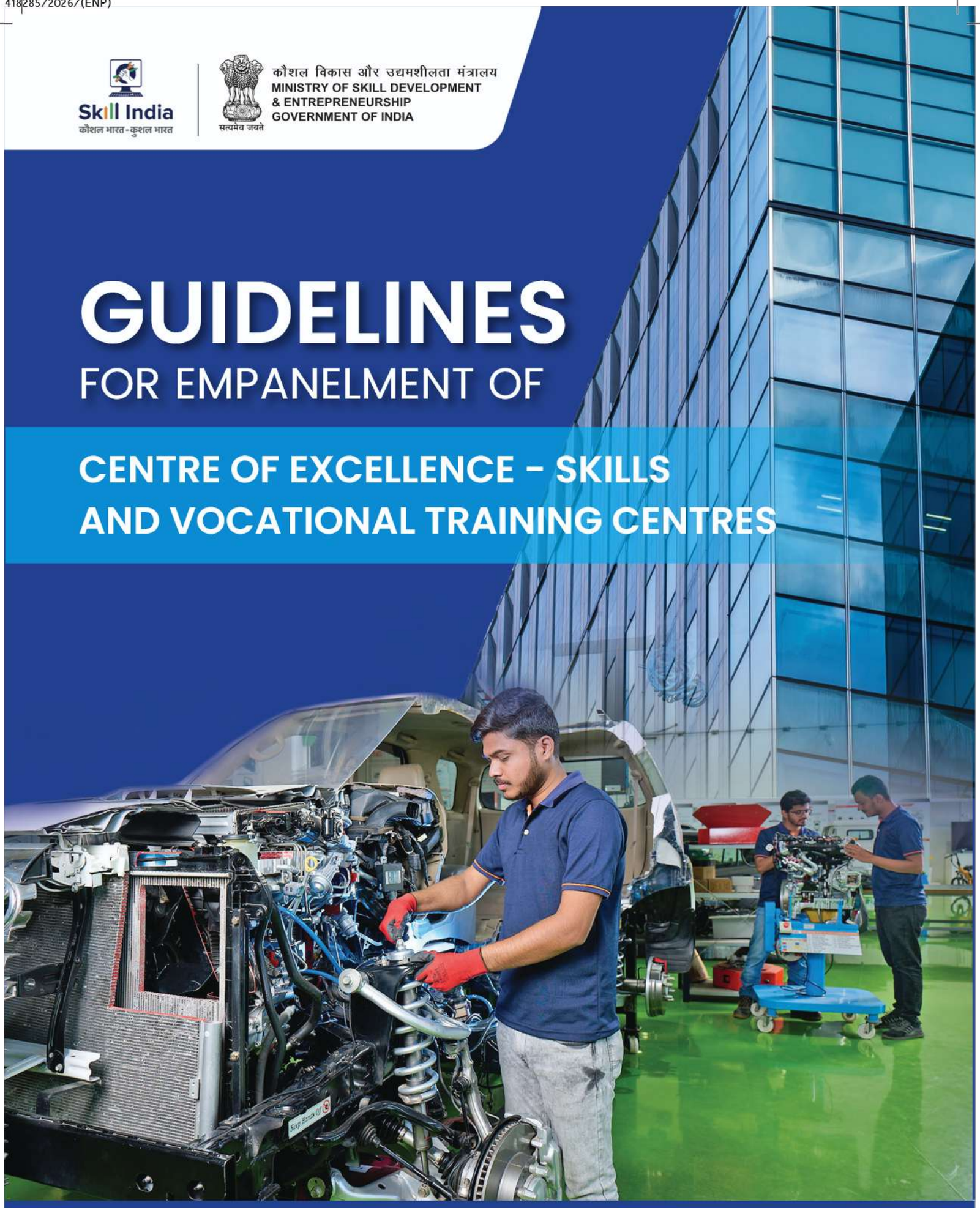
Skill India
कौशल भारत-कुशल भारत

सत्यमेव जयते

कौशल विकास और उद्यमशीलता मंत्रालय
MINISTRY OF SKILL DEVELOPMENT
& ENTREPRENEURSHIP
GOVERNMENT OF INDIA

GUIDELINES
FOR EMPANELMENT OF

CENTRE OF EXCELLENCE – SKILLS AND VOCATIONAL TRAINING CENTRES



MINISTRY OF SKILL DEVELOPMENT AND ENTREPRENEURSHIP
GOVERNMENT OF INDIA

Acronyms

Acronym	Full Form
AB	Awarding Body
AEBAS	Aadhaar Enabled Biometric Attendance System
AEC	Application Evaluation Committee
AI	Artificial Intelligence
AR	Augmented Reality
BIS	Bureau of Indian Standards
CAD	Computer-Aided Design
CAM	Computer-Aided Manufacturing
CCTV	Closed-Circuit Television
CIPET	Central Institute of Petrochemicals Engineering & Technology
CoE-Skills	Centre of Excellence - Skills
CPD	Continuous Professional Development
CSR	Corporate Social Responsibility
DGCA	Directorate General of Civil Aviation
EC	Executive Committee
FCRA	Foreign Contribution Regulation Act
FSSAI	Food Safety and Standards Authority of India
GST	Goods and Services Tax
HOD	Head of Department
INI	Institute of National Importance
IT	Information Technology
ITI	Industrial Training Institute
ITR	Income Tax Return
KPI	Key Performance Indicator
KYC	Know Your Customer
LMS	Learning Management System
MoU	Memorandum of Understanding
MR	Mixed Reality
MSDE	Ministry of Skill Development and Entrepreneurship
NCVET	National Council for Vocational Education and Training
NCrF	National Credit Framework
NEP	National Education Policy
NGO	Non-Governmental Organization
NIELIT	National Institute of Electronics & Information Technology
NOC	No Objection Certificate
NSDC	National Skill Development Corporation
NSQC	National Skills Qualifications Committee
NSQF	National Skills Qualification Framework
NSTI	National Skill Training Institute
OEM	Original Equipment Manufacturer
O&M / OM	Operation and Maintenance
PAN-India	All-India / Nationwide
PMKVY	Pradhan Mantri Kaushal Vikas Yojana
PMSETU	Pradhan Mantri Scheme for Expansion and Upgradation of Training Infrastructure
PPE	Personal Protective Equipment
PSU / PSE	Public Sector Undertaking / Public Sector Enterprise
PTF	Project Task Force
PwD	Persons with Disabilities

Acronym	Full Form
QAC	Quality Assurance Committee
RDSDE	Regional Directorate of Skill Development and Entrepreneurship
RPL	Recognition of Prior Learning
SC	Steering Committee
SDI	Skill Development Institute
SDM	Sub-Divisional Magistrate
SIDH	Skill India Digital Hub
SME	Subject Matter Expert
SOP	Standard Operating Procedure
SPOC	Single Point of Contact
SSDM	State Skill Development Mission
STT	Short-Term Training
ToA	Training of Assessors
ToT	Training of Trainers
ToT/ToA	Training of Trainers / Assessors
UT	Union Territory
VR	Virtual Reality
VTC	Vocational Training Centre

Key definitions

Term	Definition
360° Feedback Mechanism	A structured feedback system that captures inputs from candidates, trainers, assessors, employers, alumni and other implementation stakeholders for improving training quality and outcomes.
Aadhaar Enabled Biometric Attendance System (AEBAS)	A biometric attendance system used to record attendance of candidates, trainers and other relevant stakeholders, wherever applicable.
Alumni Engagement	Structured engagement with former trainees for mentoring, mobilisation, feedback, placement support, peer learning and programme improvement.
Annual Performance Review Report	A yearly report assessing the performance of an empanelled centre against prescribed KPIs, outcomes, compliance requirements and governance expectations.
Applicant	An eligible entity applying for empanelment as a Centre of Excellence - Skills or Vocational Training Centre.
Application Evaluation Committee (AEC)	A committee responsible for verifying applications, conducting evaluation-related activities and uploading evaluation reports on SIDH, as prescribed in these Guidelines.
Approved Job Role	A job role or qualification approved for training delivery by an empanelled centre under the applicable scheme, sector or awarding framework.
Assessment	The process of evaluating a candidate's knowledge, skills and competencies against prescribed qualification or job-role standards.
Assessor	A qualified and experienced person responsible for assessing candidate competency and proficiency against prescribed assessment standards.

Term	Definition
Awarding Body (AB)	The concerned Awarding or Certification Body responsible for review, validation, recommendation or certification-related functions, as applicable under these Guidelines.
Batch Occupancy	The proportion of approved or sanctioned seats filled by enrolled candidates in a training batch.
Candidate Mobilisation	Activities undertaken to identify, reach, inform and encourage eligible candidates to participate in skill training programmes.
Centre Utilisation	The extent to which classrooms, labs, workshops, tools, equipment and training infrastructure are used for training, assessment or allied skilling activities.
Certification	Formal recognition issued to a candidate after successful completion of assessment in accordance with applicable standards.
Competency-Based Assessment	Assessment that evaluates whether a candidate has demonstrated the required competencies for a job role or qualification.
Continuous Professional Development (CPD)	Ongoing training, learning or skill enhancement activities undertaken by trainers and assessors to maintain quality, relevance and professional competence.
Conversion from VTC to CoE-Skills	The process through which a VTC may apply for empanelment as CoE-Skills after meeting prescribed eligibility, infrastructure, quality, governance and performance requirements.
Counselling and Guidance	Advisory support provided to candidates to help them understand job roles, course options, training expectations, assessment requirements, employment opportunities and career pathways.
Debarment	Restriction imposed on a CoE-Skills or VTC from conducting skill training under applicable schemes or programmes due to repeated or severe default, in addition to dis-empanelment.

Term	Definition
Digital Reporting Compliance	Timely, accurate and complete submission of required data through SIDH, AEBAS or other prescribed digital systems.
Dis-empanelment	Removal of CoE-Skills or VTC status due to non-renewal, voluntary surrender, unsatisfactory performance, repeated default, severe non-compliance or termination by MSDE.
Empanelment	Formal recognition and enlistment of a training centre as CoE-Skills or VTC by MSDE after evaluation and approval.
Executive Committee (EC)	The competent authority responsible for final decisions on empanelment, renewal, review, performance monitoring and related matters under these Guidelines.
Feedback Mechanism	A system for collecting, reviewing and acting upon feedback from candidates, trainers, assessors, employers, alumni and other stakeholders.
Grading	The process of assigning a performance category or score to an empanelled centre based on prescribed parameters such as outcomes, infrastructure, training delivery, trainers and collaboration.
Green Channel Application	A simplified or expedited application route for eligible institutions that meet predefined criteria for priority consideration.
Grievance Redressal Mechanism	A structured process for receiving, recording, reviewing and resolving complaints or grievances from candidates and other stakeholders.
Idle Days	Days during a year when no active training batch is running at the centre despite availability of approved training infrastructure.
Industry Engagement	Collaboration with employers, industry associations, OEMs, regulatory bodies, academic institutions, SMEs or other sector stakeholders to strengthen training relevance, assessment credibility, certification and outcomes.

Term	Definition
Industry Linkage	Formal or operational engagement with employers, industry bodies, recruiters, OEMs, enterprises or sector experts to support training, assessment, mentoring, placement and outcome achievement.
Industry Validation	Confirmation or endorsement by relevant industry stakeholders regarding the suitability of infrastructure, equipment, training content, assessment processes or job-role relevance.
Key Performance Indicators (KPIs)	Quantifiable indicators used to monitor performance, quality, compliance and outcomes of CoE-Skills and VTCs.
Learning Management System (LMS)	A digital platform used to deliver, manage, track and support learning content, learner progress and assessments.
Master Assessor	An experienced assessor with advanced sectoral and assessment expertise responsible for training, mentoring or supporting assessors and assessment quality.
Master Trainer	An experienced trainer with advanced sectoral expertise responsible for training or mentoring trainers in approved sector(s) or job role(s).
Monitoring and Review	Periodic review of centre performance, compliance, quality, outcomes, risks and corrective actions using prescribed schedules, checklists and reporting templates.
Occupational and Workplace Safety	Compliance with applicable safety, fire, electrical, emergency, hygiene, security and workplace standards relevant to the sector and training environment.
Outcome-Based Performance Assessment	Evaluation of centre performance based on measurable outcomes such as employment, self-employment, entrepreneurship, higher education, advanced skilling or career progression.
Placement Facilitation	Support provided to trained or certified candidates to access wage employment, apprenticeship, internship, self-employment, entrepreneurship or other career opportunities.

Term	Definition
Post-Placement Tracking	Tracking of placed candidates to monitor retention, job continuity, wage outcomes, career progression or further skilling needs.
Post-Training Support	Support provided after completion of training, including placement assistance, retention tracking, refresher training, alumni engagement, career guidance and progression support.
Practical/Case-Based Assessment	Assessment based on practical tasks, simulations, workplace scenarios or case-based evaluation relevant to the job role.
Proctored Assessment	An assessment conducted under supervised physical or digital conditions to ensure fairness, transparency and credibility.
Proficiency-Based Evaluation	Evaluation that determines not only competency but also the level or degree of proficiency achieved by a candidate.
Project Closure	Completion of all project-related activities, including training, assessment, certification, reporting, placement follow-up and submission of closure documentation.
Project Task Force (PTF)	The operational coordination unit responsible for day-to-day programme management, performance tracking and issue resolution.
Quality Assurance Committee (QAC)	A committee responsible for reviewing performance, outcomes, quality benchmarks and recommending improvements based on evidence and data.
Recognition of Prior Learning (RPL)	A framework for assessing and certifying skills acquired through informal, experiential or non-formal learning aligned to industry standards.
Renewal	Extension of empanelment based on performance, achievement of outcomes, compliance status and governance or monitoring reports.
Scheme-Agnostic Empanelment	An empanelment approach not tied to any specific scheme, allowing centres to be utilised across multiple schemes or programmes, subject to applicable guidelines.

Term	Definition
Scheme Compliance	Compliance with operational, financial, reporting, quality, monitoring and implementation requirements prescribed under the applicable scheme or programme.
Sectoral Specialisation	Demonstrated capability of a centre to deliver training in one or more specific sectors or job roles based on infrastructure, trainer expertise, equipment and industry relevance.
Sectoral Specifications	Sector-wise requirements relating to infrastructure, labs, classrooms, tools, equipment, safety and trainer qualifications prescribed in Appendix I.
Self-Check Mechanism	A digital mechanism available through the centre operator's login ID to assess eligibility against CoE-Skills requirements before applying for conversion.
Self-Governance Mechanism	Internal governance mechanism established by a centre to monitor its own compliance, performance, quality assurance and corrective actions.
Single Point of Contact (SPOC)	A designated person responsible for coordination and communication between the centre and relevant stakeholders or authorities.
Skill India Digital Hub (SIDH)	The central digital platform used for submission of applications, evaluation, monitoring, reporting and lifecycle management of empanelled centres.
Standard Operating Procedure (SOP)	Documented procedures outlining step-by-step processes, roles, responsibilities and compliance requirements for operational activities.
Standing Application Evaluation Committee	A pre-constituted committee responsible for conducting physical verification of centres assigned by MSDE, without separate case-wise constitution.
Steering Committee (SC)	The apex strategic body responsible for policy direction, approval of frameworks and long-term guidance for the CoE-Skills ecosystem.

Term	Definition
Surrender of Empanelment Status	Voluntary withdrawal of empanelment by a CoE-Skills or VTC through prior written notice to MSDE after completion of ongoing activities.
Target Allocation	Assignment of training targets to empanelled centres under specific schemes based on sectoral, geographical, performance or programme priorities.
Technology-Enabled Training Tools	Digital tools used for training delivery, including LMS, digital content, AI, AR, VR, MR, simulators, dashboards, online assessments or other advanced learning aids.
Termination of Empanelment Status	Withdrawal of CoE-Skills or VTC status by MSDE based on monitoring, inspection, performance review, evaluation findings or non-compliance.
Trainer	A qualified and experienced individual responsible for delivering skill training in approved sector(s) or job role(s).
Training Batch	A group of candidates enrolled for a specific job role or course within a defined training duration, batch size and scheme or programme framework.
Training Delivery	Conduct of approved training programmes in accordance with prescribed curriculum, qualification requirements, training hours, trainer norms, infrastructure standards and scheme guidelines.
Training Need Assessment	Assessment of candidate aspirations, skill gaps and labour market opportunities to identify suitable training pathways or job roles.
Training of Assessors (ToA)	A programme focused on building the capacity of assessors responsible for evaluating trainee competency and certification.
Training of Trainers (ToT)	A programme designed to enhance the skills, knowledge and teaching capabilities of trainers delivering skill training.

Term	Definition
Work Order	Formal instruction or approval issued to a CoE-Skills or VTC to undertake a project, batssch or training activity under a scheme or programme.

1 | Introduction

1.1 Purpose and Applicability of the Guidelines

1.1.1 The Guidelines covers entire lifecycle of Centre of Excellence- Skills (CoE-Skills) and Vocational Training Centres (VTC) that includes- definitions, potential centres can apply, eligibility criteria, specifications for application, evaluation, empanelment, functions, performance review, renewal, and extensive approach to empanel all potential permanent training centres that could be leveraged for skilling across the country by the Ministry of Skill Development and Entrepreneurship (MSDE).

1.1.2 The Guidelines is applicable to training centre operated by Industries, Government training institutes, Skill training institutes, Academic institutes, training institute operated by Social organizations to be empanelled as CoE-Skills/ VTC. The detailed list of potential centres is listed in Section 3.1.

1.1.3 The Ministry of Skill Development and Entrepreneurship (MSDE) will implement skill training under its schemes, preferably through empanelled CoE-Skills and VTCs equipped to deliver standardized, sector-specific, and industry-aligned training.

1.2 Background and Rationale

1.2.1 Empanelment of Centres of Excellence- Skills (CoE-Skills) and Vocational Training Centres (VTCs) is proposed in response to persistent challenges in the Skilling ecosystem, including dependence on temporary training centres for implementation, inconsistencies in the quality of training delivery, uneven training infrastructure, variations in the rigor and credibility of assessments, misalignment of training outcomes with industry requirements and, regional and sectoral disparities in training effectiveness.

1.2.2 The CoE-Skills-led training is intended to address these gaps by enabling the delivery of advanced, industry-relevant, and high-quality Vocational Skilling through permanent centres with robust infrastructure, governance system, and quality assurance mechanisms. It seeks to promote structured learning pathways, modular and stackable training opportunities, effective outcome tracking, and stronger Trainer and Assessor ecosystems, while ensuring optimum utilization of national skilling infrastructure. Definition and detailed provisions of CoE-Skills is provided at section 2.1 of this Guidelines.

1.2.3 Vocational Training Centres (VTCs) are intended to conduct Basic level training that is industry relevant, with the desired outcome based on infrastructure, Trainers, and other demonstrated strength. The definition and detailed provisions of VTC is provided at section 2.2 of this Guidelines.

1.2.4 Empanelled CoE-Skills are expected to enhance employability, support learner mobility, enable credible certification, and improve career progression through lifelong learning opportunities, supported by a pool of high-quality, industry-aligned trainers. They are also expected to reduce training and induction efforts of Employers by creating a market-ready talent pipeline aligned with industry demand. Whereas, VTCs will be utilized for outcome based standardized skilling and could be upgraded its status to CoE-Skills with required and relevant resource/s.

1.3 Relevance to the prevalent National Policy for Skill Development & Entrepreneurship

This Guidelines provide an operational framework for translating the strategic priorities of the prevalent National Policy for Skill Development & Entrepreneurship into actionable mechanisms for empanelment, quality assurance, governance and delivery of high-quality, industry-aligned and outcome-oriented skilling through CoE-Skills and VTCs. The Guidelines is aligned with the draft Policy's emphasis on dynamic demand planning, integrated skill-education pathways, lifelong learning, employability and entrepreneurship, trainer and assessor capacity building, proficiency-based assessment, industry co-ownership, digital and physical infrastructure, monitoring and evaluation, and Whole-of-Government convergence. Through Scheme-agnostic empanelment, SIDH-enabled lifecycle management, sector-specific infrastructure standards, industry validation, competency-based assessment, mentorship, career progression support, outcome tracking and structured governance, the Guidelines create a practical mechanism to aggregate permanent training centres and strengthen India's skilling ecosystem in alignment with the Viksit Bharat @2047 vision.

1.4 Guiding principles of empanelment of CoE-Skills and VTC

Following are the guiding principles for empanelment of CoE-Skills and VTC to be considered before applying for empanelment:

1.4.1 Existing Permanent Skilling Centres

Empanelment is undertaken to identify and recognise existing and permanent skill training centres that meet the prescribed criteria. The empanelment is not construed as a commitment to provide any financial assistance for establishment or upgradation of new centre or for undertaking operational activities.

1.4.2 Scheme-Agnostic Empanelment

The empanelment is scheme-agnostic and not linked to any specific scheme of the Ministry of Skill Development and Entrepreneurship (MSDE) or any other Ministry/Department. Further, the empanelment does not confer entitlement to receive training targets under any scheme. Allocation of training target will be governed by the norms of concerned scheme.

1.4.3 Long-Term empanelment

Empanelment of CoE-Skills/VTCs is a long-term association of training centres by MSDE. Such association is to support effective planning, optimal utilisation of infrastructure, continuity in training delivery, and sustained achievement of quality skilling outcomes.

1.4.4 Outcome-Based Performance Assessment

The performance of empanelled CoE-Skills /VTCs will be assessed based on outcome indicators that may include- employment, entrepreneurship, progression to higher education, advancement to higher-order skills. Continued engagement, target allocation, renewal, or other benefits will be linked to achievement of outcomes.

1.5 Value proposition for empanelment

Following are the benefits for empanelment of a training centre as CoE-Skills /VTC:

1.5.1 National Recognition

Empanelment will serve as a formal recognition by the Ministry of Skill Development and Entrepreneurship (MSDE) of the centre’s capability to deliver quality, industry-

aligned, and outcome-oriented Skill training. Such recognition will enhance the credibility of the centre within the national skilling ecosystem.

1.5.2 National and international competitive advantage

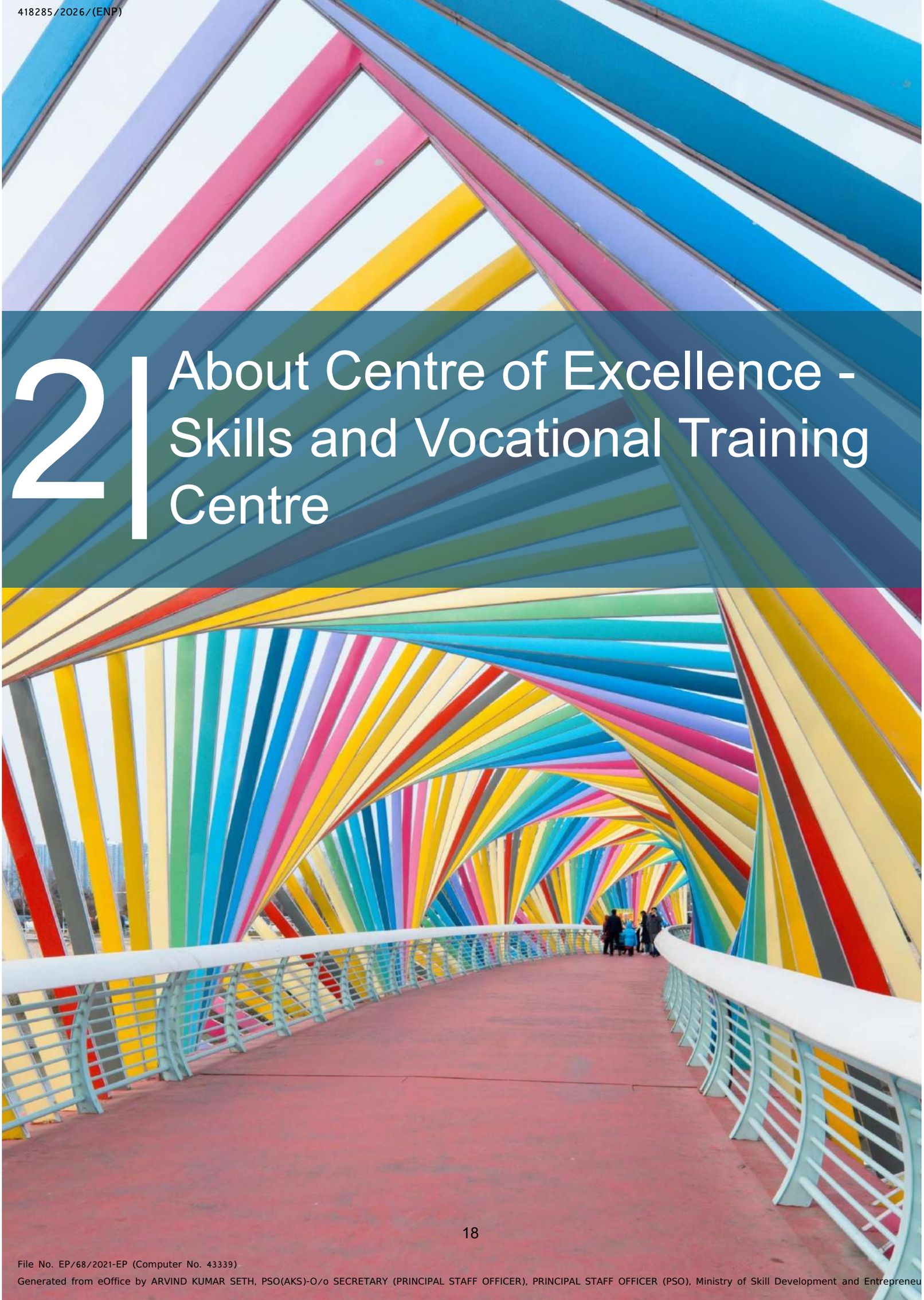
Empanelled Centres will be engaged in the national skill-building initiatives aimed at meeting both domestic and global workforce. Centre operators are expected to show-case their leading practices and participate in dialogues, consultations, deliberations at various national and international forums, where their experience, insights, and innovative approaches can contribute to policy and programme development. Further, by adhering to national standards, government frameworks, policies, and quality benchmarks augmented from time to time, the Centres will be positioned to operate at par with recognized institutional and regulatory expectations. Moreover, Centres may gain opportunity to leverage from bilateral and multilateral relationship that Indian Government maintains with other countries.

