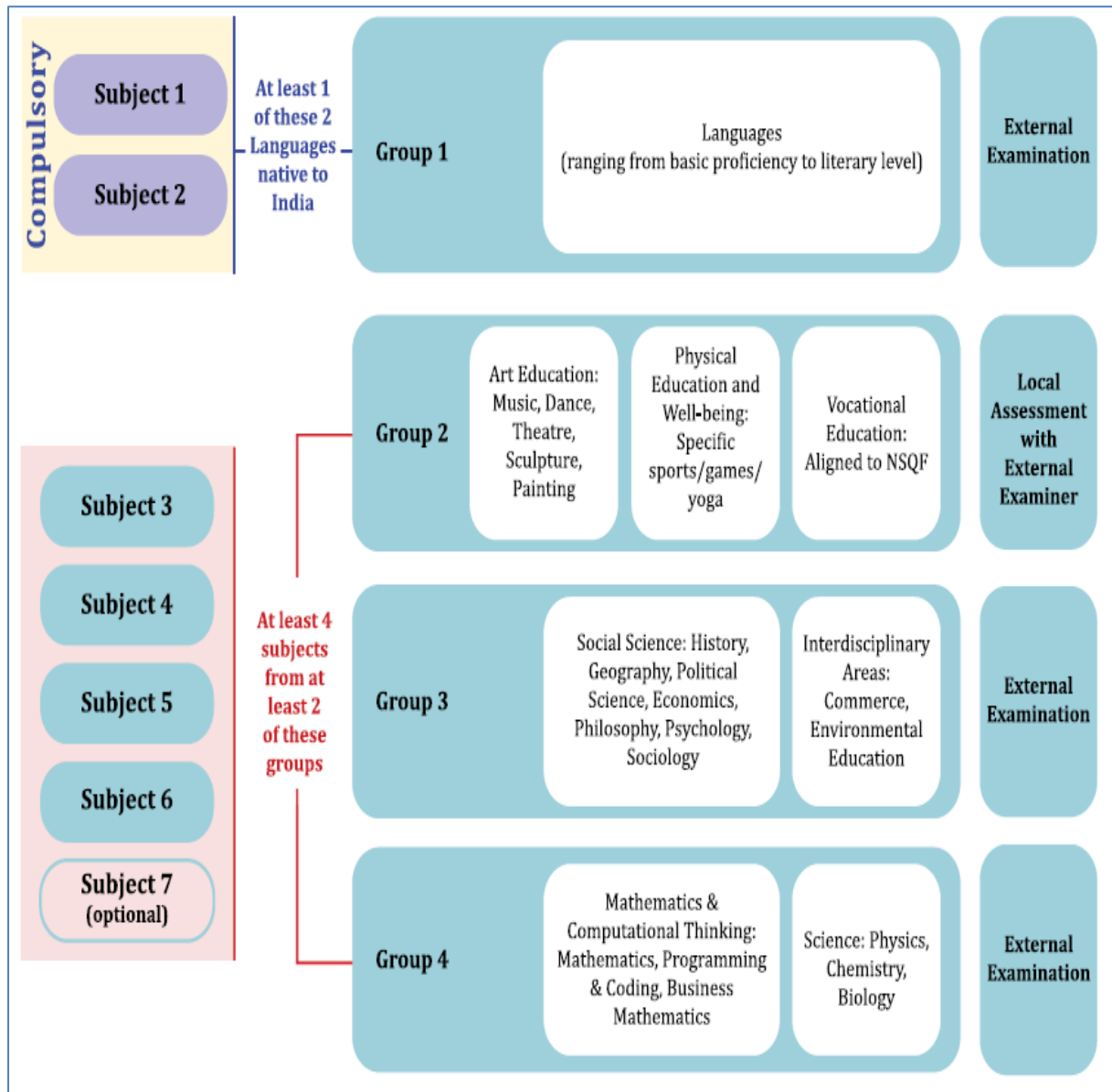g. The allocation of credits for different subjects are proposed as follows:

Curricular areas	Subjects	Hours*	Marks	Credits	Mode of Examination
Languages	Language 1 (R1)	120	100	**4**	External Examination
	Language 2 (R2)	120	100	**4**	
	Language 3 (R3)	120	100	**4**	
Mathematics and Computational Thinking	Mathematics (Standard/ Basic)	150	100	**5**	
Science	Science	150	100	**5**	
Social Science	Social Science	150	100	**5**	
Interdisciplinary Areas	Environmental Education	120	100	**4**	
Vocational Education	Vocational/ Skill Subject	150	100	**5**	
Physical Education & Well-being	Physical Education	60		**2**	Local Assessment with External Examiner
Art Education	Art Education	60		**2**	
	TOTAL	**1200**		**40**	