1.5.3 Optimum utilization of Training infrastructure

Empanelled CoE-Skills/VTCs could be leveraged for implementation of skill development schemes and initiatives of MSDE, other Central Ministries, State Governments, industry, CSR initiatives, philanthropic organisations, and other stakeholders, subject to the respective programme guidelines. Such engagement is expected to optimal utilisation of training infrastructure, equipment, trainers, and institutional capacity throughout the year.

1.5.4 Long-term planning and operational stability

Empanelment will enable centres to receive steady and longer-term training targets, wherever provided under the applicable Scheme Guidelines. This will help in better planning of training batches in alignment with optimal utilization of resources, and thereby strengthening overall training delivery.



2 | About Centre of Excellence - Skills and Vocational Training Centre

File No. EP/68/2021-EP (Computer No. 43339)
Generated from eOffice by ARVIND KUMAR SETH, PSO(AKS)-O/o SECRETARY (PRINCIPAL STAFF OFFICER), PRINCIPAL STAFF OFFICER (PSO), Ministry of Skill Development and Entrepreneu

2.1 Centre of Excellence (CoE) - Skills

2.1.1 Centre of Excellence (CoE) - Skills is a permanent, advanced, and sector-focused training centre empanelled by the Ministry of Skill Development and Entrepreneurship (MSDE) for delivering high-quality, industry-aligned, and outcome-oriented skill training. It functions as an integrated skilling hub with capabilities for technology-enabled training delivery, independent assessment, mentorship, achievement of post training outcome and their tracking, Training of Trainers and Assessors, and other allied skilling ecosystem activities.

2.1.2 Objectives of empanelment

The objectives of empanelling CoE-Skills are to:

(i) Identify, map and consolidate permanent and advanced sectoral training centres to support high-quality, sector-focused training delivery.

(ii) Strengthen future-ready skill training in sectors aligned with industry demand and national workforce priorities.

(iii) Improve quality and credibility of skilling schemes through training delivered by high-performing permanent centres.

(iv) Optimally utilize existing skilling infrastructure, equipment, Trainers, Assessors, and institutional capacity.

(v) Support structured learning pathways, including modular, stackable, and Lifelong learning opportunities for India’s workforce and aspiring learners.

(vi) Enhance post-training outcomes by strengthening assessment quality, Trainer and Assessor capacity, employability, outcome tracking, and career progression.

2.1.3 Features

CoE-Skills functions as advanced, sector-focused skilling hubs. Their key features include:

(i) **Permanent sector-specific infrastructure:** Dedicated classrooms, labs, workshops, tools, equipment, safety systems and digital learning resources aligned with approved sector(s).

(ii) **Advanced technology-enabled training delivery:** Delivers advanced, industry-relevant and future-ready training through practical instruction, digital learning tools, and emerging technology-enabled methods.

(iii) **Independent assessment capability:** Conducts competency-based, practical, competency and proficiency-based assessments.

(iv) **Qualified Trainers and Assessors:** Presence of qualified Trainers, Assessors, Master Trainers, Master Assessors, and sectoral Subject Matter Experts (SMEs).

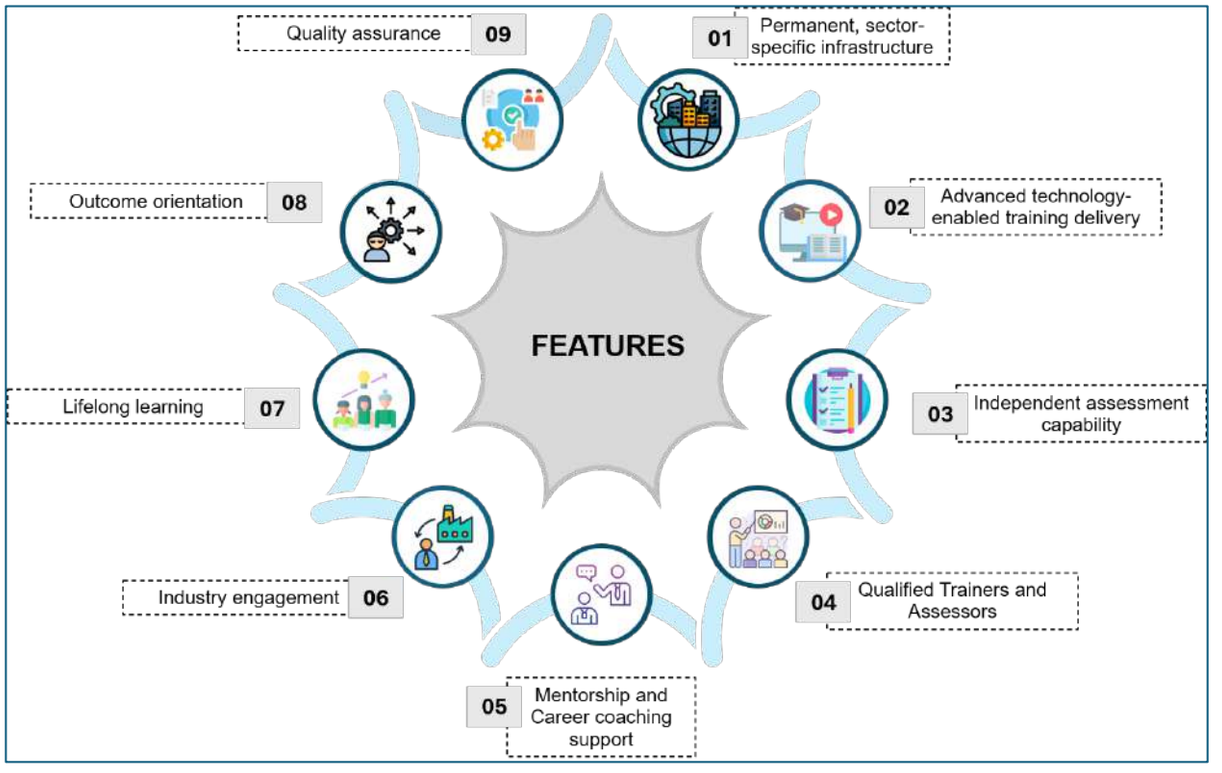


Figure 1: Features of CoE-Skills

(v) **Mentorship and Career coaching support:** Provides counselling, mentoring, career coaching, handholding support to trained candidates in achieving post training outcome.

(vi) **Industry engagement:** Collaborates with employers/industries, industry associations, Original Equipment Manufacturers (OEMs), regulatory bodies, academic institutions, Subject Matter Experts (SMEs) to ensure training relevance, assessment credibility, recognized certification, and achievement of post training outcomes.

(vii) **Lifelong learning:** Offers modular, stackable, reskilling, and upskilling opportunities for India's workforce, Trainers, and aspiring learners.

(viii) **Outcome orientation:** Tracks measurable outcomes as defined at section “4.5: Outcomes”.

(ix) **Quality assurance:** Undertakes internal monitoring, stakeholder feedback analysis, corrective action, and periodic performance review diligently for continuous improvement.

2.1.4 Scope of work

CoE-Skills has a wide scope of activities across the skilling value chain and shall maintain the preparedness required to undertake them. The comprehensive scope of work is provided in Section “4.2: Roles and responsibilities of CoE-Skills”. These centres should mandatorily undertake training, assessment, post-training outcome achievement and tracking, sectoral mentorship, career coaching, and activities prescribed under “Annexure III: Key Performance Indicators of CoE-Skills and VTC”, in addition to the requirements of scheme(s) under which the Centre operates. The Centre is also encouraged to undertake additional activities specified in the guidelines to improve its performance rating and qualify for higher gradation.

2.1.5 Categorization of sectors

A CoE-Skills can demonstrate expertise in one or more sectors aligned with current and emerging industry demand. For the purpose of empanelment, MSDE has identified 35 sectors, as listed below:

Figure 2: List of Sectors

2.2 Vocational Training Centre (VTC)

2.2.1 Vocational Training Centre (VTC) is a permanent and functional training centre empanelled to deliver training in NSQF aligned job role(s). VTC need not fulfil all criteria prescribed for CoE-Skills, but possesses basic institutional readiness required for regular training delivery, including- dedicated training premises, job-role-specific infrastructure, qualified Trainers, assessment facilitation, achievement of training outcomes, and post training tracking of candidates.

2.2.2 Objectives of empanelment

The objectives of empanelling VTCs are to:

(i) Identify, map and consolidate permanent and functional training centres capable of delivering skill training in the job role(s).

(ii) Expand access to training by leveraging existing training infrastructure and local institutional capacity.

(iii) Facilitate implementation of skill development schemes and programmes through training centres already accredited for the relevant job role(s).

(iv) Enable regular training delivery with basic institutional readiness, qualified Trainers, assessment facilitation, and training outcome tracking.

2.2.3 Features

VTCs operate as permanent and functional training centres with the basic institutional readiness required to deliver training in approved job role(s). Their key features include:

(i) **Dedicated training premises:** Permanent and functional premises available for regular training delivery.

(ii) **Job-role-specific infrastructure:** Maintain classrooms, labs, tools, equipment, consumables, and safety arrangements required for approved job role(s).

(iii) **Qualified Trainers:** Presence of Trainers, who meet eligibility criteria requirements prescribed in the concerned Job role(s).

(iv) **Training delivery readiness:** Equipped to conduct training as per approved curriculum, training hours, batch size, trainer norms and scheme requirements.

(v) **Outcome support mechanism:** Support achievement of training outcomes.

(vi) **Post-training tracking system:** Track candidates after completion of training and maintain records of their post-training status and outcomes.

2.2.4 Scope of work

Scope of work of VTC is provided in “Section 4.3: Roles and responsibilities of VTC”.

2.3 Distinction between CoE-Skills and VTC

Distinction between CoE-Skills and VTC in terms of purpose, functional areas, and institutional readiness is exhibited below:

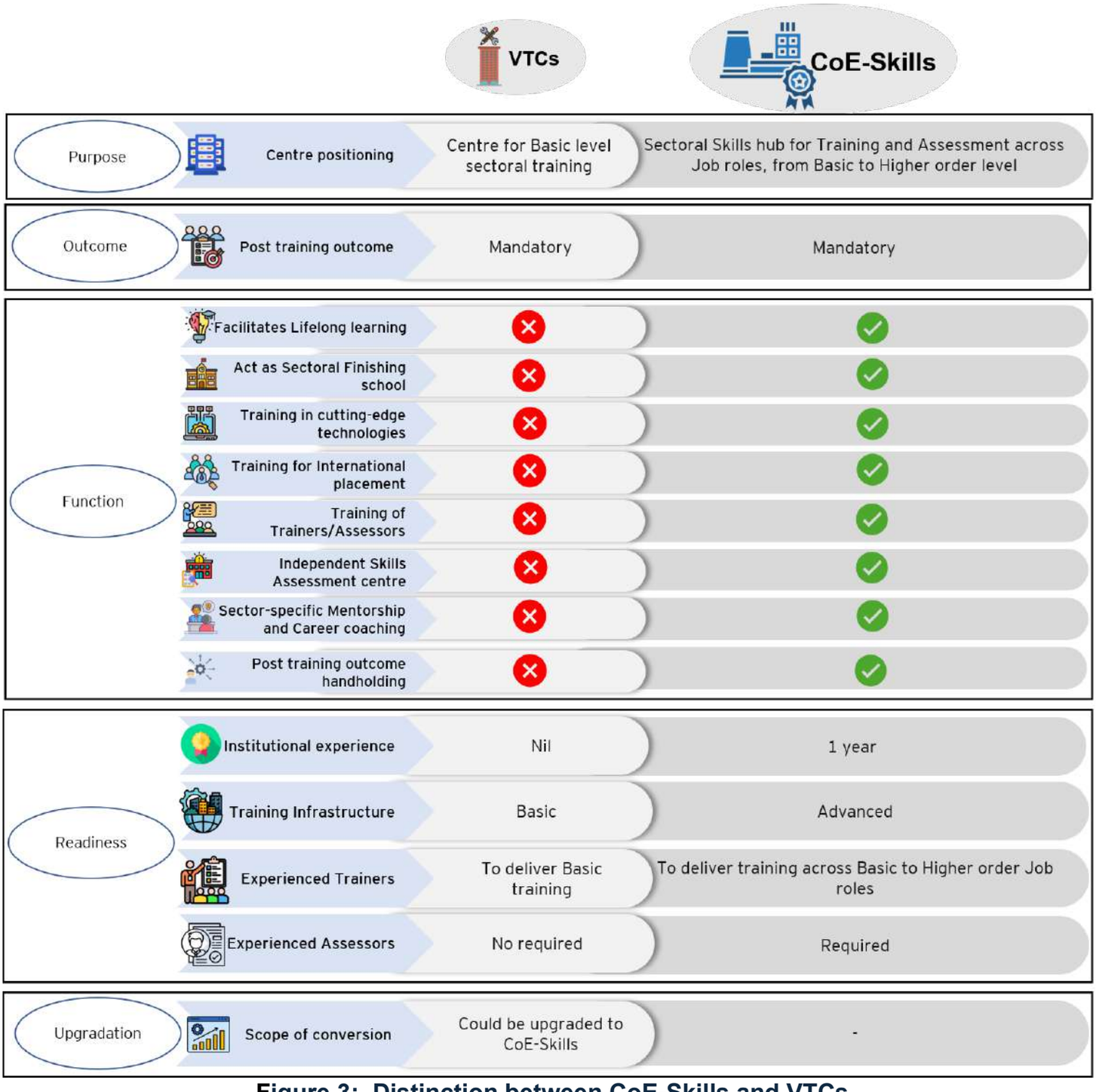


Figure 3: Distinction between CoE-Skills and VTCs

3 | Empanelment mechanism

3.1 Potential Training centres for empanelment

Applications could be submitted for empanelment of permanent Training Centres as a Centre of Excellence - Skills (CoE-Skills) or Vocational Training Centre (VTC) are listed below:

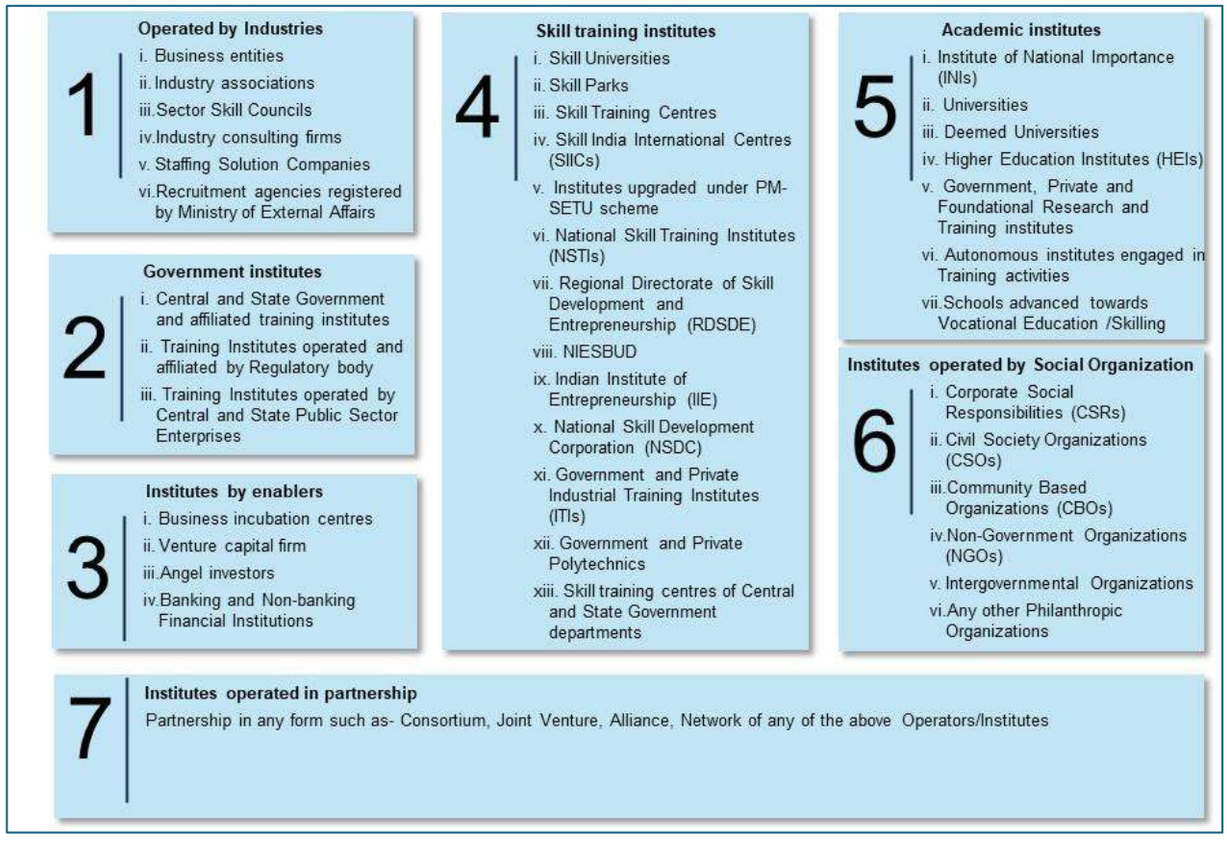


Figure 4: Potential Training Centres

3.2 Application process

Entire lifecycle of the application process including decision on empanelment, and renewal would be carried out and managed on the SIDH platform in accordance with the procedures defined below.

3.2.1 Submission of application

3.2.1 Any applicant operating a permanent Training Centre under any category specified in Section 3.1 may apply for empanelment as a Centre of Excellence - Skills (CoE-Skills) or Vocational Training Centre (VTC) as per prescribed process defined in Figure 5 through the application window of SIDH platform. The application is nomination based; Central Ministries/Departments, State Governments, Sectoral

regulatory bodies, Awarding Bodies including Sector Skill Councils, Industry Bodies are authorized to nominate the applicants to apply for a centre. Application form is enclosed as **Annexure I**. The application window will remain open throughout the year. The process is outlined at Figure 5 below:

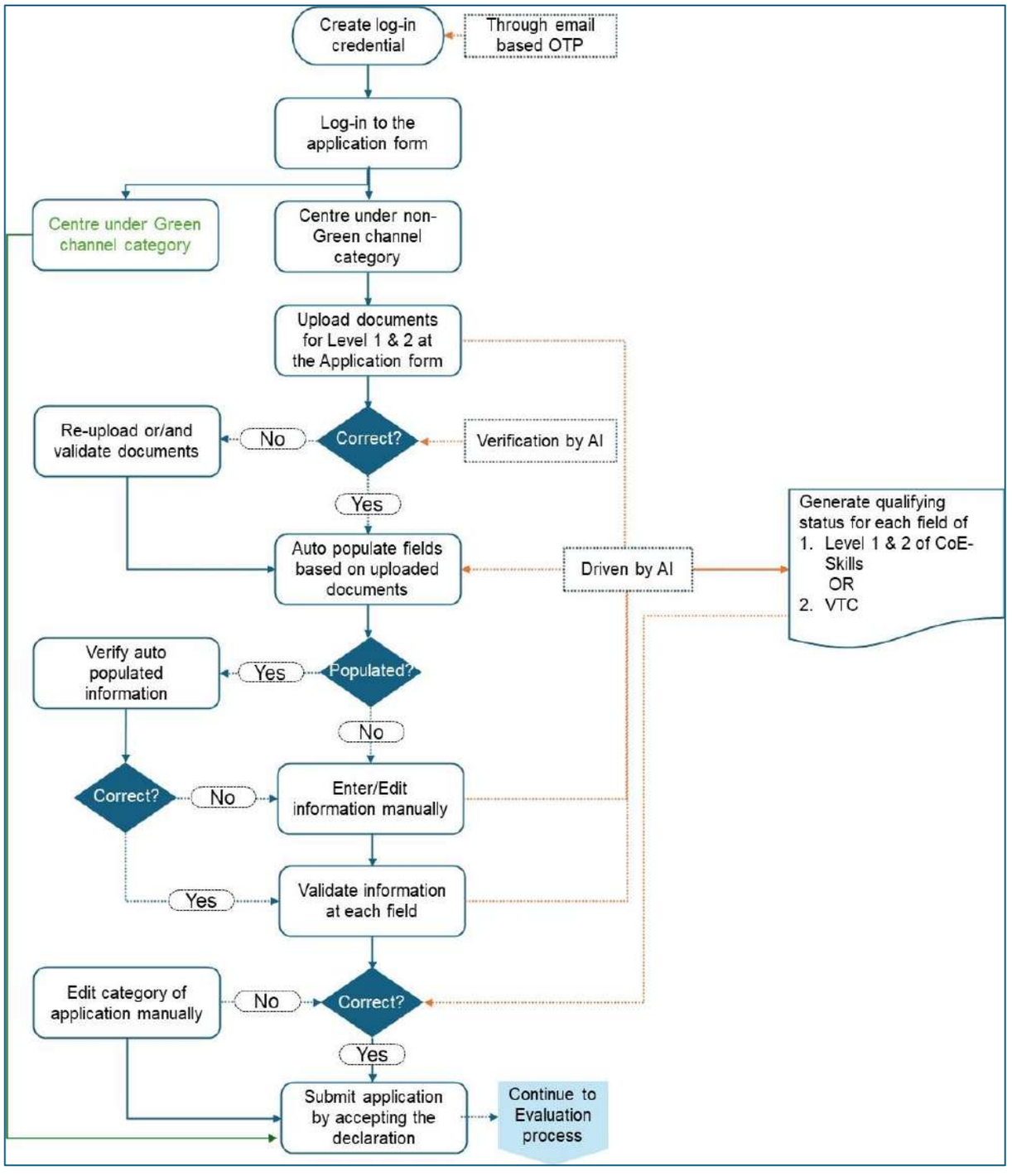


Figure 5: Application Process Flow

3.2.2 The process will also apply for conversion of a VTC into a CoE-Skills. An applicant may check eligibility status of CoE-Skills on SIDH platform and submit the

application for conversion whenever the VTC fulfils all prescribed criteria towards empanelment as a CoE-Skills.

3.2.3 Application through Green channel

A green channel mechanism is created for the empanelment process, allowing applicants to submit basic information including the training centre name, operating entity, address and contact details, sector(s) of specialisation, and seating capacity. Applications submitted through this route doesn't require any nomination and will not undergo any evaluation process; instead, they will be directly placed before the Executive Committee (EC) for consideration. Such applications will be taken up in the immediate next scheduled EC meeting. Institutions eligible to apply for CoE-Skills under this green channel are as follows:

(i) **Institutes of National Importance (INIs)** including IITs, IIMs, IIITs, IISERs, AIIMSs, NITs, NIDs, Central Universities, Medical Research Institutes, and other specialised institutions. The complete list is available at: https://www.education.gov.in/en/institutions-national-importance .

(ii) ITIs upgraded under **PM-SETU**.

(iii) Skilling Centres of Excellence operated or empanelled by **Central Ministries/Departments** and **State Governments**, such as - Central Institute of Petrochemicals Engineering & Technology (CIPET), National Institute of Electronics & Information Technology (NIELIT), Skill Development Institutes (SDI)

This mechanism is intended to accelerate empanelment for reputed and high-quality institutions by streamlining the approval process.

3.2.4 Empanelment of Centre doesn't fulfil eligibility criteria

3.2.4.1 To promote innovation, recognise superior practices, and enable the empanelment of high-potential Training Centres, the application form shall include a provision for capturing information on resources, capabilities, expertise, and other strengths of the Training Centre, in addition to the indicative eligibility criteria prescribed in the Guidelines. Applicant will be still allowed to submit the application for a Training Centre that does not fully meet one or more indicative criteria. The

application will be considered for empanelment as a CoE-Skills or VTC, subject to assessment on merit.

3.2.4.2 The applicant shall be required to furnish information, supporting evidence of such additional strengths, along with an appropriate rationale for consideration of the Training Centre for empanelment. All such applications will be evaluated for empanelment on a case-to-case basis, in alignment with overall objectives of the empanelment.

3.3 Evaluation of the application

3.3.1 Application will undergo a three-stage evaluation process, comprises of - (a) Desk level scrutiny, (b) Physical verification to the Centre, and (c) Review and recommendation by concerned Awarding Body/ies. The evaluation process is outlined at Figure 6 below:

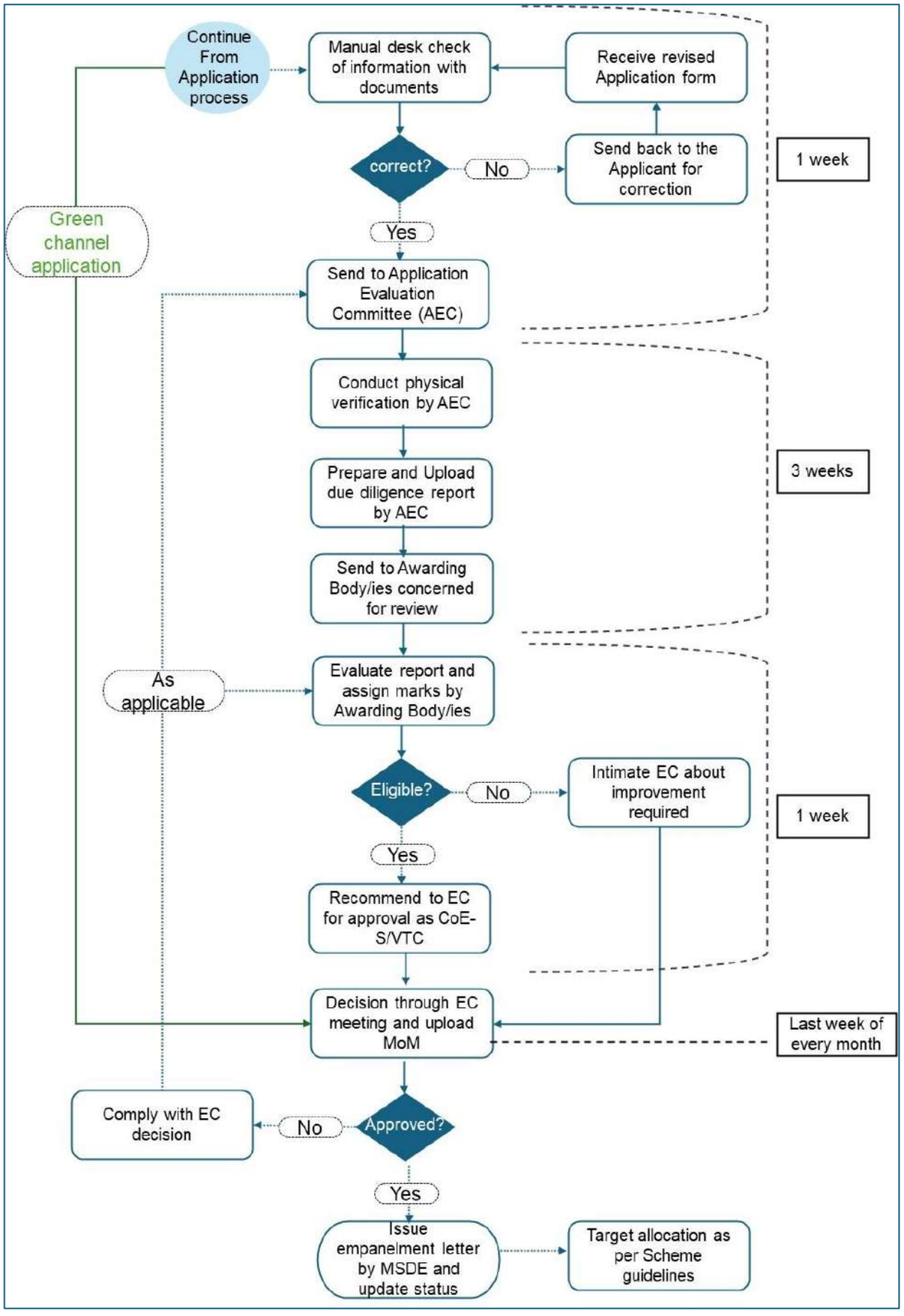


Figure 6: Evaluation process

3.3.2 Desk level scrutiny

The desk level scrutiny will be carried out by a team at MSDE to check accuracy of the information filled in application with the uploaded documents, documentary compliance of terms of conditions defined for empanelment of CoE-Skills /VTC, and comments generated through initial AI enabled verification. The process will also help in machine learning to improve accuracy of AI enabled verification.

3.3.3 Physical verification to the Centre

3.3.3.1 Physical verification to the Centre will be carried out by a Standing Application Evaluation Committee comprise of the following members:

(i) District Collector / Sub-Divisional Magistrate (SDM) - Chair
(ii) Director/ Representative of RDSDE not below the rank of Deputy Director
(iii) Industry representative of SSC[1] concerned
(iv) Any other member nominated by the Chair
(v) Principal, Nodal ITI[2] of the concerned district - Member Secretary

3.3.3.2 The Committee will function as a standing committee for the purpose of physical verification of Centres under these Guidelines. Accordingly, no separate case-by-case notification or constitution order will be issued by MSDE for each application. Upon assignment of a physical verification request by MSDE, the Committee to take up the verification on priority and complete the process in accordance with the prescribed checklist, timelines, and reporting requirements.

3.3.3.3 The Committee will evaluate application parameters that can be verified and validated at the training centre as per the evaluation checklist provided at section A. Physical verification checklist of **Annexure - II**. On completion, the report details to be entered on SIDH, alongwith upload of supporting evidence.

3.3.4 Review and recommendation by Awarding Body/ies

Application along with the desk scrutiny and Physical verification report, will be reviewed by the relevant Awarding Body/ies (ABs) on SIDH. ABs will assign scores

[1] Concerned Awarding Body where SSC is not available in the sector.
[2] In cases where the Nodal ITI is Applicant, the Principal of another ITI will be nominated.

and enter observations on SIDH as per the checklist provided at section Observation of Concern Awarding Body/ies of **Annexure II**. ABs shall maintain the confidentiality of all data and shall use it solely for the purpose of reviewing the application.

3.4 Decision through Executive Committee

The recommendations will be placed before executive Committee (EC) for final decision on empanelment. The committee may take decision based on the evaluation reports and recommendation.

3.5 Empanelment

Upon approval by the Executive Committee, the Centre will be empanelled as a Centre of Skill Excellence (CoE-Skills) / Vocational Training Centre (VTC) through an official empanelment letter issued by MSDE. Each empanelled Centre will be allotted with a unique identification number. The empanelment status, along with relevant details, such as- Sector specialization, sitting capacity at the Centre, location, contact information, and tenure of empanelment, will be updated on SIDH and made publicly available.

3.6 Validity

Once empanelled, both CoE-Skills and VTCs shall remain valid for a period of **three years**, with the provision for extension of up to an **additional two years**, subject to achievement of the prescribed training outcomes and other requirements specified in the Guidelines. However, either MSDE or the concerned CoE-Skills/VTC may withdraw the empanelment status after completion of all ongoing activities by providing one month’s prior notice.

4 | Operating framework

4.1 CoE-Skills and Vocational Training Centres (VTCs) are envisaged as permanent skilling institutions to be leveraged for delivering skill development activities across the skilling lifecycle, as may be required from time to time. While CoE-Skills are expected to function as one-stop skilling hubs capable of undertaking a wider range of advanced, industry-aligned and ecosystem-level activities, VTCs will undertake activities within their approved scope, capacity, infrastructure and sector/job-role specialisation. The roles and responsibilities outlined in this chapter are indicative and comprehensive in nature and will not be the activities required to be undertaken simultaneously or uniformly by every CoE-Skills or VTC. The specific activities to be undertaken by a CoE-Skills or VTC may vary based on the requirements of the scheme, programme, sector, location, available institutional capacity, approved empanelment category, and the mutually agreed priority areas between MSDE and the concerned CoE-Skills/VTC operator.

4.2 Roles and responsibilities of CoE-Skills

The Centre of Skill Excellence (CoE-Skills) will function as an integrated service ecosystem that supports candidates, training partners, industry, institutions, and other stakeholders across the skilling lifecycle. The CoE-Skills will act as a central coordination and service delivery hub for mobilization, counselling, training enablement, assessments, industry linkages, technology support, and post-training opportunities.

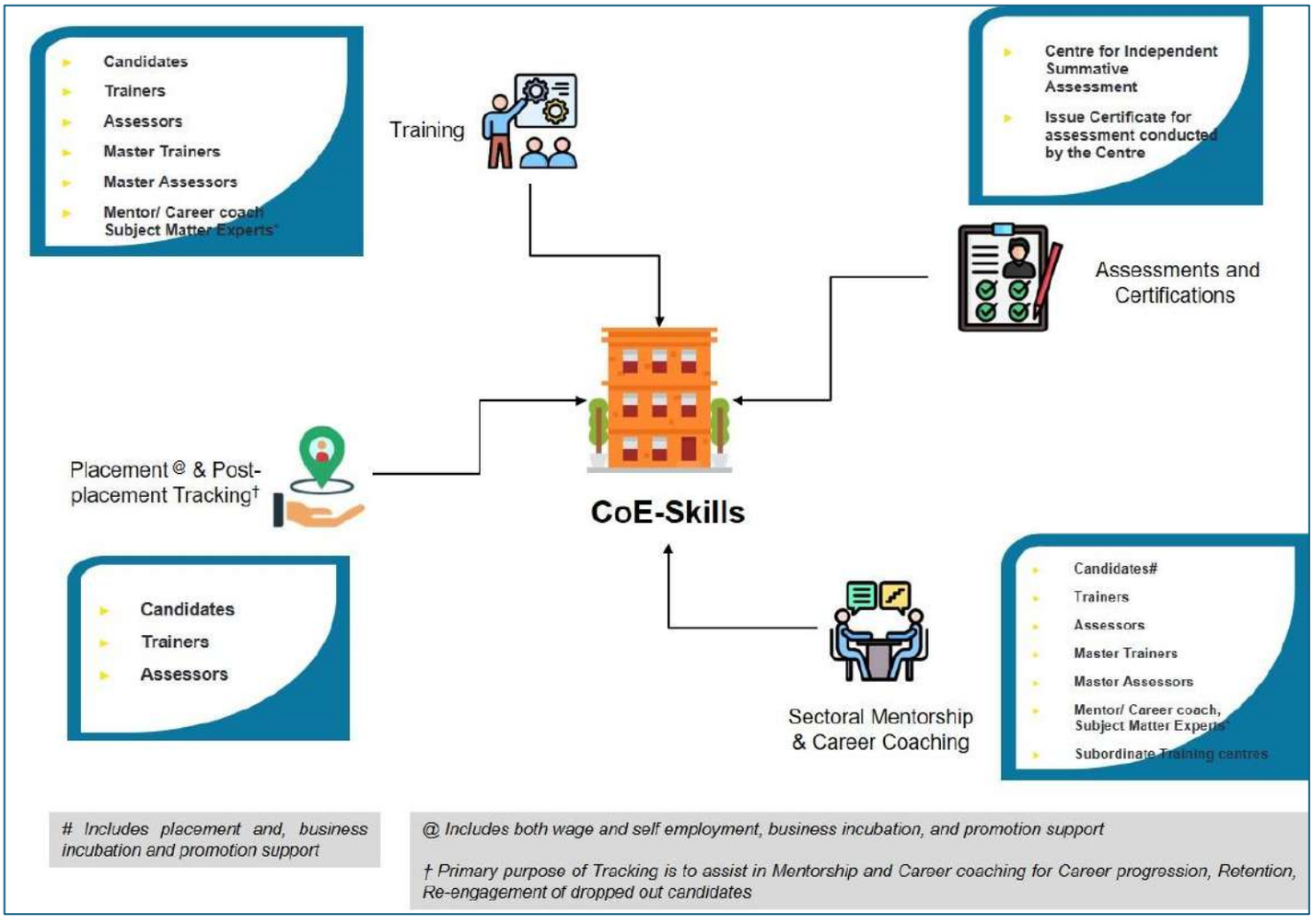


Figure 7: Functions of CoE-Skills

4.2.1 Advanced and Future-Ready Skill Training

The CoE-Skills shall deliver advanced, future-ready training in approved sector(s)/job role(s), aligned with industry needs and emerging technologies. The training shall be conducted for employment seekers and key skilling ecosystem stakeholders, including Trainers, Assessors, Master Trainers, Master Assessors, Instructors/Supervisors, Mentors, Career coaches, and Subject Matter Experts, to strengthen quality and credibility in training and assessment.

4.2.2 Assessment and Certification

The CoE-Skills shall function as an independent centre for end-of-training summative assessment in the approved sector(s)/job role(s), wherever authorized.

The Centre shall leverage advanced lab infrastructure, practical equipment, industry-relevant assessors, and competency/proficiency-based assessment mechanisms aligned with industry requirements. The CoE-Skills shall also issue certificates for

assessments conducted by the Centre, wherever applicable and as per prescribed norms.

4.2.3 Sectoral Mentorship and Career Coaching

The CoE-Skills shall provide structured mentorship and career coaching support to trainees and relevant stakeholders to improve training outcomes and enable long-term career progression. Support shall begin at the trainee selection stage through counselling, continue during the training period, and extend post-training for successful trainees. Post-training support shall include placement facilitation, post-placement guidance, employability enhancement, business incubation and promotion support, and assistance for long-term career advancement.

4.2.4 Placement and Post- Placement Tracking

The CoE-Skills shall facilitate placement linkages for trained candidates, including support for wage employment, self-employment, entrepreneurship, business incubation, and promotion support, wherever applicable.

The CoE-Skills shall also undertake post-placement tracking to monitor trainee outcomes and provide continued guidance. Such tracking shall support career progression, retention, re-engagement of drop-out candidates, and continued mentorship for long-term employment and livelihood outcomes.

4.2.5 Additional Roles envisaged

(i) **Candidate Mobilization and Training Need Assessment:** The CoE-Skills shall mobilize candidates through SSDMs, government programmes, ITIs, industry linkages, and other relevant channels, and undertake basic profiling to guide candidates towards suitable training pathways, bridge courses, assessments, and employment opportunities.

(ii) Industry Linkages and Employment Facilitation: The CoE-Skills shall build and maintain industry linkages to understand skill demand, facilitate internships, apprenticeships, placements, and promote industry participation in curriculum design, assessments, and mentoring. CoE-Skills should serve as a bridge between candidates, training institutions, and employers.

(iii) Technology Infrastructure and Digital Services: The CoE-Skills shall provide technology-enabled services such as digital candidate records, online counselling,

job aggregation, resume-building, interview preparation, and outcome tracking, with relevant data entered on or integrated with SIDH as per prescribed standards.

(iv) Lifelong Learning and Modular Course Access: The CoE-Skills shall promote stackable, modular, and flexible learning opportunities, including bridge courses, advanced modules, reskilling, and upskilling for candidates, alumni, and workers.

(v) Partnership Development and Ecosystem Coordination: CoE-Skills will actively leverage partnerships with government departments, industry, universities, academic institutions, training institutions, skill development agencies, employers, and sector experts to align resources, programmes, infrastructure, and opportunities.

(vi) Employers and sector experts: The centre should act as a coordination platform to align resources, programmes, infrastructure, and opportunities across partners.

(vii) Branding and Outreach Campaigns: The CoE-Skills shall undertake outreach and promotional activities through campaigns, community engagement, employer connect, digital promotion, success stories, and information sessions to enhance awareness, trust, and participation.

(viii) Capacity Building of Stakeholders: CoE-Skills will support capacity building of the skilling ecosystem through training of trainers, orientation of counsellors and mobilizers, workshops for institutions and training partners, employer sensitization, and sessions for government and implementation teams.

(ix) Placement Support Services: CoE-Skills may provide services such as mock interviews, psychometric tests, mentorship, alumni networks, scholarship linkages, networking events, entrepreneurship support, international job facilitation, and pre-departure orientation, based on demand and partnerships.

(x) Outcome Tracking and Continuous Improvement: CoE-Skills shall track key outcomes including mobilization, counselling, enrolment, completion, assessment, certification, placement, apprenticeship, employer participation, alumni engagement, candidate satisfaction, and digital service utilization, and use periodic reviews to improve delivery and employment outcomes.

4.3 Roles and responsibilities of VTC

The roles and responsibilities of VTCs shall be limited to conduct training with training infrastructure, available Trainers and resource as per the approved empanelled capacity.

4.3.1 Candidate Mobilisation and Enrolment

Undertake mobilisation, counselling, screening and enrolment of candidates in accordance with the requirements of the relevant scheme or programme. The mobilisation process should be aligned with local demand, approved job role(s), eligibility conditions and available training capacity. VTCs shall ensure that candidates are informed about the nature of training, duration, certification, possible employment or self-employment pathways, and other scheme-specific conditions before enrolment.

4.3.2 Basic Counselling

Carry out basic counselling to candidates to help them select suitable job role(s), understand training expectations, and prepare for training, assessment and post-training opportunities.

4.3.3 Training Delivery

Conduct Skill training in approved job role(s) and sector(s) in accordance with the applicable scheme guidelines, qualification requirements, curriculum, training hours, trainer norms and operational instructions issued by MSDE or the concerned implementing agency. Training shall be delivered using appropriate classroom, lab, workshop, practical and digital learning resources available at the centre.

4.3.4 Training Infrastructure and Equipment Utilisation

Maintain infrastructure, tools, equipment, raw material, safety arrangements, classroom/lab facilities, internet connectivity and other resources required for the approved sector(s)/job role(s). The centre shall ensure that training infrastructure is functional, accessible, safe and available for training and assessment purposes throughout the implementation period.

4.3.5 Trainer and Assessor Availability

Ensure availability of qualified and experienced Trainers and Assessors, as applicable, for the approved job role(s). Trainers and Assessors should meet the prescribed qualification, experience, ToT/ToA and sectoral requirements, wherever mandated.

4.3.6 Assessment and Certification Support

Facilitate Assessment and Certification of candidates in accordance with the applicable assessment protocols and certification requirements. This may include coordination of assessment schedules, availability of assessment infrastructure, candidate readiness, assessment records, and support for documentation and certification-related processes.

4.3.7 Placement Facilitation

Support trained and certified candidates in accessing placement as defined in the guidelines and as applicable under the relevant scheme.

4.3.8 Digital Reporting and Data Compliance

Ensure accurate, timely and complete reporting of candidate enrolment, attendance, training progress, assessment, certification, placement and outcome data on prescribed digital platforms, including SIDH, AEBAS or any other system notified by MSDE or the concerned scheme implementing agency.

4.3.9 Candidate Feedback and Grievance Redressal

Maintain feedback and grievance redressal mechanism for candidates and other relevant stakeholders. Feedback on training delivery, infrastructure, trainers, assessment experience and placement support to be collected periodically and used for improving training quality. Grievances will be recorded, reviewed and resolved within the prescribed timelines, wherever applicable.

4.3.10 Scheme and Programme Compliance

Comply with all scheme-specific obligations, operational requirements, reporting formats, financial norms, monitoring protocols and quality standards applicable to the project or programme being implemented. VTCs will also cooperate with MSDE, RDSDEs, Awarding Bodies, assessment agencies, scheme implementing agencies and monitoring teams during inspections, audits, reviews and verification exercises.

4.3.11 Post-Training Support and Outcome Tracking

Support post-training follow-up of candidates, including placement tracking, apprenticeship tracking, self-employment tracking, alumni engagement and collection of outcome-related information, wherever required under the scheme. The centre shall

maintain records of candidate progression and provide such information to MSDE or the concerned implementing agency as per prescribed timelines.

4.3.12 Upgradation Pathway to CoE-Skills

A VTC is recommended to progressively strengthen its institutional capacity, infrastructure, training quality, industry linkages, trainer and assessor capability, digital reporting systems, and outcome performance with the objective of becoming CoE-Skills. Upon fulfilment of the prescribed eligibility criteria, the VTC should apply for conversion to CoE-Skills in accordance with the empanelment process specified in these Guidelines.

4.4 Performance indicators

The performance of empanelled CoE-Skills/VTC will be assessed through a set of defined Key Performance Indicators (KPIs) as provided in **Annexure - III**. The KPIs will be used for periodic monitoring, annual performance review, continuation of engagement, target allocation, and renewal-related decisions.

4.5 Outcomes

S.No.	Outcome	Meaning	Criteria
1.	Wage employment	A form of employment where an individual is engaged by an employer, organization, company, establishment, enterprise, shop, factory, institution, or service provider and receives regular wages or salary in exchange for the work performed.	• Salary slips for minimum 3 consecutive months OR Salary payment proof through bank statement/ UPI/ cheque/ payroll transfer for minimum 3 months • Appointment letter/ offer letter/ Joining confirmation from employer OR Joint certificate issued by candidate and employer, confirming candidate name, job role, salary/ wage, joining

S.No.	Outcome	Meaning	Criteria
			date and employment duration • EPFO/ ESIC contribution proof, wherever applicable OR Form 16
2.	Self employment	Refers to a livelihood activity where an individual independently earns income by using their own skills, knowledge, trade, service, or resources, without being employed by another employer. Such as freelance work, home-based work, service delivery, small trading, repair work, production activity, or any other individual livelihood activity.	• Self-declaration by candidate with details of business/ activity, income, location and service/ product offered • Proof of business/ activity setup, such as Photographs/ videos of worksite, shop, home-based unit, tools, products or service activity OR Purchase bills of raw material, tools, machinery or stock • Income proof from self-employment, such as customer invoices/ receipts/ order records/ UPI payment screenshots/ QR payment records OR Bank statement showing income received from customers/ clients • Customer or market linkage proof, such as customer confirmation, vendor records,

S.No.	Outcome	Meaning	Criteria
			online business profile, WhatsApp Business, social media page, Google Business listing, website or e-commerce seller profile
3.	Entrepreneurship	• Candidate sets up or develops a business venture after training with the objective of generating revenue, serving a market need, scaling operations, or creating employment opportunities. • It includes setting up a shop, enterprise, production unit, service business, startup, partnership, or registered/ unregistered business activity.	• Business registration proof- Udyam Registration/ GST Registration/ Shop Act Registration/ Trade License/ any other valid enterprise registration, wherever applicable • Proof of enterprise setup- shop/ workspace/ unit photographs OR Rent agreement/ ownership/ workplace proof • Revenue or sales proof- customer invoices/ sales receipts/ purchase orders/ order records/ UPI/QR payment records OR bank statement showing business transactions/ income
4.	Fellowship	A structured learning and professional development opportunity offered by an organization, institution, government body, industry partner, or fellowship provider for a defined period.	• Fellowship selection letter/ offer letter/ engagement letter issued by the fellowship organization. • Joining confirmation/ fellowship agreement/ email confirmation from the host

S.No.	Outcome	Meaning	Criteria
			organization confirming candidate selection, role, duration and start date. • Stipend/payment proof, wherever applicable OR bank statement showing stipend received/ payment confirmation issued by the fellowship organization. • Proof of fellowship participation- attendance record/ project or work allocation letter/ progress report/ mentor or supervisor feedback/ completion certificate.
5.	Apprentice ship/ Internship	A structured workplace-based learning opportunity where a candidate gains practical exposure, on-the-job training, and industry experience for a defined duration after completing or participating in CoE-Skills training.	• Apprenticeship registration proof OR Apprenticeship/ internship contract • Joining confirmation from host organization OR Internship/ apprenticeship agreement mentioning role, duration, supervisor and start date. • Stipend proof, wherever applicable OR

S.No.	Outcome	Meaning	Criteria
			Bank statement showing stipend received OR Payment confirmation by organization. • Attendance record/ work allocation/ supervisor feedback/ completion certificate issued by the host organization.
6.	Becomes Trainer/ Assessor and above	Candidate becomes eligible to progress into roles such as Trainer, Assessor, Master Trainer, Lead Trainer, Lead Assessor, or any higher-level role in the skilling ecosystem.	• Trainer certification/ assessor certification/ ToT/A certificate issued by relevant authority, SSC, NSDC ecosystem body, institution or approved agency. • Proof of eligibility to appear for trainer/assessor certification, including exam registration proof OR assessment enrolment proof OR eligibility confirmation issued by the relevant certifying/assessment body. • Assessment result/ scorecard/ qualification proof confirming that the candidate has successfully cleared the required trainer/assessor examination, evaluation, or certification process.