Note: * Annual learning hours include class room teaching/ learning, laboratory work/ innovation labs/ class projects/ assignments/ tutorials, examinations/ class tests/ quizzes/ assessments, minor/ major project work/ field visits as well as on the job training (OJT)/ internship/ apprenticeship, etc.

8.2 FOR CLASS XI (AS PER NCF-SE):

a.   As per NCF-SE, a student of class XI/XII shall have to study:

- 2 languages (from Group 1, at least one of which is native to India).

- 4 subjects (with an optional fifth subject) from at least two of the remaining groups i.e., Group 2, 3 & 4)

b.   Thus, a student has to pass in each of the 6 subjects (2 languages + 4 subjects) to be declared 'PASS'.

c.   Total hours allotted to class XI/XII as per NCrF is 1,200. The proposed distribution of Hours/periods is as follows:

- 180 hours/periods have been allotted to each of the two languages (subjects 1 & 2)

- 210 hours/periods each have been allotted to remaining 4 subjects (subjects 3 to 6)

d.   Each subject has been allotted credits @ 1 credit per 30 hours

e.   Thus, a student passing class 6 with 10 subjects, will be eligible for earning 40 credits.

f.   The scheme of studies as mentioned in NCF-SE for Class XI/XII is as follows:

(Source: Figure 2.3iii pg no. 83 of NCF-SE)

g. The allocation of credits for different subjects will be as follows:

	Subjects	Hours	Marks	Credits
Compulsory Subjects	Subject 1- Language 1	180	100	**6**
	Subject 2 - Language 2	180	100	**6**
	Subject 3	210	100	**7**
	Subject 4	210	100	**7**
	Subject 5	210	100	**7**
	Subject 6	210	100	**7**
Optional	Subject 7	210*	100	**7**
	TOTAL	1,200		**40 - 47 credits**

h. Students passing class XI with 6/7 subjects will be eligible for earning 40/47 credits, respectively.

9. AWARDING OF GRADES:

a. Grades will be awarded in each subject.

b. For awarding the grades, the Board will put all the passed students in a rank order and will award the grades as follows:

GRADE	OCTILE
A-1	Top 1/8th of the passed candidates
A-2	Next 1/8th of the passed candidates
B-1	Next 1/8th of the passed candidates
B-2	Next 1/8th of the passed candidates
C-1	Next 1/8th of the passed candidates
C-2	Next 1/8th of the passed candidates
D-1	Next 1/8th of the passed candidates
D-2	Next 1/8th of the passed candidates
E*	Essential Repeat

Subject: Retail (Subject Code 401)

Total Marks: 100 (Theory-50 + Practical-50)

Total Credits to be earned: 7

CLASS IX

	UNITS	NO. OF HOURS		MAX. MARKS
PART A	**EMPLOYABILITY SKILLS**			
	Unit 1: Communication Skills-I	15		2
	Unit 2: Self-management Skills-I	10		2
	Unit 3 ICT Skills-I	15		2
	Unit 4: Entrepreneurial Skills-I	10		2
	Unit 5: Green Skills-I	10		2
	Total	**60**		**10**
PART B	**SUBJECT SPECIFIC SKILLS**	**THEORY**	**PRACTICAL**	
	Unit 1: Introduction to Retail	24	16	10
	Unit 2: Receiving and Storage of Goods	24	16	10
	Unit 3: Stock Levels in Storage	24	16	10
	Unit 4: Customer Service	18	12	10
	Total	**90**	**60**	**40**
PART C	**PRACTICAL & PROJECT WORK**			
	Practical File			15
	Practical Examination + Viva voce			20
	Project Work / Field Visit / Student Portfolio (Any one has to be done) **+ Viva Voce**			15
	Total			**50**
	GRAND TOTAL	**210**		**100**

Subject: Information Technology (Subject Code - 402)

Total Marks: 100 (Theory-50 + Practical-50)