S.No.	Outcome	Meaning	Criteria
			• Empanelment letter/ trainer ID/ assessor ID/ approval letter from SSC, assessment agency, training partner, institution or recognized body.
7.	Higher education	Candidate enrolling in or progressing to a formal academic programme after CoE-Skills training. The programme may include degree, diploma, advanced diploma, postgraduate diploma, undergraduate, postgraduate, professional, technical, vocational or credit-based higher education pathway.	• Admission letter/ enrolment letter issued by university, college, institute, ITI, polytechnic or recognized education provider. • Fee receipt/ student ID-card/ registration confirmation proving active admission. • Academic programme details mentioning course name, duration, level, institution name and start date. • ABC ID/ APAAR ID/ credit record, wherever applicable, showing academic or skill-credit linkage.
8.	Reskilling/ Upskilling	Learning new skills or improve existing skills for better employability, productivity, career growth, entrepreneurship or sectoral mobility.	• Enrolment confirmation for another skill course, advanced course, bridge course, digital course, technical course or sector-specific programme. • Course completion certificate/ participation certificate/ assessment certificate issued by training

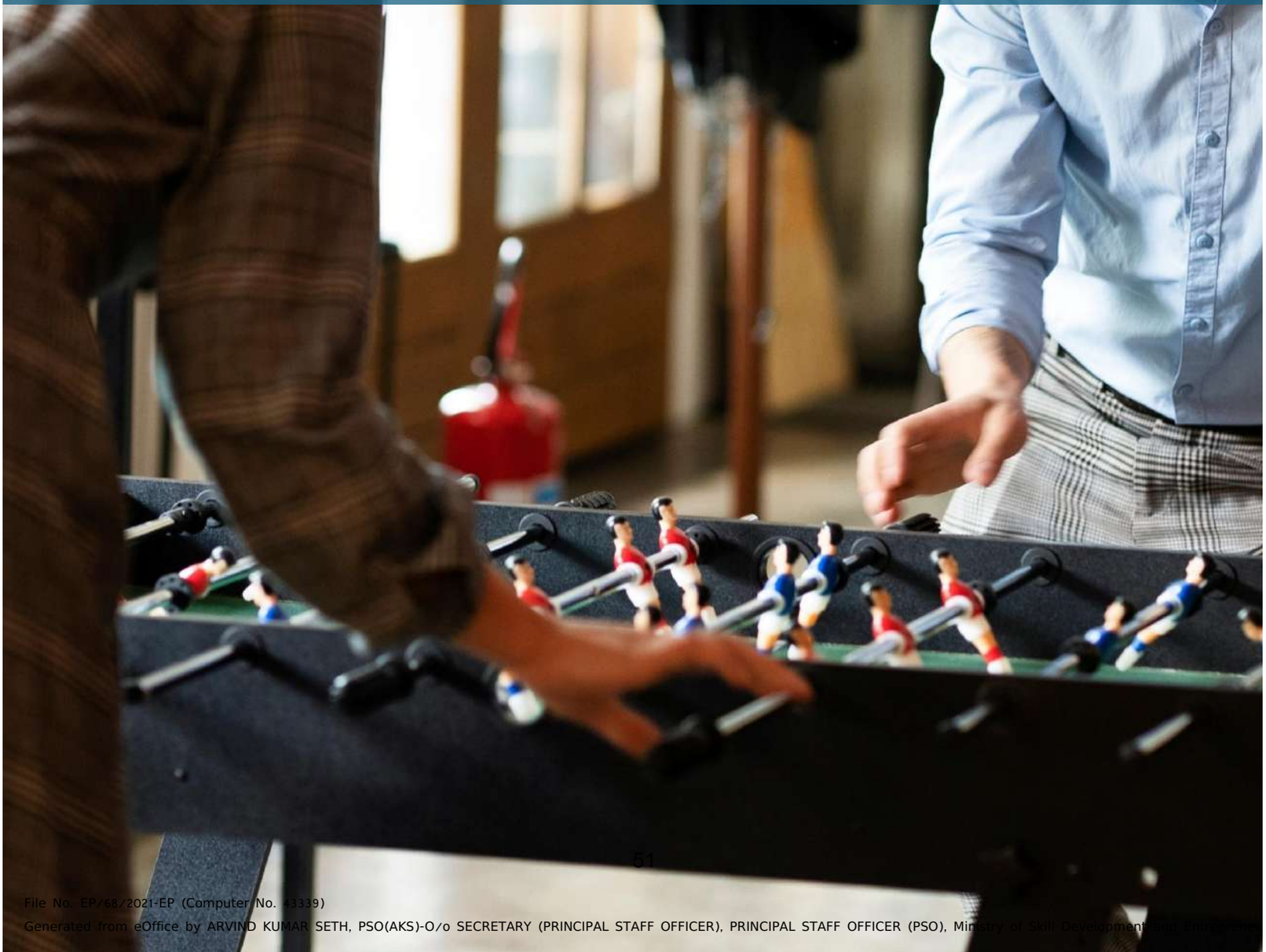
S.No.	Outcome	Meaning	Criteria
			provider, SSC, institution, employer or recognized platform. • Assessment result/ skill test score/ practical evaluation record proving successful completion or competency improvement. • Training attendance record/ LMS completion record/ digital learning transcript proving active participation.
9.	Promotion/ increment	measurable career progression where a candidate receives a higher designation, enhanced responsibilities, salary increase, wage increase, grade change or role improvement	• Promotion letter/ revised designation letter issued by employer. • Increment letter/ revised salary letter/ compensation revision letter issued by employer. • Salary slips before and after increment showing measurable salary increase OR Bank statement showing increased salary credit OR Employer confirmation certifying salary revision or role progression.
10.	Received Transnational/	Receiving a recognized certification from an international, foreign, global,	• International certification certificate issued by a recognized global, foreign,

S.No.	Outcome	Meaning	Criteria
	International certification in the Sector	transnational, multinational, sector-specific or industry-recognized certification body	industry or sector certification body. • Digital badge/ credential ID/ certificate verification link confirming authenticity of certification. • Exam result/ scorecard/ assessment report showing candidate has passed the required international certification examination.
11.	Research and innovation	Contributing to new ideas, applied research, product development, process improvement, prototypes, patents, publications, case studies, technology solutions or innovative practices in the relevant sector	• Research paper/ report/ case study/ project document authored or co-authored by candidate. • Prototype proof/ innovation model/ product design/ process improvement document with candidate contribution. • Recognition letter/ recommendation/ approval from institution, employer, incubation centre, research body or sector expert.
12.	Developing content/ Authoring book	Creating learning material, training content, manuals, modules, curriculum, assessment content, digital content, articles, guides, handbooks or books related to the sector or skill domain.	• Published book/ authored handbook/ manual/ guide/ module carrying candidate name as author, co-author, contributor or content developer.

S.No.	Outcome	Meaning	Criteria
			• Training content/ curriculum/ lesson plan/ assessment content/ e-learning material developed by candidate. • Publisher confirmation/ institution approval/ employer confirmation/ content acceptance letter verifying candidate contribution. • ISBN/ copyright registration/ digital publication link/ platform upload proof, wherever applicable.
13.	Investing in the Sector	Making a financial, material, infrastructure, equipment, technology or business investment in the relevant sector. The investment should contribute to enterprise creation, business expansion, productivity improvement, employment generation or sectoral development.	• Investment proof through bank transaction, payment receipt, invoice, purchase bill or loan disbursement record. • Asset purchase proof for machinery, equipment, tools, technology, raw material, workspace, shop setup or production unit. • Business expansion proof through rent agreement, workplace setup, infrastructure addition, new branch/unit proof or operational photographs. • Loan sanction letter/ credit linkage proof/ investment agreement/ partnership

S.No.	Outcome	Meaning	Criteria
			contribution proof, wherever applicable.

5 | Governance structure



5.1 Establish disciplined reporting, review, and escalation mechanisms:

Each governance level should follow a structured cadence for meetings, reporting, and decision-making to ensure transparency and accountability. Status updates, risks, issues, dependencies, quality observations, and required decisions should be documented using standard templates and escalated progressively from the Project Task Force to higher committees when unresolved or business-critical. Clear thresholds should be defined for escalation, such as schedule slippage, budget variance, unresolved quality concerns, scope changes, or strategic risks. All decisions should be recorded with owners, timelines, and follow-up actions so that the governance model remains action-oriented rather than purely review-based.

5.2 Sectoral Governance Structure

5.2.1 Sectoral Skilling Governing Council

5.2.1.1 Committee members

Chair: Additional Secretary / Joint Secretary, MSDE

Members:

(i) MSDE: Representative from concerned Division
(ii) Others: Representative from the relevant sector ministry/department, Nominated representative of the concerned SSC, NSDC and NCVET, Industry Association, Representatives from the top three best-performing CoE-Skills in the respective sector

5.2.1.2 Frequency of Meetings: Once a year

5.2.1.3 Purpose and Functions:

The Sectoral Skilling Governing Council shall provide sector-level strategic guidance and review the overall skilling ecosystem of the concerned sector. The Council shall focus on reviewing the performance and way forward for the overall sector, and not on the performance of any individual CoE-Skills.

The Council shall:

(i) Review overall sector-level skilling performance, outcomes, challenges, and emerging requirements

(ii) Assess alignment of skilling initiatives with sectoral demand, industry needs, and national skilling priorities

(iii) Identify sector-level gaps in training delivery, curriculum relevance, infrastructure, trainer availability, and employment linkages

(iv) Recommend measures for strengthening quality, innovation, industry participation, and outcome-based skilling in the sector

(v) Suggest the way forward for expansion, upgradation, and improved effectiveness of CoE-Skills and related skilling initiatives within the sector

5.3 Project monitoring and governance structure

A structured Governance framework will ensure strategic guidance, performance monitoring, compliance review, outcome tracking, and timely resolution of implementation issues through periodic reviews. The composition of the committee, review frequency, and key functions are outlined below:

5.3.1 Steering Committee

5.3.1.1 Committee members

Chair: Secretary, Ministry of Skill Development and Entrepreneurship (MSDE)

Members:

(iii) MSDE: Additional Secretary, Joint Secretary, Director- PMKVY
(iv) Others: National Council for Vocational Education and Training (NCVET), nominated Ministries/Departments

5.3.1.2 Frequency of Meetings: Bi-annual

5.3.1.3 Purpose and Functions:

Steering Committee will serve as the apex strategic body and will:

(i) Provide overall strategic direction and leadership for the CoE-Skills initiative
(ii) Approve policies, frameworks, national priorities, focus sectors/areas, and budgeting related to CoE-Skills

(iii) Ensure alignment of CoE-Skills objectives and outcomes with the Skill India Mission, National Education Policy (NEP) 2020, National Credit Framework (NCrF), and the Viksit Bharat @2047 vision

(iv) Review high-level progress and guide long-term evolution of the CoE-Skills ecosystem

5.3.2 Executive Committee

5.3.2.1 Committee members

Chair: Joint Secretary, MSDE

Members:

(i) MSDE: PMKVY Division

(ii) Others: CoE-Skills Representatives, Line Ministries/Departments, NCVET, Industry Representatives, Awarding Bodies, Assessment Agencies

5.3.2.2 Frequency of Meetings: Monthly

5.3.2.3 Purpose and Functions:

The Executive Committee will oversee implementation and operational performance and will:

(i) Review implementation status of CoE-Skills.

(ii) Review physical verification reports, evaluation checklist scores, supporting evidence, grading, and readiness status of individual CoE-Skills.

(iii) Monitor physical and financial progress, Key Performance Indicators (KPIs), and outcome indicators.

(iv) Monitor individual CoE-Skills performance with respect to training delivery, assessment, certification, placement, post-placement tracking, and other scheme outcomes.

(v) Review non-compliance, deficiencies, complaints, adverse findings, or performance gaps related to individual CoE-Skills.

(vi) Recommend corrective actions and escalation measures, where required.

(vii) Support project allocation decisions based on grading, performance, readiness, compliance status, physical and financial progress, and Scheme requirements.

5.4 Monitoring and Review Mechanism

5.4.1 Physical Verification

The empanelled CoE-Skills and Vocational Training Centres (VTCs) shall be evaluated **once in a year**, preferably in the month of **June**, through physical verification using the Evaluation Checklist provided at Annexure II.

Upon completion of the physical verification, the details of the evaluation report shall be entered on SIDH, along with the upload of relevant supporting evidence and documents. The grading obtained through physical verification shall be considered for determining the eligibility of CoE-Skills and VTCs for allocation of projects and it shall also serve as an important input for the renewal of empanelment of CoE-Skills and VTCs.

5.5 Review of performance

CoE-Skills/VTC operator should update details of the allocated projects and their performance on SIDH from the date of receipt of the work order until project closure, including details of the concerned scheme, implementing agency, and relevant contact information. The performance of empanelled CoE-Skills/VTCs will be evaluated against the KPIs prescribed in these Guidelines and will be considered for renewal, continued engagement, and conversion of VTCs into CoE-Skills. The performance status shall be updated on SIDH on a real-time basis, with automated intimation to the concerned scheme implementing agencies funding the project. Where performance is found unsatisfactory or minimum requirements are not met, MSDE may initiate corrective action or withdraw empanelment. In cases of repeated or severe default, the concerned CoE-Skills/VTC may be debarred from conducting skill training, in addition to dis-empanelment.

5.5.1 Grading of the Centre

The grading framework for CoE-Skills shall consist of two components: Onboarding Grading, the details and parameters of which are provided in **Annexure IV**, and Operational Grading, the details and parameters of which are provided in **Annexure V**.

The Operational grading parameters are dynamic in nature and may be reviewed and revised by the Ministry from time to time based on emerging sectoral priorities, policy focus, labour market requirements, and overall performance trends. These parameters shall be used to assess the performance of Centres across the prescribed key performance areas. Verification of the grading parameters shall be undertaken annually, and the grade awarded to a Centre shall form an important basis for decision-making during renewal. Centres securing higher grades may be considered for green channel/ autorenewal, subject to fulfilment of all mandatory compliance requirements. The grading outcomes may also be used to prioritize Centres for the allocation of new projects, additional targets, special initiatives, or other forms of support under the CoE-Skills framework.

5.6 Renewal of CoE-Skills /VTC

5.6.1 Renewal for empanelment of a CoE-Skills /VTC will be based on achievement of post training outcomes, and monitoring and governance report of MSDE. A CoE-Skills /VTC seeking renewal will submit a renewal application in the prescribed format at least three (03) months prior to the expiry of the existing recognition tenure. Applications not submitted within the stipulated timeline may not be considered for renewal. The Process of Renewal exhibited in Figure 8.

5.6.2 The Executive Committee (EC) will undertake a comprehensive assessment of the CoE-Skills/VTC, considering the achievement of intended outcome, which will serve as the basis for renewal decision.

5.6.2.1 CoE-Skills/VTCs holding a higher performance grade at the time of renewal will be eligible for auto-renewal, subject to satisfactory findings from the MSDE and Scheme monitoring team.

5.6.2.2 CoE-Skills /VTCs holding a lower performance grade will be required to demonstrate documented corrective actions, remediation measures, and measurable improvement across identified deficient parameters before their renewal application is considered. Failure to demonstrate adequate improvement may result in non-renewal and elimination from empanelment.

5.6.2.3 The decision of the Executive Committee on renewal will be final and will be communicated to the applicant CoE-Skills /VTC in writing.

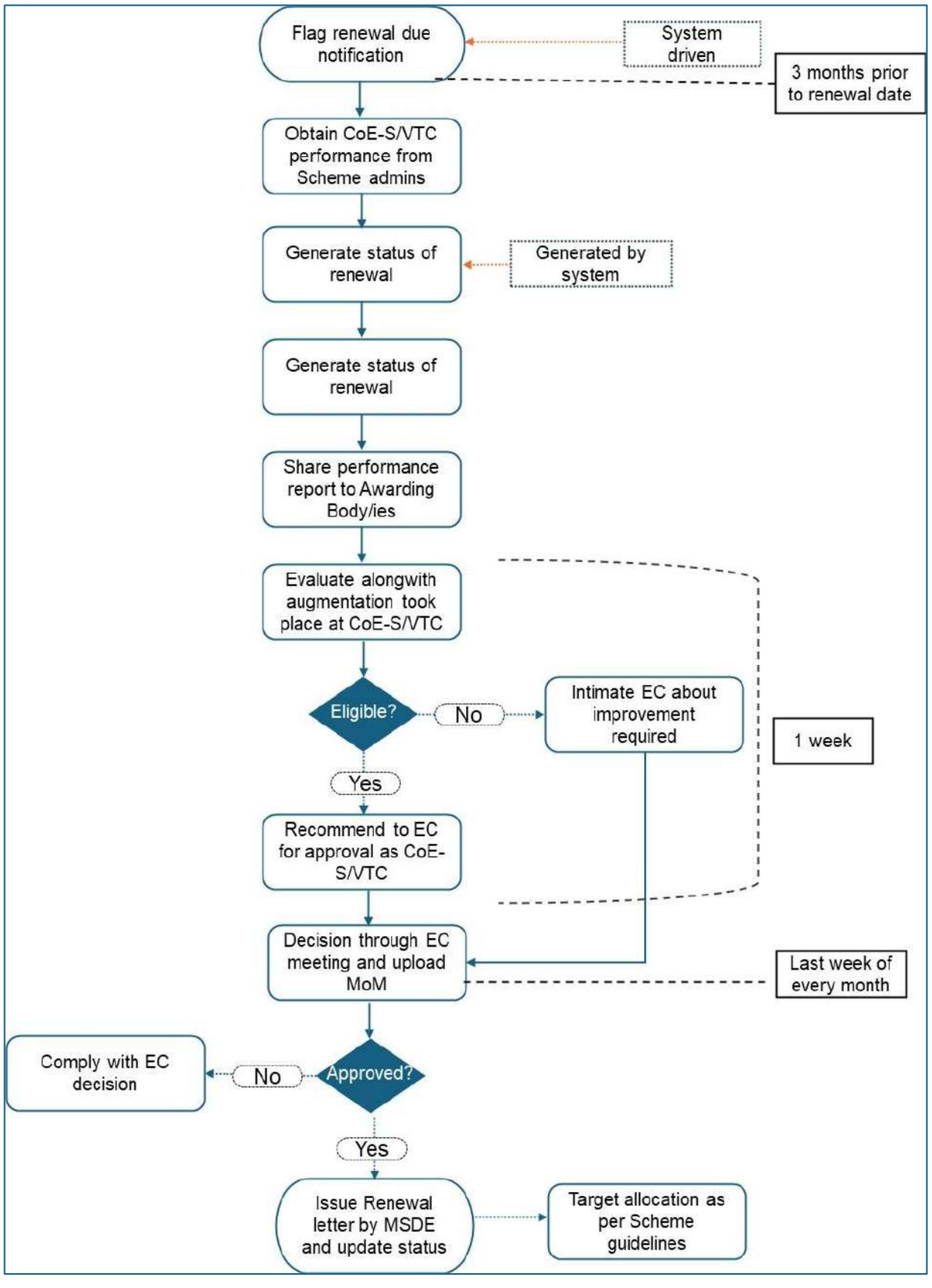


Figure 8: Renewal process

5.7 Conversion from VTC to CoE-Skills

A Vocational Training Centre (VTC) may apply for conversion to CoE-Skills upon fulfilment of the prescribed eligibility criteria. Such application could be submitted in accordance with the empanelment process specified in “Empanelment Mechanism chapter” of this Guidelines. A self-check mechanism has been enabled through the Centre operator’s login ID to allow them to assess Centre’s current eligibility status against the prescribed CoE-Skills requirements and AI based indicative likelihood of approval before submitting the application for conversion at any point in time.

5.8 Exit Clause

The empanelment of a CoE-Skills/VTC under the Scheme may cease under the following circumstances:

5.8.1 Auto-Cancellation on Non-Renewal

In the event of non-renewal of empanelment upon expiry of the prescribed term, the CoE-Skills/VTC status will stand automatically cancelled. The effective exit date will be determined based on the completion of all ongoing training, assessment, certification, or other Scheme-related activities, if any.

5.8.2 Surrender of empanelment status

A CoE-Skills/VTC may voluntarily surrender its empanelment by submitting a one month’s written notice to the competent authority of MSDE, along with the reasons for surrender, after completion of all ongoing activities. The effective exit date will be aligned with the completion of all ongoing activities and/ or implementation of any exigency measures, as applicable, to ensure minimal disruption to candidates and Scheme objectives.

5.8.3 Termination of CoE-Skills/VTC Status

The Ministry of Skill Development and Entrepreneurship (MSDE) may terminate the CoE-Skills/VTC status based on findings arising from monitoring, inspections, performance reviews, or evaluation reports. Such termination may be initiated suo motu or otherwise, with due notice to the CoE-Skills/VTC. The effective date of

termination may be determined either upon completion of ongoing activities or within a specified timeline, as decided by MSDE, depending on the severity and nature of non-compliance.

5.8.4 Suo Motu Action

The competent authority may initiate suo motu action against any CoE-Skills or VTC at any stage, based on complaints, monitoring observations, inspection findings, adverse reports, misrepresentation, non-compliance, or any other matter affecting the credibility, quality, or integrity of the skilling ecosystem.

Such action may include seeking clarification, conducting a special inspection, issuing directions for corrective measures, placing the centre under observation, suspension of empanelment, withdrawal of empanelment, or any other action deemed appropriate under the applicable guidelines

6| Annexure & Appendix

Annexure I: Application form for empanelment of CoE-Skills and VTC

Training centre name: _____

Operating entity: _____

Address of the Centre: _____

_____

Website:_____

Contact person: _____

Contact no.: _____, Email id: _____

Sector(s) specialization: _____

Domain specialization: _____

Skill qualifications / Job roles: _____

Seating capacity: _____

Area (Sq.ft): _____

Whether the Centre should be considered as Centre of Excellence (CoE)-Skills? Yes/No

If yes, state the reason: _____

_____

_____

_____

Nominated by: _____ (Attach a copy of nomination letter)

A. Level 1: Organizational KYC[3]

Sl.	Parameter	Evidence
1.	Registered entity	Registration/ Incorporation Certificate
2.	Operational	Financial audit report of current Assessment Year *OR*

[3] Level 1 information to be filled only for first centre application; details will be auto populated from the second centre onwards. Applicant would be allowed to update the information along with uploading of supporting evidence at any point of time. Updated information may impact the status of empanelment.