Total Credits to be earned: 7

CLASS IX

	UNITS	NO. OF HOURS		MAX. MARKS
Part A	**Employability Skills**			
	Unit 1: Communication Skills-I	15		2
	Unit 2: Self-management Skills-I	10		2
	Unit 3 ICT Skills-I	15		2
	Unit 4: Entrepreneurial Skills-I	10		2
	Unit 5: Green Skills-I	10		2
	Total	**60**		**10**
Part B	**Subject Specific Skills**	**Theory**	**Practical**	
	Unit 1: Introduction to IT- ITeS industry	4	3	4
	Unit 2: Data Entry & Keyboarding Skills	8	6	6
	Unit 3: Digital Documentation	23	14	10
	Unit 4: Electronic Spreadsheet	30	22	10
	Unit 5: Digital Presentation	25	15	10
	Total	**90**	**60**	**40**
Part C	**Practical Work**			
	Practical Examination			15
	Written Test			10
	Viva Voce			10
	Total			**35**
Part D	**Project Work/ Field Visit**			
	Practical File/ Student Portfolio			10
	Viva Voce			05
	Total			**15**
	Grand Total	**210**		**100**

DATA SCIENCE (SUBJECT CODE - 419)

Total Marks: 100 (Theory-50 + Practical-50)

Total Credits to be earned: 7

CLASS IX

	UNITS	NO. OF HOURS		MAX. MARKS
PART A	**Employability skills**			
	Unit 1: Communication Skills-I	15		2
	Unit 2: Self-management Skills-I	10		2
	Unit 3 ICT Skills-I	15		2
	Unit 4: Entrepreneurial Skills-I	10		2
	Unit 5: Green Skills-I	10		2
	TOTAL	**60**		**10**
PART B	**Subject specific skills**	**Theory**	**Practical**	
	Unit1: Introduction	31	15	8
	Unit 2: Arranging and Collecting Data	31	15	8
	Unit 3: Data Visualizations – Part 1	22	25	20
	Unit 4: Ethics in Data Science	6	5	4
	TOTAL	**90**	**60**	**40**
PART C	**PRACTICAL WORK / PROJECT WORK**			
	Practical File/ Student Portfolio			20
	Practical Examination			20
	Viva Voce			10
	TOTAL			**50**
	GRAND TOTAL	**210**		**100**

RETAIL (SUBJECT CODE - 801)

Total Marks: 100 (Theory-60 + Practical-40)

Total Credits to be earned: 7

CLASS XI

	UNITS	NO. OF HOURS		MAX. MARKS
PART A	**EMPLOYABILITY SKILLS**			
	Unit 1: Communication Skills – III	15		2
	Unit 2: Self-Management Skills – III	10		2
	Unit 3: ICT Skills – III	15		2
	Unit 4: Entrepreneurial Skills– III	10		2
	Unit 5: Green Skills – III	10		2
	Total	**60**		**10**
PART B	**SUBJECT SPECIFIC SKILLS**	**THEORY**	**PRACTICAL**	
	Unit 1: Fundamentals of Retailing	18	12	8
	Unit 2: Process of Credit Application	16	10	7
	Unit 3: Mechanism for Customers to Choose Right Products	18	12	10
	Unit 4: Specialist Support to Customers	19	13	12
	Unit 5: Health and Safety Management	19	13	13
	Total	**90**	**60**	**50**
PART C	**PRACTICAL & PROJECT WORK**			
	Practical File			10
	Practical Examination + Viva voce			20
	Project Work / Field Visit / Student Portfolio (Any one has to be done) **+ Viva Voce**			10
	Total			**40**
	GRAND TOTAL	210		100

LIBRARY & INFORMATION SCIENCES (SUBJECT CODE 836)

Total Marks: 100 (Theory-60 + Practical-40)

Total Credits to be earned: 7

CLASS XI

	UNITS	NO. OF HOURS		MAX. MARKS
PART A	**EMPLOYABILITY SKILLS**			
	Unit 1: Communication Skills – III	15		2
	Unit 2: Self-Management Skills – III	10		2
	Unit 3: ICT Skills – III	15		2
	Unit 4: Entrepreneurial Skills– III	10		2
	Unit 5: Green Skills – III	10		2
	Total	**60**		**10**
PART B	**SUBJECT SPECIFIC SKILLS**	**THEORY**	**PRACTICAL**	
	Chapter 1: Library, Information and Society – Role and its implications	20	14	12
	Chapter 2: Organization of Library Resources: Basics	30	18	13
	Chapter 3: Reference and Information Sources	20	14	12
	Chapter 4: Computer Applications in Libraries: Basics	20	14	13
	Total	**90**	**60**	**50**
PART C	**PRACTICAL & PROJECT WORK**			
	Practical File			10
	Practical Examination + Viva voce			20
	Project Work / Field Visit / Student Portfolio (Any one has to be done) **+ Viva Voce**			10
	Total			**40**
	GRAND TOTAL	**210**		**100**

BANKING (SUBJECT CODE 811)

Total Marks: 100 (Theory-60 + Practical-40)

Total Credits to be earned: 7

CLASS XI

	UNITS	NO. OF HOURS		MAX. MARKS
Part A	**EMPLOYABILITY SKILLS**			
	Unit 1: Communication Skills – III	15		2
	Unit 2: Self-Management Skills – III	10		2
	Unit 3: ICT Skills – III	15		2
	Unit 4: Entrepreneurial Skills– III	10		2
	Unit 5: Green Skills – III	10		2
	Total	**60**		**10**
Part B	**SUBJECT SPECIFIC SKILLS**	**THEORY**	**PRACTICAL**	
	Unit 1: Introduction	15	10	05
	Unit 2: Banker & customer	25	15	10
	Unit 3: Employment of Bank Funds	25	20	20
	Unit 4: Negotiable Instruments	25	15	15
	Total	**90**	**60**	**50**
Part C	**PRACTICAL WORK**			
	Project			10
	Viva			05
	Practical File			15
	Demonstration of skill competency via Lab Activities			10
	Total			**40**
	GRAND TOTAL	210		100

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

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 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)

TABLE OF CONTENTS

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.

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 *(Vishwa guru)*.

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 forVocational 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
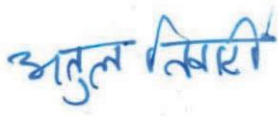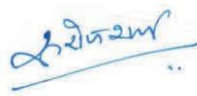
TERMS OF REFERENCE OF THE HIGH LEVEL COMMITTEE

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. RajnishJain, 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 cou**rses 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 correction**s, 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)

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) and summary document at NSQF New Guidelines.pdf (ugc.ac.in)

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 **o**f 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 Credit**s- 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 correction**s.

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:

i. 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.

ii. 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- 2nd (Engg)	NSQF Level 7 STT	7.0	40	280	MTech. 2nd Yr/ Engg PG Degree
	PG – 2nd yr/ PG 1st 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 / B.E./ B.Tech. OR 3 year UG (1200 Hrs/yr)	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/B.E
	UG- 3rd Year	10th+5-Yr NTC/NAC/CITS, 12th+3-Yr NTC/NAC/CITS, NSQF Level 5.5 STT	5.5	40	220	UG- Degree/ B. Voc/ B.Sc. Eng
	UG- 2nd Year	10th+4-Yr NTC/NAC/CITS, 12th+2-Yr NTC/NAC/CITS, NSQF Level 5 STT	5.0	40	200	UG- Diploma
	UG- 1st Year/equivalent	10th+3-Yr NTC/NAC/CITS, 12th+1-Yr NTC/NAC/CITS, NSQF Level 4.5 STT	4.5	40	180	UG- Certificate
2 year- Senior Secondary (1200 Hrs/yr)	Class XII	10th+2-Yr NTC/NAC/CITS, NSQF Level 4 STT	4.0	40	160	Class XII (Thru CBSE/ School Boards/ NIOS) Diploma Vocation
	Class XI	10th+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	8th+2-Yr NTC/NAC, NSQF Level 3 STT	3.0	40	120	Class X (Thru CBSE/ School Boards/ NIOS)
	Class IX	8th+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

Indicative Entry Criteria for Skill Levels

NCrF Level	Academic	Entry Criteria
8	PhD	PhD + Exp, PG/UG + Exp
7	PG2(Eng)	PhD, PG/UG + Exp
6	PG2 / UG4/PG1	PG, UG + Exp, Dip + Exp,12th + Exp
5	UG3 / UG2	UG, Dip + Exp,12th + Exp — 10th +3 yr Diploma = UG Cert (Subject to UGC Guidelines)
4	UG1 / XI-XII	12th, 10th or 8th + Exp — 10th + 2 yr Diploma = 12th
3	IX-X	10th, 8th or 5th + Exp — 10th pass + 2 yr ITI + NIOS = 12th
2	VI-VIII	5th, Read/ Write + Exp — 8th pass + 2 yr ITI + NIOS = 10th
1	I-V / PRE	No Edu prescribed