Sl.	Parameter	Evidence
		Income Tax Return (ITR) acknowledgement of current Assessment Year
3.	Physical presence	Geo-tagged, time-stamped photograph of the Head Office Entrance displaying name/logo of the entity, taken within 5 days prior to the application *(AI driven check: Address will be verified against Audit report/ ITR acknowledgement, or valid address change document to be uploaded with photograph, if applicable)*
4.	Sectoral credibility (Not mandatory[4])	**Original Equipment Manufacture (OEM):** Patent certificate in each of the applied sector(s) **Industry:** Sectoral analysis report (Not older than three years) by a third-party market research agency or investment agency in which the applicant entity is featured in each of the applied sector(s) **Industry association:** Evidence of having atleast 100 members in each of the applied sector(s) at the time of applications **Institute:** Latest National/International ranking report published by Government/reputed agency where applicant has been awarded not less A grade or has achieved the score of ≥80% for serving prominently in each of the applied sector(s) **Government Institute:** Sectoral eminence certificate from parent Central/State department, not older than three years for each of the applied sector(s) **Sector Skill Council:** No evidence is required for application in the operating sector **Social organization:** Industry credibility certificate from at least 10 sectoral employers served by the entity, where more than 100 candidates have been placed in each applied sector over the past three years
5.	Non-debarment Status	Self-certification on organization letterhead confirming non-blacklisting / non-debarment from conducting skill training activities

[4] Non-negotiable criteria to qualify as CoE-Skills.

B. Level 2: Eligibility for CoE-Skills/VTC

Sl.	Parameter	Indicator	Applicability	Evidence
1.	Permanent training centre	Long term commitment	Both CoE-Skills & VTC	Ownership document or valid lease/ rent agreement of the centre premises for a period not less than 10 years
		Continuity of skilling operations at the Centre	CoE-Skills	Self-certified operational activities for each of past three years
2.	Licencing requirement	Regulatory authorization to conduct training in applied Sector(s), if applicable	Both CoE-Skills & VTC	Self-declaration on organization letterhead confirming compliance with applicable licensing requirements / non applicability, supported by valid regulatory licence/approval/NOC/certification as specified in Appendix I "Regulatory clearance" for applicable sector, if applicable
3.	Operational standards	Standard Operating Procedures (SOP) for operational activities	CoE-Skills	SOP document delineating activities carried out at the centre including- Training of Trainers/Assessors, Assessment & Certification, Mentorship & career coaching, Training for international placement
4.	Operational expertise	Trained atleast 5,000 candidates in each of the applied sector(s)	CoE-Skills	Certificate from project awarding agency/ Self-certificate for self-funded operation or fee-based training supported by evidence of training completion
		Atleast 70% of the trained candidates have qualified in the assessment for each of the applied sector(s)	CoE-Skills	Repository where copy of certificates could be traced
		Atleast 70% of the trained candidates have achieved one of the post training outcomes as	CoE-Skills	Tracking report of the candidates

Sl.	Parameter	Indicator	Applicability	Evidence
		defined in this guidelines		
5.	Governance	Internal monitoring of centre performance	CoE-Skills	Annual self-monitoring report of the centre for each of past three years
		Action taken on self-monitoring	CoE-Skills	Action Taken Report on findings/ gaps identified at self- monitoring, in each of past three years
		Logical conclusion of Stakeholders' feedback	CoE-Skills	Report on feedback analysis and logical conclusion drawn in past three years
6.	Collaboration	Contribution by Industry/Institute[5]	CoE-Skills	Evidence of progressive contribution by the collaborators in atleast two key areas of- Training, Assessment & Certification, Sectoral mentorship & Career coaching, Post training outcome over the past three years
			VTC	MoU Agreement signed with collaborators to contribute atleast in two key areas of- Training, Assessment & Certification, Sectoral mentorship & Career coaching, Post training outcome
7.	Self-sustainability	At least 50% of the training conducted in the past three years was funded through non-Government scheme	CoE-Skills	Details of training programmes conducted in past 3 years with their source of funding
		Sustainability plan of the Centre	VTC	Centre sustainable strategy clearly demonstrating that the

[5] Institutional contribution is applicable only to training centres operated by Industry entity functioning within the applied sector(s). CSR activities shall not be treated as industry of the Parent entity. For all categories of centre operators other than Industry, collaboration with Industry will be applicable.

Sl.	Parameter	Indicator	Applicability	Evidence
				centre can operate without funding from Government scheme
8.	Centre infrastructure	Centre Built-up area, as prescribed in Appendix I of the concerned Sector	CoE-Skills	Schematic plan of the centre
		Availability of training equipment and practice materials, as prescribed in Appendix I of the concerned Sector	CoE-Skills	Checklist with photograph/ demonstration video of each of the equipment
		Safety requirement, as prescribed in Appendix I of the concerned Sector	CoE-Skills	Checklist with photograph/ demonstration video of each of the requirement
		Centre specification	VTC	Self-declaration stating that the Centre meets all requirements prescribed in the relevant NSQF-aligned qualification file for the job role(s) applied for, supported by a checklist along with photographs and/or demonstration video
9.	Criteria for Trainers/Assessors	Atleast have 5 Trainers/Assessors and all of them meet the eligibility criteria, as prescribed in Appendix I of the concerned Sector	CoE-Skills	• CV of Trainers/Assessors meeting prescribed eligibility criteria • Appointment letter of Trainers/Assessors • Salary slips of Trainers/Assessors for past three months • Letter of association *(for Industry visiting/guest faculty)*
		Each Trainer meets criteria prescribed in the relevant NSQF-	VTC	Self-declaration enclosing latest brief CVs of Trainers by clearly indicating their qualifications and experience details

Sl.	Parameter	Indicator	Applicability	Evidence
		aligned qualification file for the job role(s) applied for		

Annexure II: Checklist for Evaluation of Application

A. Physical verification checklist

S.No.	Verification Item	Parameter to be Validate	Mode of validation	Yes/ No/ NA (Not Applicable)	EC Observation
1	Location & Access	Centre located at address proposed in the application	Observation		
		Approach road and entry accessible	Observation		
		Location safe and accessible for trainees	Observation		
2	Infrastructure	Number of classrooms & it's size	Observation		
		Number of labs & it's size	Observation		
		Open / activity space available (if applicable)	Observation		
3	Equipment	Availability and functionality of all mandatory equipment	Observation		
		• Equipment relevant to current industry practice • Safety equipment and sector-specific safety measures are available and functional.	Observation		
		Relevant Raw material available for practical training	Observation		
4	Master Trainers /Trainers/ Master Assessors /Assessors	Educational Qualification	Verbal		
		Experience	Verbal		
5	Non-Complian	Additional Remarks			

	ce Observed				

B. Observation of Concern Awarding Body/ies

Parameter	Compliance (Yes/No)	Remarks	Comments
Permanent training centre			
Licencing requirement			
Operational standards			
Operational expertise			
Governance			
Collaboration			
Self- sustainability			
Centre infrastructure			
Criteria for Trainers/ Assessors			

C. Decision of Executive Committee:

Signature by Committee Members

Annexure III: Key Performance Indicators of CoE-Skills and VTC

Sl.	Parameter	Key Performance Indicator (KPI)	Measurement / Metric	Minimum requirement
1.	Centre utilization*	Utilisation of classrooms, labs and workshops	% of idle days with no active training batch	≤ 20% in a year
		Batch occupancy	Average % of candidates enrolled training batches on an average	≥ 70% in a year
2.	Relevance of Job role*	Placement of qualified candidates	% of candidates placed	≥ 70% of candidates completed training by the month of December in the Financial Year
		Enrolment of candidates in batches for each Job role	% of candidates enrolled in each job role	≥ 70% in a year
3.	Training Delivery	Training and Assessments are conducted as reported by CoE-Skills and VTC	CCTV footages of Training and Assessment days	For all Training and Assessment days
			AEBAS attendance records of Trainers and Candidates of the batch	
		Use of technology-enabled training tools*	CCTV footages of use of digital content, LMS, AI/AR/VR/MR, simulation tools or other advanced training aids	As per the training plan, for each batch
4.	**For CoE-Skills** Counselling, mentoring and	Placement of qualified candidates	% of candidates placed from each batch	≥ 70% in a year

Sl.	Parameter	Key Performance Indicator (KPI)	Measurement / Metric	Minimum requirement
	Career coaching; Training and Assessment quality; Placement; Post training support	Candidates retained for 12 months	% of candidates retained from each batch	≥ 50% in a year
4.A	**For VTC** Training quality; Placement; Post training support	Placement of qualified candidates	% of candidates placed from each batch	≥ 70% in a year
5.	Professional development of Trainers and Assessors*	Continuous Professional Development (CPD) of Trainers and Assessors	No. of CPD conducted for all the Trainers atleast once in a year	≥ 1 in a year
		Each Trainer, Assessor attended atleast one CPD in a year	No. of CPD attended by each Trainer and Assessor	
6.	Alumni Engagement	Alumni connect	No. of alumni engagement sessions conducted	Atleast 1 in a year
7.	Industry Linkages[6]*	Discussion took place with industry	Frequency of meetings	Atleast 1 meeting in a quarter
		Changes incorporated based on industry inputs	No. of changes incorporated	Atleast 1 in a year
8.	Digital Reporting Compliance	Timely reporting of data on SIDH and other systems	% of required data submitted accurately and on time through	Timely compliance for each scheduled requirement

[6] Applicable for CoE-Skills not operated by Industry

Sl.	Parameter	Key Performance Indicator (KPI)	Measurement / Metric	Minimum requirement
			SIDH/AEBAS or other prescribed platforms	
9.	Feedback mechanism	Implementation of 360° feedback mechanism	Feedback received from each of the stakeholder groups	Atleast once in a year
		Action based on the feedback	% of feedback concluded	≥ 70% in a year
10.	Compliance to the Scheme(s) and programme(s)	Implementation of projects as per the norms	% of compliance on comprehensive roles and responsibilities for CoE-Skills	≥ 70% in a year
11.	Governance for CoE-Skills	Monitoring and review conducted as per Standard Operating Procedures	Scheduled vs. actual monitoring and review conducted	conducted ≥ 70% of the scheduled time
		Compliance to the Monitoring and review observations	% of compliance	≥ 70% after each of the Monitoring and review
		Annual performance review report	Availability of report in each year	Every year
11.A	Governance for VTC	Self-governance mechanism is practiced at the Centre	Evidence of carrying out Self-governance	Every year

* Not applicable to VTC.

Note: Year refers to Financial Year.

Annexure IV: Grading- Onboarding

S.No.	Parameters	Weight (%)	Indicators	(E) 0	(D) 25	(C) 50	(B) 75	(A) 100
1.	Outcomes Track Record	40	Placement	0	1-30%	31-50%	51-70%	71-100%
			International Placement	0	1-30%	31-50%	51-70%	71-100%
			Career Progression	0	1-30%	31-50%	51-70%	71-100%
2.	Infrastructure	30	Advanced Tools and Equipment added over and above minimum requirement	0	1-4	5-6	7-9	10 and above
			Amenities added in the centre	0	1-4	5-6	7-9	10 and above
			Safety equipment checked	≥50 %	51-60%	61-80%	81-99%	100%
3.	No. of projects	15	Number of relevant skilling/ training projects implemented	0	1-4	5-6	7-9	10 and above

S.No.	Parameters	Weight (%)	Indicators	(E) 0	(D) 25	(C) 50	(B) 75	(A) 100
4.	Trainers	10	Experience- Above the minimum requirement mentioned in *Appendix I*	0	1-4 years	5-6 years	7-9 years	10yeas or above
			Continuous Professional Development (CPD) of Trainers and Assessors	0%	30%	50%	70%	100%
5.	Collaboration	5	No. of Activities undertaken collaboratively	0	2-4	5-6	7-9	10 and above

Annexure V: Grading- Operational

S.No.	Parameters	Weight (%)	Indicators	(E) 0	(D) 25	(C)50	(B) 75	(A) 100
1.	Outcomes	40	Placement	0	1-30%	31-50%	51-70%	71-100%
			International Placement	0	1-30%	31-50%	51-70%	71-100%
			Career Progression	0	1-30%	31-50%	51-70%	71-100%
2.	Infrastructure	30	Advanced Tools and Equipment added over and above minimum requirement	0	2-4	5-6	7-9	10 and above
			Amenities added in the centre	0	2-4	5-6	7-9	10 and above
			Safety equipment checked	≥50%	51-60%	61-80%	81-99%	100%
3.	Training Delivery	15	Courses aligned with NSQF	0%	1-30%	31%-60%	61-99%	100%
			Trainees Qualified	≥40%	41%-60%	61%-80%	81-99%	100%
4.	Trainers	10	Experience- Above the minimum requirement mentioned in *Appendix I*	0	2-4 years	5-6 years	7-9 years	10years or above

			Continuous Professional Development (CPD) of Trainers and Assessors	0%	30%	50%	70%	100%
5.	Collaboration	5	No. of Activities undertaken collaboratively	0	2-4	5-6	7-9	10 and above

Appendix I: Sectoral specifications

1. Aerospace & Aviation

Parameters	Specifications
Centre Built-up areas (Sq.ft)	5,000
Equipment	1. Aircraft cut section/mock-up, aircraft panels, fuselage/rivet practice panels 2. Sheet-metal work benches, riveting guns, pneumatic tools, torque wrenches, drilling machines, fastener kits 3. Composite lay-up tables, vacuum bagging kit, curing oven/autoclave simulator, resin handling tools, NDT demo kits 4. CNC simulator, CNC lathe/milling trainer, CAD/CAM workstations, 3D printer, metrology tools, vernier, micrometer, height gauge, CMM demo access 5. Avionics trainers: wiring harness boards, multimeters, oscilloscopes, power supplies, soldering/desoldering stations, aircraft electrical circuit trainers 6. Hydraulic, pneumatic and fuel-system trainers; environmental control system demo trainer 7. Basic aircraft engine/powerplant cutaway or simulator, turbine engine model, propeller model 8. Drone/UAV kits: multirotor drones, flight controller trainers, battery charging station, payload simulator, geo-fencing/mission planning software 9. Airport operations equipment: baggage conveyor simulator, cargo pallet/ULD demo unit, marshalling wands, chocks, cones, safety cones, GSE simulator, load-and-trim software demo 10. AR/VR aircraft maintenance simulator and digital twin-based troubleshooting station; 11. LMS, smart boards, assessment terminals, biometric attendance, CCTV 12. (Preferred) Live “mini-airport + mini-MRO + mini-aerospace factory” simulation floor
Criteria for Trainers/ Assessors	1. Diploma/ITI/degree in mechanical, aeronautical, electrical, electronics, avionics, aircraft maintenance, production or relevant discipline 2. Minimum 5 years industry experience for vocational job roles 3. For MRO/aircraft maintenance- oriented modules, trainers should have relevant aircraft maintenance, AME, airline, MRO or DGCA-approved training organisation exposure

Parameters	Specifications
Safety requirements	1. PPE: safety shoes, goggles, gloves, ear protection, face shield, respirator/mask for composite work, anti-static wrist straps for avionics 2. Fire safety: extinguishers - CO_2, DCP and foam; smoke detectors, fire alarm, marked evacuation routes, emergency lighting and assembly area 3. Electrical safety: ELCB/RCCB, proper earthing, lockout/tagout procedure, insulated tools, periodic electrical audit 4. Tool and machine safety: tool crib, tool accountability, machine guards, SOPs, torque tool calibration and daily inspection checklist 5. Composite/chemical safety: MSDS, resin storage cabinet, ventilation/extraction, spill kits, eyewash station and controlled waste disposal 6. Battery and drone safety: Li-ion/LiPo charging cabinet, fireproof charging bags, battery logbook, indoor cage for drone testing and no-fly compliance for outdoor flying 7. Airport-side safety simulation: FOD control, ramp hazard marking, marshalling discipline, high-visibility jackets, hearing protection and emergency stop practice 8. First-aid room, stretcher, trained first-aiders and tie-up with nearest clinic/hospital 9. CCTV coverage, access control, visitor control and incident reporting register 10. Calibration, maintenance and audit records for tools, equipment and safety systems
Regulatory clearance	Directorate General of Civil Aviation (DGCA), *only if the centre offers regulated aircraft maintenance training*

2. Agriculture

Parameters	Specifications
Centre Built-up areas (Sq.ft)	1,000
Equipment	1. Tractor with basic implements- cultivator, rotavator, seed drill, plough, harrow and trailer; 2. Power tiller, brush cutter, sprayer, knapsack sprayer, battery sprayer and fogger 3. Soil testing kit, pH meter, EC meter, moisture meter, NPK testing kit, water testing kit and sampling tools 4. Seed testing equipment- germination trays, seed counter, seed treatment drum, weighing balance and seed storage bins 5. Nursery tools- pro-trays, mist chamber, shade net, potting mixture unit, grafting/budding tools and plant protection tools

Parameters	Specifications
	6. Polyhouse/shade-net demonstration structure with drip irrigation, fertigation tank, filters, valves, pressure gauge and sensors 7. Micro-irrigation kit- drip lines, sprinklers, rain-gun demo, fertigation unit and irrigation scheduling tools 8. Composting and organic farming unit- vermicompost bed, NADEP compost unit, bio-input preparation drums, waste shredder and compost sieves 9. Plant protection demo kit- pest traps, pheromone traps, yellow/blue sticky traps, protective sprayers and safe pesticide application demo material 10. Farm mechanisation workshop- tool kits, grease gun, compressor, welding demo, work benches, basic repair tools and maintenance manuals 11. Post-harvest equipment- weighing scale, grading table, sorting line, packaging sealer, crates, moisture meter, storage bins and cold-room demo or access 12. Food processing/value addition equipment- pulper, grinder, dryer/dehydrator, mixer, sealing machine, FSSAI-compliant stainless-steel work tables and hygiene kits 13. Dairy/allied demo equipment, if included- milking demo unit, feed chopper, feed formulation charts, clean milk production kit and chilling demo access 14. Digital agriculture equipment- tablets, farm management software, weather station, IoT soil-moisture sensors, GPS device, GIS mapping workstation and drone demonstration kit, where permitted 15. Smart classroom equipment- projector/smart board, LMS, biometric attendance, CCTV, assessment terminals and digital content 16. (Preferred): AI-based crop advisory kiosk, satellite/drone-based farm diagnosis demo, climate-smart agriculture station and agri-startup incubation desk

Parameters	Specifications
Criteria for Trainers/ Assessors	1. Minimum qualification: Diploma/degree/ITI or equivalent experience in agriculture, horticulture, agricultural engineering, dairy, food processing, veterinary/allied sciences, rural development, agribusiness or relevant domain 2. Minimum 5 years industry experience for vocational job roles 3. Trainers/Assessors for farm mechanisation should have practical experience in tractor operation, farm machinery maintenance, implement calibration and safe machine handling 4. Trainers/Assessors for protected cultivation should have hands-on experience in polyhouse operations, drip irrigation, fertigation, nursery management and pest/disease management 5. Trainers/Assessors for food processing/value addition should understand hygiene, quality control, packaging, storage and food safety practices
Safety requirements	1. PPE: gumboots, gloves, masks, aprons, goggles, head protection, ear protection for machinery and respirators for pesticide/chemical handling 2. Farm machinery safety: machine guards, PTO safety cover, emergency stop practice, lockout/tagout, reverse alarm, operator checklist and supervised machine operation 3. Chemical and pesticide safety: labelled chemical storage, MSDS, restricted access, spill kit, eyewash station, separate pesticide mixing area and safe disposal protocol 4. Fertiliser and bio-input safety: dry ventilated storage, segregation from food/feed, handling SOP and fire precautions for oxidising materials 5. Electrical and irrigation safety: proper earthing, RCCB/ELCB, waterproof switches, pump safety, cable protection and lockable electrical panels 6. Food processing safety: hygiene zoning, hand-wash stations, pest control, stainless-steel contact surfaces, hairnets, aprons, cleaning schedule and potable water 7. Polyhouse safety: ventilation, heat-stress prevention, safe ladder use, fertigation tank safety and chemical handling SOP 8. Drone/digital agriculture safety, if used: battery charging cabinet, propeller guards, geo-fencing compliance, no-fly-zone awareness and supervised demonstration 9. Animal handling safety, if included: vaccination/health records, clean shed, biosecurity, waste disposal, hand hygiene and zoonotic disease awareness 10. Emergency preparedness: fire extinguishers, first-aid room, stretcher, trained first-aiders, emergency contact board, evacuation route and incident register

Parameters	Specifications
	11. Environmental safety: composting area management, wastewater control, plastic mulch disposal, pesticide container triple-rinse protocol and segregation of biodegradable/non-biodegradable waste
Regulatory clearance	1. State Animal Husbandry Department, for Animal husbandry job roles 2. FSSAI registration/licence, if the centre manufactures, processes, packs, stores or sells food products as part of training or incubation

3. Apparel

Parameters	Specifications
Centre Built-up areas (Sq.ft)	5,000
Equipment	1. Industrial single-needle lockstitch machines 2. Overlock machines- 3-thread, 4-thread and 5-thread 3. Flatlock / interlock machines 4. Button-hole and button-stitch machines; 5. Feed-of-arm, bartack and zig-zag machines 6. Blind-stitch and specialised machines for selected products 7. Cutting tables, fabric spreading table, straight knife, round knife and scissors 8. Pattern-making tables, dress forms, rulers, curves, notches, marking tools and paper rolls 9. CAD pattern software, marker-making software, plotter and digitiser 10. Steam irons, vacuum ironing tables, stain-removal table and finishing tools 11. Quality-control tools- measuring tapes, GSM cutter, weighing scale, shrinkage testing kit, shade cards, light box, needle detector and inspection tables 12. Sewing machine maintenance tools- tool kits, oiling systems, spare parts, needles, bobbins, loopers, motors and demo machine heads 13. Home furnishing equipment- heavy-duty sewing machines, quilting machine, curtain tape attachment, cushion and bed-linen production tools 14. Embroidery machine / digital embroidery demo, if embroidery job roles are included; 15. Packing equipment- tagging gun, barcode printer, polybag sealing machine, cartons, folding boards and packing tables 16. IT and digital systems- smart board, LMS, biometric attendance, CCTV, assessment terminals and production-tracking dashboard

Parameters	Specifications
	17. Sustainability equipment- fabric waste segregation bins, upcycling station, repair/rework station and sample display wall 18. (Preferred) AI-enabled digital sampling studio, 3D garment visualisation, zero-waste cutting practice, and micro-factory production line for low-volume, high-mix manufacturing
Criteria for Trainers/ Assessors	1. Minimum qualification: ITI/Diploma/Degree/Certificate in apparel manufacturing, fashion technology, garment construction, textile technology, industrial engineering, production, merchandising or relevant trade 2. Minimum 5 years industry experience for vocational job roles 3. Trainers for Sewing Machine Operator, Self-Employed Tailor, Pattern Master, Quality Checker, Finisher, Production Supervisor and Machine Maintenance Mechanic should have practical exposure to factory-line operations 4. Trainers for CAD/CAM and pattern-making should have hands-on experience in digital pattern, grading, marker making and sample development 5. Trainers for merchandising/export roles should understand buyer communication, costing, trims, sampling, production follow-up, documentation and quality standards
Safety requirements	1. PPE: needle guards, finger guards, cut-resistant gloves for cutting, masks, aprons, closed footwear and ear protection in high-noise areas 2. Machine safety: needle guards, belt guards, emergency stop where applicable, safe threading procedure, lockout/tagout for maintenance and machine-wise SOP display 3. Cutting-room safety: restricted access to cutting machines, blade-changing SOP, metal mesh gloves, blade disposal box and supervised cutting operations 4. Electrical safety: proper earthing, ELCB/RCCB, insulated wiring, overload protection, periodic electrical audit and safe cable routing 5. Fire safety: fire extinguishers, smoke detectors, fire alarm, emergency exits, evacuation route, assembly area and no-blockage rule for aisles 6. Steam/ironing safety: pressure control, insulated pipes, heat-resistant gloves, steam-leak inspection and safe boiler/steam generator operation where used 7. Ergonomics: correct chair height, machine height, lighting, anti-fatigue mats, posture training and periodic breaks to reduce repetitive strain 8. Fabric-dust control: ventilation, housekeeping, lint removal schedule and dustbin segregation 9. Chemical safety: safe storage for stain removers, adhesives, cleaning agents and printing chemicals, with MSDS and spill kit