ACADEMIC AXIS

SKILL AXIS (NSQF Skill Levels)

8.0, 7.0, 6.5, 6.0, 5.5, 5.0, 4.5, 4.0, 3.5, 3.0, 2.5, 2.0, 1.0

EXPERIENTIAL LEARNING / PROFICIENCY AXIS

- TRAINED — Credit Point X1 — ≤ 1yr
- PROFICIENT — Credit Point X1.33 — 1-4 yr
- EXPERT — Credit Point X1.67 — 4-7yr
- MASTER — Credit Point X2 — >7yr

NATIONAL HIGHER EDUCATION QUALIFICATION FRAMEWORK (NHEQF)

NATIONAL SCHOOL EDUCATION QUALIFICATION FRAMEWORK (NSEQF)

Academic Levels

8	PhD	
7	PG2(Eng)	
6.5	PG2	
6	UG4/PG1	
5.5	UG3	
5	UG2	10+3 yrs Diploma
4.5	UG1	12+3 yrs Diploma
4	12	
3.5	11	
3	10	
2.5	9	
2	Upto 8	
1	Upto 5	

NCrF Credit Levels

Three Dimensional
ACADEMIC
SKILLS &
EXPERIENTIAL 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 of1200 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 LEANING 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), NPTL 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	▰ 9th Grade pass ▰ 8th Grade pass and pursuing continuous schooling	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
		▰ 5th 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 ▲ Grade 8 pass and pursuing continuous schooling in regular school with vocational subject	No Experience required			
		▲ 8th grade pass	2year 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 ▲ 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	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	**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
		▲ 8th grade pass with two years of NTC ▲ 8th Grade pass with 1 year NTC plus 1 year NAC	One Experience required			

		Qualification	Experience	Notional Hours of Training	Vocational Education	Certificate
		▲8th Grade pass with 1 year NTC plus 1 year CITS			**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
		▲8th Grade pass	3 year relevant experience			
		▲Previous relevant Qualification of NSQF Level 2.5	3 year relevant experience			
		▲Previous relevant Qualification of NSQF Level 3	1.5 year relevant experience			
Level 3.5	Level 4	▲12th grade pass	No Experience required	**390-480 Notional Hours of Training**	**2 to 3 years** of Vocational education & Training/ Skilling (NTC/ NAC) (After 10th) **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
		▲Completed 2nd year of 3-year diploma (after 10th) and pursuing regular diploma	No Experience required			
		▲10th grade pass plus 2-year NTC ▲10th grade pass plus 1-year NTC plus 1 year NAC	No Experience required			
		▲8th pass plus 2-year NTC plus 1-Year NAC plus CITS	No Experience required			
		▲10th grade pass and pursuing continuous schooling	No Experience required			
		▲10th Grade Pass	2 year relevant experience			
		▲8th Grade pass	4 year relevant experience			
		▲Previous relevant Qualification of NSQF Level 3.0 with minimum education as 8th Grade pass****	3 year relevant experience			
		▲Previous relevant Qualification of NSQF Level 3.5	1.5 year relevant experience			
Level 4	Level 4.5	▲Completed 1st year of UG ▲Pursuing 1st year of UG and continuous education ▲Pursuing 3rd year of 3-year diploma after 10th and continuous education ▲Completed 3-year diploma after 10	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,**
		▲Completed 2nd year of 2-year diploma after 12th ▲Pursuing 2nd year of 2- year diploma after 12 and continuous education	No Experience required			

		Qualification	Experience	Notional Hours	Vocational Education	Credits/Courses
		10th Grade pass plus 3 years of vocational education & Training e.g. ◣ 10th grade pass with 2 year NTC plus 1 year NAC/CITS ◣ 10th Grade pass with 1 year NTC plus 1 year NAC plus 1 year CITS	No Experience required		after 10th (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
		◣ 10th grade pass with 1 year NTC plus CITS	1 year Experience required			
		◣ 8th 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 8th Grade pass	3 year relevant experience			
		◣ Previous relevant Qualification of NSQF Level 4 and with minimum education as 8th Grade pass	1.5 year relevant experience			
Level 4.5	**Level 5**	◣ Completed 2nd year of UG ◣ Pursuing 2nd year of UG and continuous education ◣ Completed 2nd year of diploma (after 12th) ◣ Pursuing 2nd year of 2-year diploma after 12th	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 12th (NTC +NAC/ CITS) **OR** **4 to 5 years** of Vocational education & Training/ Skilling after 10th (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
		◣ 12th pass with 1 year Vocational Education & training (NTC or NAC or CITS)	No Experience required			
		◣ Completed 3 year diploma after 10th	1 year relevant experience			
		◣ 12th Grade pass	2 year relevant experience			
		◣ 10th Grade pass	4 year relevant experience			
		◣ Previous relevant Qualification of NSQF Level 4 and with minimum education as 8th 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 3rd year of UG ◣ Pursuing 3rd year of UG and continuous education ◣ Completed 2nd year diploma after 12th	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**

Level	Level	Qualification	Experience	Notional Hours / Internship	Vocational Pathway	Credits
		12th Grade Pass plus 2 years of vocational Education and Training. E.g. ◣12th grade pass with 1 year NAC plus 1 year CITS ◣12th grade pass with 1 year NTC plus 1year NAC/CITS	1 year relevant experience	For UG Students - 550 Hours of Internship + project work with Assessment	after 12th (NTC/ NAC/ CITS) **OR** **5 to 6 years** of Vocational education & Training/ Skilling/ experiential learning after10th (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
		◣12th Grade pass with 1 year NTC/ NAC ◣Completed 3-year diploma (after 10th)	2 year relevant experience			
		◣12th 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
		12th Grade Pass with 2 years of Vocational Education & Training. E.g. ◣12th Grade with 1 year NTC plus 1 year NAC/CITS ◣12th grade with 1 year NAC plus CITS	2 year relevant experience			
		◣12th 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 in 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 X 1.33=159.6 or rounded of to 160 credit points.

Similarly, in case of student/ learner with more than 7 years' experience, the maximum credit points earned will be 120 X 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 X 40= 140 and 4X40= 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 10thwith 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 5th or grade 8th 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**	8th 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 9th Certificate **In addition to (Col-7)** Grade 8th certificate + Accumulated 40 credits at level 2/3 **plus** Language Skills at level 3 by competent authority for Grade 9th Certificate	2.5	100
10	High School 1200 Hrs/Yr	Grade X	NA	Completed **2 Years of ITI after 8th Class**	8th 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 10th Certificate **In addition to (Col-7)** Grade 8th and/or Grade 9th certificate + Accumulated 40 credits at level 3 **plus** Language Skill at level 3 through competent authority for Grade 10th Certificate	3.0	120
11	Sr. Sec. School 1200 Hrs/Yr	Grade XI	NA	Completed	10th 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 10th (Certificate of Voc. (Eng))	education & Training/ Skilling (NTC/ NAC) (After 10th) **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** ▲10th 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 11th Certificate **In addition to (Col 7)** Grade 10th certificate + Accumulated 40 credits at level 3.5 **plus** Language Skill of level 3.0/3.5 through competent authority for Grade 11th Certificate		
12	Sr. Sec. School 1200 Hrs/Yr	Grade XII	NA	Completed 2nd Yr of Diploma after 10th (Industrial Training Certificate (Eng.)) **Diploma of Vocation**	10th Grade pass + 1 to 2 years of Vocational education & Training/ Skilling (NTC/ NAC) (After 10th) **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 12th Certificate **In addition to (Col 7)** Grade 11th certificate + Accumulated 40 credits at level 4 **plus** Language Skill at level 3.5/4 through competent authority for Grade 12th 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 10th (NTC/ NAC/ CITS) **AND (for NTC only)** +150 hours of project work	**OR** ▲2 years of relevant experience at NSQF Level 3.5 or 1year 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 12th plus internship as per AICTE Policy 40 credits UG Diploma	Total 1 to 2 years of Vocational education & Training/ Skilling after 12th (NTC +NAC/ CITS) **OR** Total 3 to 4 years of Vocational education & Training/ Skilling after 10th (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 8th 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 3rd Year **(UG Degree)** 40 credits **OR**	Completed 3 Years of technical education after 12th 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 12th (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