Parameters	Specifications
	10. Needle and broken-needle control: needle issue register, broken-needle recovery procedure, magnetic sweeper and needle detector for export-oriented products 11. First-aid: first-aid box, trained first-aiders, burn-care kit, eyewash station, stretcher and emergency contact board 12. Workplace compliance: sanitation, drinking water, adequate lighting, ventilation, welfare facilities and incident reporting register
Regulatory clearance	-

4. Automotive

Parameters	Specifications
Centre Built-up areas (Sq.ft)	5,000
Equipment	1. Two-wheeler training vehicles- scooter, motorcycle, electric two-wheeler 2. Four-wheeler training vehicles- petrol, diesel and EV/hybrid demonstration vehicle, based on feasibility 3. Vehicle lift, hydraulic jack, jack stands, creepers, work benches and service trolleys 4. Engine cut-section, transmission cut-section, clutch, differential, suspension and steering models 5. Diagnostic scan tools, OBD-II scanners, multimeters, oscilloscopes, battery testers and sensor-actuator trainers 6. EV training kit- motor, controller, inverter, DC-DC converter, BMS, battery pack simulator and HV safety trainer 7. AC service station, refrigerant recovery unit and HVAC trainer 8. Brake testing trainer, ABS trainer, wheel alignment machine, wheel balancer and tyre changer 9. Fuel injection trainer, common rail diesel trainer, petrol EFI trainer and emission analyser 10. Charging station demo unit- AC charger, DC fast-charger simulator, earthing tester and charging protocol demo 11. Battery lab equipment- insulated tools, battery analyser, cell balancing kit, thermal camera, battery storage cabinet and fire-resistant containment box 12. Body shop tools- dent puller, panel beating tools, spot welding trainer, MIG welding set, sanding tools and paint booth simulator or spray-paint demo zone

Parameters	Specifications
	13. Automotive manufacturing lab- assembly fixtures, torque tools, pneumatic tools, poka-yoke demo, quality gauges, 5S/Kaizen boards and line-balancing charts 14. Precision measuring tools- vernier caliper, micrometer, dial gauge, torque wrench, feeler gauge and compression tester 15. Lubrication and fluid handling equipment- oil drain, grease gun, coolant tester and waste-oil collection system 16. Digital systems- LMS, smart board, biometric attendance, CCTV, assessment terminals, service-management/DMS software and digital job-card system 17. (Preferred) EV battery diagnostics, ADAS calibration demo, connected vehicle telematics, AI-based fault diagnosis and battery second-life/recycling simulation
Criteria for Trainers/ Assessors	1. Minimum qualification: ITI/Diploma/Degree/Certificate in automobile engineering, mechanical engineering, electrical/electronics, mechatronics, EV technology, manufacturing, welding, painting, transport operations or relevant trade 2. Minimum 5 years industry experience for vocational job roles 3. Trainers/Assessors for service technician roles should have hands-on experience in diagnosis, routine repair, major repair, overhaul, electrical/electronic troubleshooting and service documentation 4. Trainers/Assessors for EV and battery programmes should have experience in high-voltage safety, battery systems, BMS, charging systems, motor controllers, diagnostics and safe isolation procedures 5. Trainers/Assessors for manufacturing roles should understand assembly line operations, quality control, torque discipline, 5S, Kaizen, lean manufacturing, welding, machining and inspection 7. Trainers/Assessors for sales/service-advisor roles should understand customer handling, job-card creation, warranty, service estimation, parts management and dealership management systems
Safety requirements	1. PPE: safety shoes, gloves, goggles, face shield, overalls, ear protection, welding helmet, respirator for painting, and insulated gloves for EV work 2. Vehicle workshop safety: wheel chocks, lift safety locks, jack-stand use, no-work-under-unsupported-vehicle rule, oil-spill control and safe tool storage 3. EV/high-voltage safety: HV isolation procedure, lockout/tagout, insulated tools, rescue hook, HV warning signage, battery quarantine area and trained supervision only

Parameters	Specifications
	4. Battery safety: fire-resistant battery storage, thermal monitoring, sand bucket/Class D or appropriate extinguisher as applicable, battery charging SOP, damaged-battery isolation and emergency response plan 5. Fire safety: CO_2, DCP and foam extinguishers, smoke detectors, fire alarm, emergency exits, evacuation plan, assembly point and periodic mock drills 6. Electrical safety: proper earthing, ELCB/RCCB, overload protection, insulated wiring, periodic electrical audit and safe charging station installation 7. Welding and body-shop safety: welding screens, fume extraction, hot-work permit, gas-cylinder storage, flashback arrestors and fire watch 8. Painting safety: ventilated spray area, respirators, flame-proof storage for paints/solvents, MSDS, spill kit and safe disposal of contaminated waste 9. Chemical and fluid safety: labelled storage for lubricants, coolant, brake fluid, cleaning chemicals and refrigerants; MSDS and spill-control kit 10. Waste management: used oil collection, battery waste segregation, oily rag disposal, scrap segregation, tyre waste handling and authorised recycler linkage 11. Ergonomics and housekeeping: 5S discipline, marked walkways, anti-slip flooring, adequate lighting, ventilation and clean work bays 12. First aid and emergency: first-aid box, burn-care kit, eyewash station, stretcher, emergency contact board, trained first-aiders and incident reporting register
Regulatory clearance	-

5. BFSI

Parameters	Specifications
Centre Built-up areas (Sq.ft)	1,000
Equipment	1. Smart classrooms with projector/interactive panel, whiteboard, audio system and hybrid-training camera 2. Computer lab with atleast 40 desktops/laptops, licensed OS, office productivity suite, spreadsheet/accounting tools, PDF tools and browsers 3. High-speed internet, Wi-Fi, LAN networking, firewall/router, UPS and backup power 4. Banking simulation lab: mock branch counters, teller/cash desk, token/display system, cheque drop box, passbook/printer demo, account-opening and KYC documentation practice kits

Parameters	Specifications
	5. Digital payments lab: UPI/QR demo kits, POS terminals, micro-ATM/AePS demo device, biometric scanner, card reader, payment gateway sandbox/demo interface 6. Financial inclusion and microfinance lab: tablet/mobile devices for field data capture, loan application forms, SHG/JLG documentation samples, credit appraisal caselets and collection tracking formats 7. Insurance and mutual fund advisory lab: product illustration templates, proposal forms, claim forms, premium calculator, risk profiling tools, investor/KYC forms, SIP/STP/SWP demo sheets 8. Credit processing and recovery practice kits: loan file samples, CIBIL/credit bureau sample reports, income assessment formats, collateral documentation samples, DRA role-play scripts 9. Finance and accounts lab: Tally/ERP or accounting software, GST practice datasets, invoice/voucher sets, bank reconciliation exercises, payroll and ledger practice files 10. Cybersecurity and fraud-awareness lab: phishing demo, secure login/MFA demo, data privacy case studies, fraud typology posters, cyber hygiene checklist 11. Communication and customer-service lab: call-centre headsets, softphone/demo CRM, complaint-handling scripts, role-play recording facility 12. Assessment infrastructure: biometric attendance, CCTV, LMS, online assessment terminals, printer/scanner, secure question-paper/storage cabinet 13. Library/resource corner with RBI/SEBI/IRDAI/PFRDA awareness material, financial literacy content, banking forms, insurance/mutual fund brochures and current affairs resources 14. Counselling and placement cell with interview cabins, résumé-building station and employer-connect database 15. (Preferred) Fintech and digital finance innovation lab with AI-based credit scoring demo, fraud/risk analytics dashboard, account aggregator/open banking simulation, digital lending workflow, robo-advisory demo, cyber fraud detection cases and financial inclusion field-tech simulation
Criteria for Trainers/ Assessors	1. Minimum qualification: Graduate in Commerce/Finance/Economics/Business Administration/Banking/Insurance/Statistics/Mathematics or relevant discipline; MBA/CA Inter/CMA Inter/CS Inter/PG Diploma in Banking & Finance preferred 2. Minimum 5 years industry experience in banking operations, insurance, mutual funds, microfinance, credit, collections, accounting or financial inclusion 3. Trainers/Assessors for specific job roles should have practical exposure to relevant BFSI functions such as branch banking, KYC/AML, digital payments, loan processing,

Parameters	Specifications
	microfinance operations, insurance sales/service, mutual fund distribution, GST/accounts or debt recovery 4. Trainers/Assessors must have working knowledge of financial literacy, customer service, ethics, data privacy, cyber fraud prevention, KYC/AML basics, grievance handling and responsible selling 5. Digital skills required: MS Office/spreadsheets, online forms, LMS, CRM basics, digital payment platforms, e-KYC workflows and online assessment platforms 6. Soft-skill capability: communication, sales etiquette, counselling, field-readiness, documentation discipline, workplace behaviour and interview preparation
Safety requirements	1. Electrical safety: proper earthing, MCB/RCCB, surge protection, cable management, UPS safety and periodic inspection of computer labs 2. Fire safety: fire extinguishers, smoke detectors, emergency exits, evacuation plan, assembly point, first-aid box and periodic drills 3. Cybersecurity: secured Wi-Fi, firewall, antivirus/endpoint protection, access control, password policy, MFA for admin systems and periodic data backup 4. Data privacy: no use of real customer data for training; all KYC, bank, insurance, credit and investment documents should be dummy/anonymized 5. CCTV and assessment security for examination rooms, server/storage areas and assessment terminals 6. Safe digital-payment practice: demo/sandbox accounts only, no live customer transactions during training unless formally authorized and supervised 7. Biometric device hygiene and privacy controls 8. Ergonomics: proper seating, lighting, ventilation, monitor height, electrical load management and safe cable routing 9. Cash-handling simulation safety: dummy cash only, lockable practice cash boxes and supervised role-play 10. Field-training safety for microfinance/financial inclusion: route planning, emergency contact, supervisor tracking, code of conduct, no unsupervised cash collection practice 11. Anti-harassment, grievance redressal, inclusion and safe-learning policies displayed in centre 12. Insurance/mutual fund/debt recovery role-plays must include ethical selling, non-coercive recovery practices, customer consent and complaint escalation 13. Secure disposal of printed documents through shredding and controlled access to records

Parameters	Specifications
Regulatory clearance	1. For domain content and simulations, align with applicable financial-sector rules/guidelines from RBI for banking/payments/NBFC-related learning, SEBI for securities/mutual funds, IRDAI for insurance and PFRDA for pension-related awareness. 2. If learners are prepared for regulated market roles, centre should ensure linkage to relevant statutory/licensing/certification pathways such as NISM/AMFI-related mutual fund distribution requirements, IRDAI insurance intermediary requirements, IIBF/BCBF-related banking correspondents where applicable

6. Beauty & Wellness

Parameters	Specifications
Centre Built-up areas (Sq.ft)	1,000
Equipment	1. Smart classrooms with projector/interactive panel, whiteboard, audio system, demonstration camera and LMS-enabled training setup 2. Beauty therapy lab: facial beds, facial stools, magnifying lamps, steamers, hot towel cabinets, galvanic/ high frequency/ ultrasonic demo equipment, skin analyser, trolley, mirror units and storage cabinets 3. Skin care kits: cleansers, toners, moisturisers, scrubs, masks, disposable spatulas, bowls, brushes, cotton pads, wipes, headbands and towels 4. Hair dressing lab: hydraulic styling chairs, wash stations, mirrors, hair dryers, hood dryers, straighteners, curlers, clippers, trimmers, blow-dry brushes, section clips, combs, scissors, colour bowls, applicator brushes and mannequins 5. Hair chemical service area: colour mixing station, exhaust/ventilation, patch-test kit, PPE, chemical storage cabinet, spill kit and MSDS file 6. Makeup studio: professional makeup chairs, vanity mirrors with lighting, airbrush makeup kit, brush sets, disposables, sanitising sprays, draping kits, portfolio photography corner and ring lights 7. Nail care lab: manicure/pedicure stations, pedicure chairs/bowls, UV/LED nail lamps, nail drills, nail art tools, steriliser, disposable files/buffers, cuticle tools and nail product storage 8. Spa/wellness therapy lab: massage couches, privacy screens, linen sets, hot stone heater, foot spa, aromatherapy diffuser, oil warmer, towel warmer and relaxation area

Parameters	Specifications
	9. Yoga/fitness/wellness studio: yoga mats, blocks, straps, bolsters, exercise balls, resistance bands, weighing scale, BMI chart, first-aid kit and audio system 10. Aesthetic/non-invasive demo area: skin consultation station, client record templates, consent-form practice kits, LED/laser demonstration charts, non-invasive cosmetology theory models and safety signage 11. Hygiene and sterilisation zone: autoclave/UV steriliser, disinfectant trays, handwash stations, sanitiser dispensers, disposable gloves, masks, aprons, capes, laundry bins and colour-coded waste bins 12. Salon reception and entrepreneurship lab: billing counter, appointment register/software, POS demo, CRM templates, inventory register, retail display shelves and customer-service role-play setup 13. Assessment infrastructure: CCTV, biometric attendance, online assessment terminals, printer/scanner, secure storage cabinet, practical assessment stations and assessor observation checklists 14. Digital content and placement cell: computers, internet, résumé/interview station, portfolio-building setup, employer database and entrepreneurship support materials 15. (Preferred) Smart beauty and wellness technology lab with AI-based skin/hair analysis demo, virtual makeup and hairstyle simulation, digital client consultation records, non-invasive aesthetic device demo, wellness tracking apps, online booking/POS system and beauty e-commerce/creator portfolio setups
Criteria for Trainers/ Assessors	1. Minimum qualification: Diploma/Certificate/ITI/NSQF qualification in Beauty, Hair, Makeup, Nail, Spa, Wellness, Yoga, Cosmetology or relevant domain; graduate qualification preferred for lead trainers 2. Minimum 5 years practical industry experience for trainers in salon, spa, wellness centre, cosmetology clinic, makeup studio, nail studio, fitness/yoga centre or beauty retail 3. For Beauty Therapist/Hair Stylist/Nail Technician/Makeup Artist/Spa Therapist/Yoga Trainer/ Assessor roles, they should have domain-specific hands-on capability in procedures, client consultation, hygiene, tool handling and service sequencing 4. Trainers/Assessors must understand salon/spa operations, customer care, retail sales, appointment management, inventory, hygiene protocols, workplace communication and entrepreneurship 5. Trainers/Assessors for chemical services must be competent in patch testing, contraindications, product dilution, MSDS interpretation, allergy response and safe disposal

Parameters	Specifications
	6. Trainer/Assessors for wellness/yoga/fitness modules must understand contraindications, safe posture correction, basic anatomy, emergency response and learner-specific limitations 7. Trainers/Assessors should demonstrate inclusive training methods, digital learning capability, assessment documentation and learner placement support
Safety requirements	1. PPE: gloves, masks, aprons, capes, goggles/face shield where required, closed footwear and disposable sheets/towels for practical services 2. Hygiene: handwashing stations, sanitiser, sterilisation of reusable tools, single-use disposables, clean linen protocol and daily cleaning schedule 3. Chemical safety: labelled storage, MSDS availability, patch testing, ventilation, dilution control, spill kit, allergy-response procedure and restricted access to strong chemicals 4. Electrical safety: proper earthing, RCCB/MCB, dry working areas near electrical tools, heat-tool stands, periodic inspection and safe cable management 5. Fire safety: extinguishers, smoke detectors, emergency exit signage, evacuation plan, first-aid box and periodic fire drills 6. Skin and client safety: consultation forms, consent forms, contraindication checklist, no invasive procedures without authorised medical/legal compliance and supervised practical sessions only 7. Sharps safety: safe handling of scissors, razors, blades, needles/tattoo tools where applicable, puncture-proof disposal containers and no reuse of disposables 8. Waste management: colour-coded bins for general, contaminated, sharp and chemical waste; safe disposal of wax strips, cotton, blades, used gloves and chemical residue 9. Spa/wellness safety: clean linen, appropriate draping, privacy screens, supervised practice, oil spill prevention, slip-resistant flooring and clear learner code of conduct 10. Yoga/fitness safety: warm-up/cool-down protocol, safe mats, posture modification, no forced stretching, emergency contact and hydration availability 11. Ergonomics: correct trainer/learner posture during services, adjustable chairs/beds, adequate lighting and ventilation 12. Infection prevention: screening for visible skin/nail/scalp infections during practice, tool disinfection after each use and no sharing of personal products 13. Product safety: expiry-date checks, batch tracking for training products, allergen awareness and safe storage away from heat/sunlight

Parameters	Specifications
	14. Centre policies: anti-harassment, grievance redressal, learner consent, safe-touch/service-boundary policy and CCTV in common/assessment areas without violating privacy
Regulatory clearance	-

7. Capital Goods

Parameters	Specifications
Centre Built-up areas (Sq.ft)	5,000
Equipment	1. Smart classrooms with projector/interactive panel, whiteboard, audio system, CAD/CAM teaching display and LMS-enabled digital content 2. Basic workshop with workbenches, bench vice, marking tools, measuring tools, hand tools, power tools, torque tools, clamps, tool cabinets and assembly fixtures 3. Machining lab with conventional lathe, milling machine, drilling machine, surface grinder, pedestal grinder, band saw/cutting machine and tool grinding setup 4. CNC lab with CNC turning centre, CNC vertical machining centre/VMC, CNC simulation software, CNC programming stations, tool pre-setter, fixtures, collets, inserts and cutting tools 5. Welding and fabrication lab with SMAW/MMAW welding machines, MIG/MAG/GMAW welding machines, TIG/GTAW demonstration unit, gas cutting/plasma cutting demo, welding tables, fume extraction, welding screens and electrode/consumable storage 6. Fitting and mechanical assembly lab with bearing pullers, gear pullers, hydraulic press, arbor press, torque wrench, alignment tools, fasteners, couplings, gearboxes, pumps, motors and mechanical sub-assembly kits 7. Sheet metal and fabrication lab with shearing machine, bending machine, rolling machine, notching machine, hand tools, rivet guns, templates and layout tables 8. Electrical/electronic assembly lab with wiring boards, control panels, PLC trainer kits, sensors, relays, contactors, VFD demo, multimeters, clamp meters, soldering stations and panel assembly tools 9. Hydraulics and pneumatics lab with hydraulic trainer, pneumatic trainer, valves, actuators, FRL units, hoses, fittings, pressure gauges and troubleshooting kits

Parameters	Specifications
	10. Metrology and quality lab with vernier calipers, micrometers, height gauge, bore gauge, dial indicators, slip gauges, surface plate, angle plates, thread gauges, radius gauges, roughness tester and calibration demo kits 11. CAD/CAM/CAE lab with atleast 30-40 computer systems, licensed CAD/CAM software, manufacturing simulation tools, 3D printer/prototyping equipment and technical drawing plotter/printer 12. Maintenance and condition-monitoring lab with lubrication kits, vibration meter, IR thermometer/thermal camera demo, alignment kit, maintenance charts and machine breakdown simulation panels 13. Industry 4.0/advanced manufacturing corner with IoT sensors, data acquisition demo, HMI/SCADA demo, robotics/cobot demo, AR/VR maintenance module and digital twin/simulation exposure 14. Material handling and storage equipment such as pallet truck, chain pulley block demo, hoist demo, racks, bins, lifting tackles, slings and safe storage area 15. Assessment infrastructure: CCTV, biometric attendance, online assessment terminals, secure tool room, assessment bays, practical job-piece stations, inspection sheets and evidence-recording system 16. (Preferred) Advanced manufacturing and Industry 4.0 lab with CNC digital twin, AI-based predictive maintenance, IoT-enabled machine monitoring, robotics/cobot demo, additive manufacturing/3D printing, AR/VR machine maintenance simulation and smart quality inspection using vision systems
Criteria for Trainers/ Assessors	1. Minimum qualification: ITI/Diploma/Degree in Mechanical, Production, Manufacturing, Automobile, Electrical, Mechatronics, Tool & Die, Welding, Fabrication, Industrial Automation or relevant engineering trade 2. Minimum 5 years practical industry experience for Trainers in machining, CNC, welding, fabrication, fitting, assembly, maintenance, quality, CAD/CAM or industrial automation 3. Trainers/Assessors for CNC roles should have hands-on knowledge of CNC turning/VMC operations, G-code/M-code, tool offset, work offset, tool selection, job setting, feeds/speeds, machining parameters and inspection 4. Trainers/Assessors for welding should be competent in welding symbols, joint preparation, welding parameters, defect identification, visual inspection, WPS awareness and safe welding practice

Parameters	Specifications
	5. Trainers/Assessors for fitting/assembly should have experience in drawings, tolerances, fasteners, alignment, torqueing, bearing/gear assembly, lubrication, mechanical troubleshooting and preventive maintenance 6. Trainers/Assessors for CAD/CAM/quality should understand engineering drawings, GD&T basics, 2D/3D modelling, CNC toolpath basics, inspection methods, calibration discipline and quality documentation 7. Trainers/Assessors must understand 5S, Kaizen, lean basics, industrial safety, PPE, housekeeping, machine guarding, lockout/tagout basics, material handling and workplace communication
Safety requirements	1. PPE: safety shoes, helmets, goggles/face shield, welding helmet, welding gloves, leather apron, ear protection, dust mask/respirator, cotton overalls and heat-resistant gloves as required 2. Machine safety: guards, emergency stop switches, interlocks, safe operating procedures, no loose clothing, controlled access to rotating machinery and supervised machine operation 3. Electrical safety: proper earthing, MCB/RCCB, insulated cables, lockout/tagout procedure, periodic electrical inspection and restricted access to live panels 4. Welding safety: fume extraction, welding screens, fire blankets, flashback arrestors, gas cylinder trolley and chain, leak testing, safe storage of cylinders and hot-work permit practice 5. Fire safety: extinguishers suitable for electrical/oil/metal fires, sand buckets, fire alarm, smoke detectors, emergency exits, evacuation plan, assembly point and periodic fire drills 6. CNC/machining safety: chuck-key control, tool clamping checks, coolant handling, chip guards, chip removal tools, no hand cleaning of chips, spindle safety and machine-door discipline 7. Grinding/cutting safety: wheel guard, tool rest gap control, face shield, spark control, wheel inspection and no side grinding unless permitted 8. Chemical and coolant safety: labelled containers, MSDS, spill kit, proper ventilation, skin protection, safe disposal of used oil/coolant and housekeeping around wet areas 9. Material handling safety: safe lifting methods, hoist inspection, sling certification, load-limit display, clear pathways, pallet storage and manual handling training 10. Compressed air and pneumatic safety: pressure regulation, hose clamps, no direct air blowing on body/clothes and periodic leak inspection

Parameters	Specifications
	11. Hydraulics safety: pressure release before maintenance, hose inspection, leak control, eye protection and safe troubleshooting procedures 12. Tool room safety: controlled tool issue/return, sharp-tool storage, damaged-tool quarantine and periodic inspection of hand/power tools 13. Workshop housekeeping: 5S implementation, anti-slip floors, adequate lighting, ventilation, scrap segregation, oil-spill control and safe walkway marking 14. First aid and emergency readiness: first-aid room/box, trained first-aiders, emergency contact board, incident register, eye-wash station and stretcher 15. Assessment safety: practical assessments only under instructor/assessor supervision, defined job-piece limits, machine authorisation and stop-work authority for unsafe acts.
Regulatory clearance	-

8. Construction

Parameters	Specifications
Centre Built-up areas (Sq.ft)	5,000
Equipment	1. Smart classrooms with projector/interactive panel, whiteboard, audio system, construction drawings display boards and LMS-enabled digital learning setup 2. Masonry lab: brick/block masonry bays, mortar mixing area, trowels, plumb bob, spirit level, line dori, measuring tape, masonry hammers, floats, screed bars, tile cutters and curing arrangements 3. Concrete lab: concrete mixer, vibration table/needle vibrator, slump cone, cube moulds, curing tank, weighing balance, aggregate sieves, compression testing demo access and concrete finishing tools 4. Bar bending and steel fixing lab: bar bending machine/manual bending bench, cutting machine, rebar tying tools, binding wire, stirrup-making jigs, rebar samples, safety guards and reinforcement drawing practice boards 5. Shuttering/formwork lab: timber/plywood/system formwork panels, props, clamps, tie rods, wedges, staging samples, formwork oiling tools and formwork assembly bays; 6. Scaffolding lab: frame scaffolding, cuplock/ ringlock demo, base plates, sole boards, guard rails, toe boards, ladders, full-body harness, lifelines, fall-arrest demonstration kit and inspection tags