#	Program							Level	Credits
						Total 4 to 5 years of Vocational education & Training/ Skilling/ Experiential learning including relevant experience and professional levels acquired after10th (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 1st 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 2nd 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 2nd 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 2nd 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 NCrF 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 it's 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	i. Get the final report on National Credit Framework submitted by the high-level committee approved by the competent authority and notify the same. ii. Constitute the inter-ministerial committees to formulate the communication strategy, including communication with the state governments, for creating public awareness for implementation of NCrF. iii. 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. iv. 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. v. Effective monitoring of implementation of NCrF

Regulators (UGC/AICTE/NCVET) School Boards (CBSE/NIOS/State)	i. The regulators/ INIs/ Autonomous institutes to prescribe and notify various operationalization guidelines SOPs, and other provisions related to implementation of various provisions of NCrF
	
	ii. 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.
	
	iii. 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.
	
	iv. Operationalization of ABC and mandating ABC to all the bodies
	
	v. Enabling/ Developing flexible curricular structures for multi-disciplinary holistic learning and effective integration and embedding of vocational education, training and skilling with general education.
	
	vi. Frame and issue detailed SOPs for credit assignment including creditization of digital/ online/ blended learning.
	
	vii. 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
	
	viii. 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 off 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 it 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 enables 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)	12th 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)
9th Grade	8 Grade pass	ξ 9th Class/ ξ 1 year of ITI after 8th class	2.5
10th 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
11th Grade. /1st 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
12th Grade. /2nd 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/ 1st yr UG Degree	▲ Class 12 ▲ 12+ Industrial Training Certificate (Eng) ▲ Class 12+ QPs & NOCs	UG Certificate (Eng.)	4.5
2nd yr UG Degree	UG Certificate (Eng.)	UG Diploma(Eng.)	5.0
3rd yr UG Degree	UG Diploma (Eng.)	B. Voc (Eng.)	5.5
Final yr UG Degree	B. Voc (Eng.)	B.E./B. Tech.	6.0
1st Year PG (Eng)	B.E./B. Tech.	M.Voc (Eng.)	6.5
2nd 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.*

BIBLIOGRAPHY/ SOURCES/ REFERENCES

A number of documents/ articles/ reports/ publications were referred to while making of this report to understand the international as well as national system of credits.

i.   National Education Policy 2020, Ministry of Education, https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf

ii.   SAMVAY by AICE, 2018, SAMVAY_1_.pdf (aicte-india.org) and

iii.   Guidelines for providing Skill Based Education under National Skill Qualification Framework by University Grant Commission (UGC), 6556003_Guidelines-for-providing-Skill-Based-Education-under-NSQF.pdf (ugc.ac.in)

iv.   National Skill Qualifications Framework notified by Ministry of Finance in 2013, https://www.ncvet.gov.in/nsqf-notification

v.   Academic Bank of Credit notified by UGC, 2021, www. abc.gov.in

vi.   https://eric.ed.gov/?id=ED470030

vii.   Raubinger, Rowe, Piper, and West (1969)

viii.   https://eportfolios.macaulay.cuny.edu/hainline2013/files/2013/04/History-of-the-credit-hour.pdf

ix.   https://documents1.worldbank.org/curated/en/652361468739273645/pdf/multi-page.pdf

x.   https://www.shorttermprograms.com/page/academic-credit-systems

xi.   https://www.mastersportal.com/articles/1110/what-you-need-to-know-about-academic-credit-systems-in-the-us.html

xii.   https://www.idp.com/india/blog/grading-system-in-canada/

xiii.   https://www.manchester.ac.uk/study/international/study-abroad-programmes/study-abroad/course-units/credit-equivalence/

xiv.   https://theconnection.ece.org/AcademicCreditSyste/862/n

xv.   https://www.expatrio.com/studying-germany/studying-germany/course-studygermany#:~:text=As%20one%20ECTS%20credit%20generally,to%20a%20university%20in%20Germany.

xvi.   https://www.mastersportal.com/articles/1115/academic-credits-in-australian-universities-things-to-know-before-applying.html#:~:text=Credits%20reflect%20the%20number%20of,you%20would%20study%204%20subjects

xvii.   https://www.ask.uwa.edu.au/app/answers/detail/a_id/196/~/credit-points-explained

xviii. https://www.nus.edu.sg/registrar/academic-information-policies/graduate/modular-system

xix.   https://students.uu.nl/en/university-college-utrecht/national-university-of-singapore-university-scholars-program

xx.   https://asiaexchange.org/information/credit-conversion/korea/