Parameters	Specifications
	7. Plumbing and sanitary lab: pipes, fittings, valves, traps, fixtures, threading machine, pipe cutter, PPR/CPVC/UPVC tools, pressure testing pump and leak testing setup 8. Construction electrical lab: wiring boards, conduits, switches, sockets, distribution board, MCB/RCCB, earthing demo, multimeters, insulation tester and safe low-voltage training panels 9. Painting and finishing lab: wall panels, putty tools, rollers, brushes, spray painting demo unit, texture tools, polishing tools, surface-preparation tools and sample finish boards 10. Surveying lab: auto level, dumpy level, total station demo, laser distance meter, measuring tapes, staff, tripod, marking tools and layout practice area 11. Road and infrastructure works demo area: paver block laying bay, kerb laying, compactors, bitumen/asphalt sample boards, drainage channel demo and road layer cross-section models 12. Equipment operation simulation area: mini excavator/loader simulator or VR simulator, rigging models, lifting tackles, slings, chain pulley block and crane-signal practice charts 13. Digital construction/BIM lab: Minimum 30-40 computers, CAD/BIM software, quantity estimation tools, project scheduling software, digital drawings, printer/plotter and 3D model viewing setup 14. EHS training zone: PPE display, fire extinguishers, first-aid station, emergency signage, confined-space demo model, work-at-height demo tower, hazard identification charts and toolbox-talk area 15. Assessment infrastructure: CCTV, biometric attendance, online assessment terminals, secure storage, practical trade bays, measurement sheets, checklists, job-card templates and assessor observation tools 16. (Preferred) Digital construction and smart infrastructure lab with BIM-enabled project simulation, drone surveying demo, AR/VR safety and site-work simulation, IoT-based site monitoring, green building material display, 3D concrete printing concept demo and AI-based quantity estimation/project scheduling tools
Criteria for Trainers/Assessors	1. Minimum qualification: ITI/Diploma/Degree in Civil Engineering, Construction Technology, Electrical, Plumbing, Surveying, Architecture, Safety, Project Management or relevant construction trade 2. Minimum 5 years relevant site/workshop experience for Trainers in masonry, bar bending, shuttering, scaffolding, plumbing, electrical works, painting, surveying, road works, QA/QC or EHS

Parameters	Specifications
	3. Trainers for masonry/concrete should have practical exposure to construction drawings, line-level-plumb, mortar/concrete mix, curing, blockwork, tiling, plastering, finishing and quality checks 4. Trainers for bar bending and shuttering should understand BBS, reinforcement drawings, cover blocks, lap length, stirrup spacing, formwork alignment, staging safety and dismantling sequence 5. Trainers for scaffolding/work-at-height should be competent in scaffold erection/dismantling sequence, inspection tagging, fall protection, access/egress and load limits 6. Trainers for plumbing/electrical roles should have hands-on installation, testing, troubleshooting, drawings interpretation, safety isolation and quality inspection experience 7. Trainers must understand construction site safety, 5S/housekeeping, material handling, green construction basics, productivity improvement, communication, documentation and employability skills
Safety requirements	1. PPE: safety helmet, safety shoes, gloves, reflective jacket, goggles/face shield, dust mask/respirator, ear protection and full-body harness for work-at-height training 2. Work-at-height safety: guard rails, toe boards, lifelines, anchor points, inspected harnesses, scaffold tags, ladder safety and supervised access 3. Scaffolding safety: base plates, sole boards, bracing, platform boards, load-limit display, safe erection/dismantling procedure and daily inspection checklist 4. Electrical safety: proper earthing, MCB/RCCB, insulated cables, lockout/tagout practice, low-voltage training panels, dry working areas and periodic inspection 5. Fire safety: appropriate extinguishers, sand buckets, fire alarm, emergency exits, evacuation plan, assembly point and periodic fire drills 6. Concrete/masonry safety: safe lifting of cement/blocks, dust control, wet-work skin protection, eye wash, controlled mixer operation and safe curing-area access 7. Cutting/grinding safety: blade guards, spark control, face shield, tool inspection, safe cable routing and no unauthorised operation of cutting tools 8. Bar bending safety: machine guards, hand protection, safe rebar storage, protruding bar caps, controlled bending area and foot-pedal/emergency stop checks 9. Material handling: safe stacking, clear walkways, pallet storage, lifting aids, manual-handling training and signage for heavy materials 10. Excavation/confined-space demo safety: barricading, signage, gas-testing awareness, rescue plan demonstration and restricted access

Parameters	Specifications
	11. Chemical safety: labelled storage for paints, solvents, adhesives, admixtures and waterproofing chemicals; MSDS file, ventilation and spill kit 12. Housekeeping: 5S implementation, anti-slip surfaces, debris removal, nail/sharp-object control, waste segregation and safe storage of tools 13. First aid and emergency readiness: first-aid room/box, stretcher, trained first-aiders, emergency contact board, incident register and heat-stress management 14. Environmental safety: dust suppression, noise control, water conservation, construction waste segregation and safe disposal of cement slurry, paint residue and packaging waste 15. Assessment safety: practical assessments only under instructor/assessor supervision, restricted machine access and stop-work authority for unsafe acts.
Regulatory clearance	-

9. Domestic Workers

Parameters	Specifications
Centre Built-up areas (Sq.ft)	1,000
Equipment	1. Smart classrooms with projector/interactive panel, whiteboard, audio system, CCTV-enabled demonstration camera and LMS-enabled training setup 2. Model household lab with living room, bedroom, kitchen, bathroom, dining area, utility/laundry corner and storage area for realistic practice 3. Housekeeping lab: brooms, mops, dusters, vacuum cleaner, floor scrubber demo, cleaning buckets, microfiber cloths, dustbins, ladders/step stools, glass-cleaning tools and surface-cleaning kits 4. Cleaning chemical kit: disinfectants, detergents, glass cleaner, bathroom cleaner, floor cleaner, stain removers, labels, dilution bottles, MSDS file and spill kit 5. Kitchen and cooking lab: gas stove/induction cooktop, LPG demo setup, chimney/exhaust, refrigerator, mixer-grinder, pressure cooker, microwave/OTG, utensils, chopping boards, knives, storage containers, weighing scale and food hygiene charts 6. Laundry and garment-care lab: washing machine, iron, ironing board, drying rack, laundry baskets, stain-removal kits, fabric-care labels, folding tables and wardrobe management practice units

Parameters	Specifications
	7. Child-care simulation lab: baby dolls/mannequins, feeding bottles, sterilizer, baby bathtub, diaper changing station, crib/cot demo, toys, child-safe furniture, first-aid kit and child-safety checklist 8. Elderly and assisted-care simulation lab: patient bed, wheelchair, walker, commode chair, bedpan/urinal demo, transfer belt, basic mobility aids, BP monitor, thermometer, pulse oximeter demo and non-clinical care charts 9. Caregiving for persons with disabilities lab: accessibility demo aids, ramps, grab bars, communication cards, assisted-transfer practice area, wheelchair handling path and dignity-focused care materials 10. Home safety and emergency lab: fire extinguisher demo, smoke alarm, first-aid box, emergency contact board, gas-leak response chart, electrical safety board and evacuation drill material 11. Communication and household-service etiquette lab: role-play setup, employer interaction scripts, visitor-handling scenarios, privacy/confidentiality caselets, conflict-resolution practice and workplace behaviour posters 12. Digital literacy corner: tablets/smartphones, computers, internet, UPI/payment awareness demo, online job-profile creation, digital attendance, video learning content and helpline/emergency calling practice 13. Assessment infrastructure: biometric attendance, CCTV, online assessment terminals, printer/scanner, practical task stations, assessor checklists, learner logbooks and secure record storage 14. Placement and counselling cell: interview cabin, résumé/profile-building station, employer database, placement MoUs, counselling desk and grievance support system 15. (Preferred) Smart home and assisted-living simulation lab with IoT-enabled home appliances, smart cleaning devices, home safety sensors, elderly fall-alert demo, digital caregiver reporting app, AI-based household task scheduling, emergency response simulation and assistive devices for elderly/persons with disabilities
Criteria for Trainers/Assessors	1. Minimum qualification: 10th/12th pass with certified vocational training in housekeeping, cooking, caregiving, childcare, elderly care, hospitality, nursing assistant/non-clinical care, home management or relevant domain; diploma/graduate qualification preferred for lead trainers 2. Minimum 5 years practical experience for trainers in household services, housekeeping, hospitality, cooking, childcare, elderly support, caregiver services, facility services or home management

Parameters	Specifications
	3. Trainers/Assessors for housekeeping/cooking roles should have hands-on capability in cleaning methods, chemical dilution, equipment handling, kitchen hygiene, safe cooking, laundry, ironing, wardrobe care, home organisation and time management 4. Trainers/Assessors for child-care roles should understand age-appropriate routine support, feeding hygiene, safe handling, basic child safety, play supervision, emergency escalation and boundaries of non-clinical care 5. Trainers/Assessors for elderly and disability caregiving should understand dignity-centred non-clinical support, mobility assistance, fall prevention, hygiene assistance, medication-reminder boundaries, emergency escalation and communication with family/employer 6. Trainers/Assessors must understand worker rights, dignity of labour, workplace conduct, privacy, confidentiality, anti-harassment norms, safe-touch/service-boundary policy and grievance escalation 7. Trainers/Assessors should be able to teach digital literacy, basic financial literacy, self-employment readiness, interview preparation, employer communication and placement-readiness
Safety requirements	1. PPE: gloves, masks, aprons, closed footwear, hair cover/cap where required and safe-use training for all cleaning/cooking/caregiving practical sessions 2. Chemical safety: labelled bottles, correct dilution, MSDS file, no mixing of incompatible chemicals, ventilation, spill kit, skin/eye protection and safe storage away from food/children 3. Kitchen safety: LPG/induction safety, fire blanket/extinguisher, safe knife handling, anti-slip flooring, hot-surface warning, pressure-cooker safety and supervised cooking practice 4. Electrical safety: proper earthing, MCB/RCCB, safe use of iron, mixer, washing machine, vacuum cleaner and microwave/OTG; no wet-hand operation of electrical appliances 5. Fire safety: fire extinguishers, smoke detectors, emergency exits, evacuation plan, assembly point, periodic fire drills and gas-leak response practice; 6. Hygiene and infection prevention: handwashing, sanitisation of tools, separate cleaning cloths for kitchen/bathroom, safe disposal of waste, clean linen protocol and laundry hygiene

Parameters	Specifications
	7. Child-care safety: no unsupervised practice with real children, child-safe furniture, choking hazard awareness, safe feeding/bathing simulation, emergency contact display and strict boundary policy 8. Elderly/disability care safety: fall-prevention practice, wheelchair handling, safe transfer technique, non-clinical scope limitation, no medical procedures unless authorised and emergency escalation protocol 9. Manual handling and ergonomics: safe lifting, bending and mopping posture, use of aids, work-rest cycles and prevention of repetitive strain 10. Ladstepstooltool safety: stable ladders only, no overreaching, supervised use and no unsafe height work 11. Waste management: segregation of wet/dry waste, sanitary waste handling, sharp-object caution, contaminated cloth disposal and safe cleaning of bins 12. Privacy and safeguarding: no sharing of household/client information, secure handling of keys/documents, learner consent for role-plays and prohibition of harassment or exploitation 13. First aid and emergency readiness: first-aid kit, trained first-aider, emergency contact board, incident register, basic CPR awareness demo where permitted and referral protocol 14. Assessment safety: practical assessments only under supervision, use of dummy/simulation materials for child/elderly care, stop-work authority for unsafe acts and clear task instructions
Regulatory clearance	-

10. Electronics & Hardware

Parameters	Specifications
Centre Built-up areas (Sq.ft)	1,000

Parameters	Specifications
Equipment	1. Smart classrooms with projector/interactive panel, whiteboard, audio system, electronics drawings display, digital content and LMS-enabled learning setup 2. Basic electronics lab: workbenches with ESD mats, regulated DC power supplies, multimeters, CRO/DSO oscilloscopes, function generators, LCR meters, breadboards, component kits, jumper wires and tool kits 3. PCB assembly and soldering lab: soldering stations, desoldering stations, hot-air rework stations, PCB holders, magnifiers, fume extractors, solder wire, flux, tweezers, cutters, crimpers and inspection lamps 4. Electronics manufacturing lab: SMT demo kit, component feeders, manual pick-and-place demo, reflow oven demo, wave soldering demo model, torque screwdrivers, ESD bins and assembly fixtures 5. Mobile phone and gadget repair lab: mobile repair tool kits, precision screwdrivers, DC power supply, battery booster, microscope, screen separator, hot plate, BGA rework demo, firmware flashing tools and spare-device practice kits 6. Consumer electronics service lab: LED/LCD TV demo units, set-top box demo, audio system demo, home appliance control boards, microwave/washing machine/refrigerator control panel demo and troubleshooting boards 7. RAC/HVAC and appliance lab: split AC demo unit, refrigeration cycle trainer, gauges, vacuum pump, refrigerant handling demo kit, leak detector, thermometer, clamp meter and basic appliance service tools 8. IT hardware and networking lab: desktops, laptops, servers/demo NAS, routers, switches, LAN cabling tools, crimping tools, patch panels, RJ45 connectors, Wi-Fi devices, printer/scanner demo and storage devices 9. Embedded systems and IoT lab: microcontroller boards, Arduino/Raspberry Pi-type kits, sensors, actuators, relay modules, displays, IoT gateways, cloud-dashboard simulator and basic programming workstations 10. Industrial automation and mechatronics corner: PLC trainer kits, HMI demo, VFD demo, motor control panels, sensors, pneumatics trainer, robotics/cobot demo and troubleshooting panels 11. Solar and power electronics demo lab: solar PV panel demo, charge controller, inverter, battery bank demo, MPPT demo, wiring kits, earthing demo and safety signage 12. Quality and testing lab: insulation tester, earth tester, clamp meter, component tester, thermal camera demo, continuity tester, ESD tester, torque meter, sample inspection jigs and QA checklists

Parameters	Specifications
	13. E-waste and repairability corner: component recovery demo, safe dismantling tools, labelled bins, battery disposal container, RoHS/e-waste awareness charts and repair documentation templates 14. Assessment infrastructure: CCTV, biometric attendance, online assessment terminals, printer/scanner, secure storage cabinet, practical assessment benches, job cards and assessor observation sheets 15. (Preferred) EV battery diagnostics trainer with BMS monitoring kit, cell balancing and thermal management demo; ADAS calibration demonstration setup with camera/radar sensor alignment board; connected vehicle telematics demo unit with GPS, CAN/OBD-II data logger and cloud dashboard; AI-based fault diagnosis software for electronics/appliance/EV subsystems; and battery second-life/recycling simulation kit covering testing, grading, repurposing and safe dismantling workflow
Criteria for Trainers/Assessors	1. Minimum qualification: ITI/Diploma/Degree in Electronics, Electrical, ECE, Instrumentation, Mechatronics, Computer Hardware, IT/Networking, RAC/HVAC, Manufacturing Technology or relevant trade 2. Minimum 5 years relevant industry experience for Trainers in electronics manufacturing, PCB assembly, repair/service, IT hardware, mobile repair, appliance service, automation, IoT, quality or maintenance 3. Trainers for electronics manufacturing should have hands-on capability in soldering, crimping, PCB assembly, ESD control, component identification, assembly-line discipline, inspection and quality documentation 4. Trainers for after-sales service should have experience in diagnosis, troubleshooting, board-level repair basics, customer complaint handling, warranty workflow, spare-parts management and service reporting 5. Trainers for IT hardware/networking should understand computer assembly, OS installation, peripherals, LAN cabling, router/switch configuration basics, storage devices, backup and cybersecurity hygiene 6. Trainers for RAC/HVAC/appliance roles should understand safe electrical testing, refrigeration cycle basics, appliance control boards, leak testing, installation, preventive maintenance and safe handling of tools 7. Trainers for IoT/automation should have exposure to sensors, microcontrollers, PLC basics, HMI/VFD, wiring diagrams, programming logic, troubleshooting and industrial safety

Parameters	Specifications
Safety requirements	1. PPE: safety shoes, ESD wrist strap, ESD coat/apron, safety goggles, heat-resistant gloves, cut-resistant gloves, mask/respirator where fumes are present and closed footwear 2. Electrical safety: proper earthing, MCB/RCCB, insulated tools, low-voltage training circuits for beginners, lockout/tagout practice, dry working surfaces and periodic electrical inspection 3. ESD safety: ESD mats, ESD wrist straps, anti-static storage bags, humidity control, ESD-safe bins, grounded workstations and ESD awareness signage 4. Soldering safety: fume extractors, heat-resistant stands, safe solder storage, no-touch hot-tip protocol, burn first-aid kit and ventilation 5. Battery safety: safe charging area, Li-ion battery handling procedure, damaged battery quarantine box, no puncturing/crushing, thermal runaway awareness and fire-suitable extinguishers 6. Tool safety: controlled issue/return of precision tools, sharp-tool storage, damaged-tool tagging, safe use of cutters/crimpers and periodic inspection of power tools 7. Chemical safety: labelled flux/cleaner/IPA storage, MSDS file, spill kit, ventilation, no open flames near flammables and safe disposal of chemical wipes 8. Fire safety: CO_2/DCP extinguishers, smoke detectors, emergency exits, evacuation plan, assembly point, fire blanket near soldering area and periodic fire drills 9. RAC/HVAC safety: refrigerant handling training, leak detection, cylinder storage, pressure gauge safety, ventilation and no unauthorised refrigerant release 10. Networking/IT lab safety: cable management, server rack stability, safe lifting of equipment, controlled power load and ventilation for computer labs 11. E-waste safety: segregation of PCBs, batteries, cables, plastics and metals; safe storage of e-waste and handover to authorised recyclers 12. Machine and automation safety: guarded rotating parts, emergency stop, low-voltage trainer panels, restricted access to live control panels and supervised operation 13. Ergonomics: proper bench height, anti-glare lighting, magnification for micro-soldering, ventilation and breaks for precision work 14. First aid and emergency readiness: first-aid box, eye-wash station, trained first-aiders, emergency contact board, incident register and burn/electrical shock response protocol

Parameters	Specifications
	15. Assessment safety: practical assessment only under instructor/assessor supervision, energised circuit work by authorised learners only and stop-work authority for unsafe acts
Regulatory clearance	-

11. Food Processing

Parameters	Specifications
Centre Built-up areas (Sq.ft)	1,000
Equipment	1. Smart classrooms with projector/interactive panel, whiteboard, audio system, food-processing charts, food safety posters, digital content and LMS-enabled training setup 2. Basic food processing lab with stainless-steel worktables, food-grade cutting boards, knives, peelers, slicers, weighing scales, measuring cylinders, trays, sieves, mixers, grinders and utensils 3. Fruits and vegetables processing lab: washer, peeler, pulper, juicer, fruit crusher, blancher, steam kettle, jam/jelly/ketchup kettle, pickle mixing tank, bottle filling unit, capping/sealing machine and dehydration/drying unit 4. Bakery and confectionery lab: deck oven, rotary/rack oven, planetary mixer, dough kneader, dough sheeter, proofer, bread slicer, baking trays, moulds, cooling racks, weighing scales and packaging station 5. Dairy processing lab: milk testing kit, cream separator, pasteurizer demo, homogenizer demo, curd/yoghurt incubator, paneer press, chiller, milk can washer and dairy packaging demo 6. Food grain milling and pulse/spice processing lab: grain cleaner, destoner, grader, mini flour mill, dal mill demo, spice grinder, pulverizer, sieve shaker, roaster and storage bins 7. Ready-to-eat/packaged foods lab: steam kettle, fryer, extruder demo, snack-making tools, retort/autoclave demo, vacuum sealer, pouch sealing machine, band sealer and batch coding machine 8. Fish/meat/seafood processing demo area where applicable: insulated tables, chillers/freezers, fish/meat cutting tools, ice box, hygienic wash station and cold-chain handling equipment

Parameters	Specifications
	9. Quality testing and food safety lab: pH meter, TDS meter, refractometer, moisture meter, thermometer/probe thermometer, weighing balance, water activity demo, titration set, microbial swab kits, glassware, sample storage and basic adulteration testing kits 10. Packaging and labelling lab: FFS/packing demo, vacuum packing machine, heat sealer, shrink wrapper, label printer, batch coding machine, barcode/QR demo, packaging material samples and shelf-life study setup 11. Cold chain and storage lab: deep freezer, refrigerator, cold room demo, temperature data logger, humidity meter, FIFO/FEFO storage racks, pest-control demo and warehouse documentation formats 12. Hygiene and sanitation zone: handwash stations, foot-operated bins, hairnets, gloves, aprons, masks, gumboots, disinfectants, cleaning-in-place demo, colour-coded tools and sanitation schedule display 13. Entrepreneurship and food business lab: costing templates, recipe standardisation sheets, FSSAI label checklist, product development desk, sensory evaluation booth, retail display and online marketplace demo 14. Assessment infrastructure: CCTV, biometric attendance, online assessment terminals, printer/scanner, secure storage cabinet, practical assessment stations, batch production records and assessor observation sheets 15. (Preferred) IoT-enabled cold-chain monitoring demo with temperature/humidity sensors and cloud dashboard; AI-based food quality/freshness inspection demo using image-based grading; smart packaging and QR traceability simulation; mini-HACCP digital compliance dashboard; rapid adulteration/pathogen-screening simulation; food waste valorisation demo for by-products such as peel, pomace, bran and whey; and sustainable packaging/recycling simulation for circular food-processing practices
Criteria for Trainers/Assessors	1. Minimum qualification: ITI/Diploma/Degree/B.Voc in Food Processing, Food Technology, Dairy Technology, Bakery, Agriculture, Horticulture, Microbiology, Chemistry, Nutrition, Hotel Management or relevant domain 2. Minimum 5 years relevant industry experience for trainers in food processing, bakery, dairy, fruits and vegetables processing, grain milling, packaging, quality control, food safety, production or entrepreneurship 3. Trainers/Assessors for processing roles should have hands-on capability in raw material selection, sorting, grading, cleaning, cutting, blanching, cooking, drying, preservation, packaging, storage and batch documentation

Parameters	Specifications
	4. Trainers/Assessors for bakery/confectionery should understand recipe standardisation, dough handling, fermentation/proofing, baking parameters, hygiene, finishing, packaging and shelf-life control 5. Trainers/Assessors for dairy/meat/fish/seafood modules should understand cold-chain handling, hygiene, spoilage prevention, temperature control, contamination risk and safe handling practices 6. Trainers/Assessors for quality and food safety should be competent in GMP, GHP, HACCP basics, FSSAI hygiene requirements, sampling, testing, traceability, allergen awareness, sanitation, pest control and documentation 7. Trainers/Assessors must also teach employability, entrepreneurship, costing, packaging, labelling, market linkage, digital payments, inventory control and customer handling
Safety requirements	1. PPE: hairnet/cap, apron, gloves, mask, gumboots, sleeve guards and cut-resistant gloves where required 2. Personal hygiene: mandatory handwashing, trimmed nails, no jewellery, clean uniforms, illness reporting, visitor hygiene and controlled entry into processing labs 3. Food safety: GMP/GHP, sanitation schedule, pest-control log, raw and finished product segregation, allergen control, potable water use and prevention of cross-contamination 4. Fire safety: fire extinguishers, fire blanket near cooking/frying areas, smoke detectors, emergency exits, evacuation plan, assembly point and periodic fire drills 5. Electrical safety: proper earthing, MCB/RCCB, insulated wiring, dry operating areas, safe plug points, periodic inspection and safe use of mixers, grinders, ovens and sealing machines 6. Steam/heat safety: heat-resistant gloves, steam-release protocol, pressure vessel awareness, hot-surface signage, safe fryer operation and burn first-aid kit 7. Knife and blade safety: safe cutting techniques, knife storage, colour-coded cutting boards, machine guards for slicers/cutters and restricted access to sharp tools 8. Chemical safety: labelled cleaning chemicals, MSDS file, dilution charts, separate storage, spill kit, no chemical storage near food ingredients and safe disposal 9. Cold-chain safety: freezer gloves, temperature logs, safe lifting of frozen products, defrosting protocol and alarm/monitoring for cold storage 10. Machine safety: guards, emergency stop switches, authorised operation, lockout/tagout during cleaning/maintenance and supervised practical use

Parameters	Specifications
	11. Microbiology and sample safety: proper sample labelling, safe disposal of swabs/media, disinfected benches and restricted access to testing area 12. Waste management: segregation of organic waste, recyclable packaging, used oil, broken glass, rejected batches and wastewater 13. Environmental safety: water conservation, energy-efficient operation, odour control, safe effluent disposal and by-product utilisation 14. First aid and emergency readiness: first-aid box, eye-wash station, trained first-aiders, emergency contact board, incident register and food contamination recall drill 15. Assessment safety: practical assessments under trainer/assessor supervision only, batch records maintained, unsafe food products discarded and stop-work authority for unsafe acts
Regulatory clearance	FSSAI registration/licence as applicable for food preparation, processing, storage, demonstration, sale or distribution; trainers should align food-safety training with FSSAI hygiene and labelling requirements where relevant

12. Furniture & Fittings

Parameters	Specifications
Centre Built-up areas (Sq.ft)	1,000
Equipment	1. Smart classrooms with projector/interactive panel, whiteboard, audio system, furniture drawings, joinery charts, hardware catalogues, digital content and LMS-enabled training setup 2. Carpentry and wooden furniture workshop: heavy-duty workbenches, bench vice, hand saws, chisels, planes, mallets, hammers, screwdrivers, clamps, marking gauges, try squares, bevel squares, measuring tapes and sharpening stones 3. Wood machining lab: circular saw, band saw, table saw, planer, thicknesser, spindle moulder, router table, drilling machine, mortising machine, sanding machine and dust extraction system 4. Modular furniture lab: panel saw, edge banding machine, boring machine, laminate pressing setup, hardware fitting jigs, dowel drilling jigs, drawer channel fitting tools, hinge boring tools and assembly tables 5. Furniture assembly and fitting lab: cordless drills, impact drivers, screw guns, pneumatic nailers, staplers, clamps, adhesives, fasteners, knock-down fittings, connectors, hinges, locks, handles, drawer slides and levelling tools

Parameters	Specifications
	6. Finishing and polishing lab: spray booth, compressor, spray guns, sanding blocks, orbital sanders, polishing pads, staining tools, lacquer/PU/water-based finish demo, drying racks and colour/sample boards 7. Upholstery and sofa-making lab: sewing machine, foam cutter, staple gun, upholstery tools, fabric/leatherette samples, webbing, springs, cushion-filling material, measuring tools and frame assembly setup 8. Bamboo/cane furniture lab: bamboo splitting/slivering tools, cane weaving tools, bending jigs, heat treatment demo, finishing tools, bamboo seasoning/storage rack and bamboo product sample kits 9. Glass, doors and window installation lab: framed/frameless glass door demo, aluminium/uPVC/wooden frame samples, drilling tools, suction lifters, sealant guns, silicone, gaskets, locks, hinges, rollers and installation fixtures 10. Interior design and drafting lab: drafting tables, drawing boards, sample boards, colour/material libraries, furniture catalogues, hardware catalogues, CAD workstations, printer/plotter and 3D visualisation software 11. CNC/digital fabrication corner: CNC router demo or simulator, laser cutting demo, 3D printer, CAD/CAM software, nesting software, toolpath simulation and digital measurement tools 12. Quality and testing lab: moisture meter, vernier caliper, micrometer, digital angle finder, weighing scale, load/stability demo, finish inspection lights, sample inspection checklists and defect boards 13. Material storage and inventory area: racks for timber, plywood, MDF, particle board, laminates, veneers, bamboo, glass, hardware, adhesives, paints, solvents and finished components 14. Assessment infrastructure: CCTV, biometric attendance, online assessment terminals, printer/scanner, secure tool room, practical assessment bays, job cards, measurement sheets and assessor observation sheets 15. (Preferred) AR/VR-based modular kitchen and interior installation simulator; AI-based design-to-cut optimisation and defect detection demo; IoT-enabled CNC/router monitoring and tool-life tracking; digital measuring and room-scanning demo for site-fit furniture; sustainable material innovation corner for bamboo, recycled boards and low-VOC finishes; and furniture repair, refurbishment and circular-economy simulation for reuse, recycling and second-life furniture products

Parameters	Specifications
Criteria for Trainers/Assessors	1. Minimum qualification: ITI/Diploma/Degree/B.Voc in Carpentry, Woodworking, Furniture Design, Interior Design, Civil/Architecture, Mechanical, Production, Bamboo Technology, Upholstery or relevant trade 2. Minimum 5 years relevant industry experience for trainers in carpentry, modular furniture, furniture manufacturing, fitting, finishing, upholstery, bamboo furniture, glass installation, interior execution or CAD/CAM 3. Trainers for wooden furniture should have hands-on skills in measurement, marking, cutting, joinery, shaping, drilling, assembly, sanding, finishing and quality inspection 4. Trainers for modular furniture should understand panel processing, edge banding, drilling patterns, knock-down fittings, site measurement, modular kitchen/wardrobe assembly, installation and defect rectification 5. Trainers for bamboo/cane furniture should understand bamboo selection, treatment, splitting, bending, weaving, joining, finishing and product quality requirements 6. Trainers for glass/door/window installation should have experience in safe glass handling, frame measurement, drilling, fitting, alignment, sealing, hardware installation and site safety 7. Trainers for design/CAD should understand furniture drawings, ergonomics, material estimation, cut-list preparation, nesting, costing, 3D visualisation and customer presentation
Safety requirements	1. PPE: safety shoes, goggles/face shield, dust mask/respirator, ear protection, gloves, apron, cut-resistant gloves and appropriate clothing for machine operation 2. Machine safety: guards on saws, planers, routers and sanding machines; emergency stops, push sticks, anti-kickback devices, restricted access and supervised operation only 3. Dust control: central/local dust extraction, regular cleaning, masks/respirators, no compressed-air dust blowing on body and safe disposal of sawdust 4. Fire safety: fire extinguishers, fire alarm/smoke detectors, emergency exits, evacuation plan, no-smoking signage, spark control and safe storage of flammable finishes/solvents 5. Electrical safety: proper earthing, MCB/RCCB, insulated wiring, periodic inspection, safe cable routing and lockout/tagout during maintenance 6. Chemical safety: labelled adhesives, paints, thinners, stains and polishes; MSDS file, ventilation, spill kit, closed containers and separate flammable storage 7. Spray/finishing safety: spray booth ventilation, respirators, gloves, eye protection, no open flames, safe drying area and controlled disposal of used rags

Parameters	Specifications
	8. Sharp-tool safety: controlled tool issue/return, blade guards, safe sharpening, damaged-tool tagging and proper storage of chisels, saws, knives and blades 9. Glass handling safety: suction lifters, edge protection, gloves, goggles, safe stacking, two-person lifting and safe disposal of broken glass 10. Material handling safety: safe lifting posture, trolley use, rack stability, clear aisles, storage height limits and team lifting for panels/glass/heavy furniture 11. Noise and vibration control: ear protection in machining zones, machine maintenance and restricted exposure for learners 12. Ergonomics: proper bench height, safe posture during sanding, drilling and assembly, adjustable stools and planned rest breaks 13. Housekeeping: 5S, clear walkways, anti-slip floors, waste segregation, nail/screw control, sawdust removal and safe stacking of offcuts 14. First aid and emergency readiness: first-aid box, eye-wash station, trained first-aiders, emergency contact board, incident register and cut/burn response protocol 15. Assessment safety: practical assessments under trainer/assessor supervision only, machine authorisation for learners and stop-work authority for unsafe acts
Regulatory clearance	-

13. Gems & Jewellery

Parameters	Specifications
Centre Built-up areas (Sq.ft)	1,000

Parameters	Specifications
Equipment	1. Smart classrooms with projector/interactive panel, whiteboard, audio system, jewellery design charts, gemstone charts, process-flow posters, digital content and LMS-enabled training setup 2. Jewellery design and CAD lab: Atleast 30-40 computer systems, jewellery CAD software, rendering software, 3D printer/resin printer, design tablets, scanner, printer, design library, trend boards and product development sample kits 3. Hand-sketching and design studio: drafting tables, jewellery templates, pencils, markers, tracing sheets, design boards, stone-size charts, measurement scales, colour pencils and portfolio display boards 4. Goldsmith and handmade jewellery lab: jeweller's benches, bench pins, saw frames, files, pliers, tweezers, mandrels, hammers, anvils, draw plates, rolling mill, hand drills, soldering torch, pickle pot, quenching bowls and polishing motors 5. Casting and wax lab: wax injector, wax carving tools, wax setting tools, sprue base, investment mixer, burnout furnace, induction/vacuum casting machine demo, casting tree samples and de-vesting tools 6. Stone setting lab: microscope, bench magnifiers, prong/bezels setting tools, gravers, beading tools, burnishers, ring clamps, setters' benches and practice mounts 7. Diamond processing demo lab: diamond planning demo software, loupe, microscope, assorting trays, sieves, weighing balances, bruting/polishing demo unit, laser marking demo and diamond grading sample sets 8. Gemstone processing and identification lab: gem microscope, refractometer, polariscope, dichroscope, UV lamp, specific gravity kit, gemstone tweezers, gemstone trays, calibration gauges and gemstone sample kits 9. Assaying and hallmarking awareness lab: touchstone kit, XRF analyser demo, fire-assay demonstration charts, sample tags, weighing balance, purity-testing workflow, HUID/hallmark verification demo and BIS Care awareness material 10. Polishing and finishing lab: polishing motors, buffing wheels, tumblers, ultrasonic cleaner, steam cleaner, polishing compounds, magnetic polisher, dust collector and finishing inspection lamps 11. Quality control and dispatch lab: precision weighing scales, vernier calipers, ring/bracelet gauges, loupe, microscope, stone count sheets, defect boards, QC checklists, product photography light box and packing station 12. Jewellery retail and customer-service lab: mock retail counter, display trays, billing/POS demo, inventory software, product tags, price-calculation templates, customer-handling scripts and visual merchandising display

Parameters	Specifications
	13. Security and inventory infrastructure: CCTV, biometric access, lockers, safe/vault demo, metal detector demo, tool issue register, material movement register and RFID/barcode inventory demo 14. Assessment infrastructure: CCTV, biometric attendance, online assessment terminals, printer/scanner, secure tool room, practical assessment benches, job cards, logbooks and assessor observation sheets 15. (Preferred) AI-based jewellery design ideation and trend forecasting demo; CAD-to-3D-print rapid prototyping workflow; blockchain/QR-based jewellery traceability simulation from raw material to retail; AI-based gemstone/diamond grading and defect-detection demo; laser welding/laser marking demonstration; digital gold-loss monitoring and recovery simulation; and sustainable jewellery recycling/refining simulation for scrap recovery, responsible sourcing and circular-economy practices

Parameters	Specifications
Criteria for Trainers/Assessors	1. Minimum qualification: ITI/Diploma/Degree/B.Voc/Certificate in Jewellery Design, Gemmology, Diamond Processing, Jewellery Manufacturing, CAD Jewellery, Goldsmith, Retail, Quality Control, Assaying/Hallmarking or relevant domain 2. Minimum 5 years relevant industry experience for trainers in jewellery manufacturing, CAD design, diamond processing, gemstone processing, stone setting, polishing, QC, retail or assaying 3. Trainers/Assessors should be certified/approved as per GJSCI/NSDC/NCVET norms wherever applicable, and training should follow NSQF-aligned QP/NOS and model curriculum; GJSCI explains that QPs define minimum requirements for a job role and that NOS specify performance standards and knowledge requirements 4. Trainers/Assessors for manufacturing roles should have hands-on skills in measurement, sawing, filing, soldering, forming, wax work, casting awareness, stone setting, finishing, polishing and gold-loss control 5. Trainers/Assessors for CAD/design should understand jewellery sketching, ergonomics, stone setting feasibility, CAD modelling, rendering, rapid prototyping, costing and production-friendly design 6. Trainers/Assessors for diamond/gemstone roles should understand sorting, grading basics, use of loupe/microscope, stone handling, calibration, identification tools, defects and safe handling 7. Trainers/Assessors for assaying/hallmarking awareness should understand BIS hallmarking basics, fineness/purity standards, HUID verification workflow and documentation; BIS defines hallmarking as official recording of precious metal content and states that gold and silver are currently under hallmarking in India. 8. Trainers/Assessors must also teach workplace ethics, responsible sourcing awareness, precious-material accountability, customer handling, retail selling, inventory documentation, digital payments and employability skills
Safety requirements	1. PPE: safety goggles, mask/respirator, apron, gloves, finger guards, closed footwear, heat-resistant gloves and ear protection where required 2. Fire safety: fire extinguishers, fire blanket, emergency exits, smoke detectors, evacuation plan, gas-leak response and periodic fire drills 3. Torch and heat safety: flashback arrestors, leak testing, safe cylinder storage, ventilation, hot-work procedure, quenching safety and burn first-aid kit

Parameters	Specifications
	4. Chemical safety: labelled storage for acids, pickle solution, flux, cleaning agents and plating chemicals; MSDS file, spill kit, eye-wash station, fume extraction and restricted access 5. Dust and fume control: polishing dust collector, soldering fume extraction, ventilation, mask use and safe collection of precious-metal dust/sweeps 6. Machine safety: guards on polishing motors, safe use of flex-shaft tools, emergency stop, loose-clothing control and supervised machine operation 7. Sharp-tool safety: safe storage and issue/return of saw blades, files, gravers, cutters, drills and tweezers; damaged-tool tagging and proper disposal of broken blades 8. Laser/advanced equipment safety: controlled access, eye protection, interlocks, signage and supervised operation for laser marking/welding demos 9. Precious-material security: controlled access, CCTV, lockers, material issue/return register, daily reconciliation, scrap collection and restricted storage 10. Gemstone/diamond handling safety: use of trays, tweezers, stone papers, anti-loss mats, secure sorting area and stone count verification 11. Ergonomics: proper bench height, magnification, task lighting, posture training, anti-fatigue seating and periodic breaks for precision work 12. Electrical safety: proper earthing, MCB/RCCB, safe wiring, dry work areas, periodic inspection and safe use of ultrasonic cleaners, motors and CAD/3D-print equipment 13. Waste management: segregation of metal scrap, polishing dust, chemical waste, wax waste, broken blades, packaging and general waste 14. First aid and emergency readiness: first-aid box, eye-wash station, trained first-aiders, emergency contact board, incident register and burn/cut/chemical exposure response protocol 15. Assessment safety: practical assessments under trainer/assessor supervision only, controlled issue of precious or simulated materials, and stop-work authority for unsafe acts.
Regulatory clearance	1. BIS jeweller registration/hallmarking compliance where the centre undertakes sale, demonstration of sale or production of hallmarked gold/silver jewellery; BIS states that manufacturers, wholesalers, distributors or retailers selling hallmarked precious-metal articles must register with BIS, with certain exemptions for job-work artisans. 2. If assaying/hallmarking centre operations are planned, BIS recognition as an Assaying & Hallmarking Centre is required as per BIS guidelines and IS 15820

Parameters	Specifications
	requirements; BIS guidelines specify grant, operation, renewal, suspension and cancellation procedures for A&H Centres. 3. For rough diamond import/export training or incubation activities, align with Kimberley Process Certification requirements; DGFT policy requires rough diamond imports to be accompanied by Kimberley Process Certificate as specified by GJEPC, and GJEPC is referenced as the authority for such certification.

14. Green Jobs

Parameters	Specifications
Centre Built-up areas (Sq.ft)	1,000
Equipment	1. Smart classrooms with projector/interactive panel, whiteboard, audio system, green economy charts, climate action posters, renewable energy process charts, SDG boards and LMS-enabled digital learning setup 2. Solar PV installation lab with PV modules, mounting structures, DC cables, MC4 connectors, junction boxes, charge controllers, inverters, net-metering demo, earthing kit, solar pathfinder/demo sun chart and rooftop installation mock-up 3. Rooftop solar technician yard with roof-slope demo, safety harness anchor points, panel lifting tools, cable routing practice, conduit installation, inverter mounting board and commissioning checklist; PM-Surya Ghar training guidelines highlight the need for solar technician training for rooftop solar implementation 4. Solar O&M and testing lab with IV curve tracer demo, multimeters, clamp meters, insulation tester, earth tester, thermal camera demo, irradiance meter, cleaning tools and fault-finding boards 5. Green hydrogen awareness and technician lab with electrolyser model/simulator, renewable power integration demo, water purification model, hydrogen safety charts, storage cylinder demo, gas detector demo and green hydrogen plant process-flow simulator 6. E-waste management lab with dismantling benches, ESD mats, screwdrivers, pliers, component sorting bins, printed circuit board samples, cable/wire stripping demo, PPE, safe storage containers and e-waste traceability templates 7. Solid waste and circular economy lab with segregation bins, composting unit, biogas model, material recovery facility demo, baler/shredder demo model, recycling samples, waste audit templates and zero-waste campus dashboard; Solid Waste

Parameters	Specifications
	Management Rules cover domestic, institutional, commercial and non-residential solid waste generators 8. Water management and wastewater awareness lab with water quality testing kits, pH/TDS/turbidity meters, rainwater harvesting model, greywater treatment model, STP/ETP process model and water audit tools 9. Energy efficiency and resource optimisation lab with energy meters, smart plugs, power analyser demo, LED lighting board, efficient motor demo, building energy audit templates and resource optimisation worksheets 10. Green mobility and EV charging awareness lab with AC EV charger demo, connector types, battery pack model, charging safety interlocks, load-management simulator, e-mobility process charts and carbon-emission comparison tools 11. Improved cookstove and clean cooking lab with improved cookstove models, biomass fuel samples, chimney/ventilation demo, emission awareness charts, user safety checklist and maintenance toolkit 12. Green construction and sustainable building lab with insulation samples, cool roof materials, green building models, low-carbon material samples, water-efficient fixtures, waste-reuse samples and building sustainability checklist 13. Climate, carbon and ESG digital lab with computers, carbon-footprint calculators, GIS/climate risk maps, ESG reporting templates, lifecycle assessment demo, sustainability dashboard and green business case-study library 14. Assessment infrastructure with CCTV, biometric attendance, online assessment terminals, secure tool room, practical assessment bays, installation checklists, waste audit sheets, O&M logs and assessor observation forms 15. (Preferred) AI-based solar site assessment and generation forecasting; drone/thermal inspection simulation for solar plants; IoT-based energy, water and waste monitoring dashboard; digital twin for rooftop solar and microgrid systems; carbon accounting and ESG analytics platform; green hydrogen safety and electrolyser digital twin; e-waste blockchain/QR traceability; circular economy product-design studio; and climate-resilience simulation for institutions and MSMEs

Parameters	Specifications
Criteria for Trainers/Assessors	1. Minimum qualification: ITI/Diploma/Degree/B.Voc in Electrical, Electronics, Renewable Energy, Solar Technology, Environmental Science, Mechanical, Civil, Energy Management, Waste Management, Water Management, Sustainability, Green Hydrogen or relevant field 2. Minimum 5 years relevant experience for Trainers in solar PV installation/O&M, energy audit, waste management, e-waste recycling, water management, EV charging, green hydrogen, sustainability or green construction 3. Solar trainers/assessors should have hands-on skills in rooftop survey, mounting, DC/AC cabling, earthing, inverter installation, net-metering basics, commissioning, troubleshooting and O&M 4. Waste/e-waste Trainers/Assessors should understand segregation, dismantling safety, authorised recycling, EPR awareness, hazardous component handling, circular economy and documentation; E-Waste Management Rules, 2022 apply to manufacturers, producers, refurbishers, dismantlers and recyclers involved in e-waste processing 5. Green hydrogen trainers/assessors should understand renewable power integration, electrolyser basics, water purification, gas detection, hydrogen storage safety, commissioning support and emergency response 6. Trainers/Assessors must also demonstrate employability, green entrepreneurship, sustainability reporting, environmental compliance, digital literacy, resource efficiency, workplace communication and customer handling
Safety requirements	1. PPE: safety helmet, safety shoes, gloves, goggles/face shield, reflective jacket, dust mask/respirator, cut-resistant gloves, electrical insulated gloves and fall-arrest harness where required 2. Solar electrical safety: lockout/tagout, test-before-touch, DC isolation, earthing, insulation testing, safe inverter work, correct polarity checks and no live work without supervision; CEA Safety Regulations apply to electrical installations, plants and electric lines 3. Work-at-height safety: ladder safety, harness use, anchor points, tool lanyards, barricading, rooftop edge protection and rescue plan 4. Battery and EV safety: ventilation, polarity checks, no short-circuiting, thermal runaway awareness, insulated tools, emergency disconnect and charging-area fire precautions 5. Hydrogen safety: leak detection, ventilation, no ignition sources, cylinder restraint, emergency shutdown, gas detector use and controlled demo quantities only

Parameters	Specifications
	6. Waste and e-waste safety: ESD-safe handling, sharp-edge protection, dust control, segregated bins, no open burning, safe storage of batteries/PCBs and authorised recycling tie-ups; E-waste rules promote environmentally sound management and scientific recycling/disposal 7. Solid waste safety: four-stream segregation awareness, composting hygiene, odour control, pest control, gloves/masks and hand hygiene; SWM Rules 2026 make four-stream segregation mandatory from April 1, 2026 8. Chemical and water-testing safety: labelled reagents, MSDS, spill kit, eye-wash station, safe disposal of test chemicals and supervised lab work 9. Fire safety: CO_2/DCP extinguishers, smoke detectors, emergency exits, evacuation plan, assembly point and periodic mock drills 10. First aid and emergency readiness: first-aid box, trained first-aiders, emergency contact board, incident register, electrical shock response protocol and rooftop rescue drill 11. Data and digital safety: use dummy/anonymised data in ESG, energy and waste dashboards, secure login practices and controlled access to learner/assessment data
Regulatory clearance	-

15. Handicrafts

Parameters	Specifications
Centre Built-up areas (Sq.ft)	1,000
Equipment	1. Smart classrooms with projector/interactive panel, whiteboard, audio system, craft-process charts, design boards, product samples, digital content and LMS-enabled training setup 2. Common design and product development studio: drafting tables, drawing boards, colour wheels, motif libraries, craft catalogues, trend boards, measuring tools, sample boards and product documentation station 3. Hand-crafted textile and block-printing lab: printing tables, wooden/metal blocks, dye trays, screens, squeegees, brushes, drying racks, fabric cutting tools, steam/curing demo and colour-matching charts

Parameters	Specifications
	4. Carpet and rug weaving lab: handlooms, carpet looms, tufting frames, warp/weft yarns, shuttles, bobbins, comb beaters, scissors, design graph sheets, yarn cones and finishing tools 5. Bamboo, cane and natural fibre lab: bamboo splitting/slivering tools, hand saws, knives, bending jigs, weaving frames, treatment/seasoning demo, sanding tools and natural fibre storage racks 6. Woodware and toy-making lab: workbenches, hand saws, chisels, carving tools, mallets, clamps, drills, sanders, small lathe demo, non-toxic paints, polishing tools and toy-safety sample kits 7. Ceramics and blue pottery lab: clay preparation tools, sieves, moulds, potter's wheel, jigger/jolly demo, glazing tools, brushes, kiln demo/electric kiln, drying racks and ceramic quality samples 8. Metalware and fashion jewellery lab: jeweller's benches, pliers, cutters, files, small hammers, mandrels, beading boards, strings, wires, soldering demo, polishing tools and small component storage 9. Glassware and decorative craft lab: glass cutting tools, grinders, engraving tools, stained-glass tools, safety shields, adhesive/sealant kits and sample display panels 10. Stonecraft and papier-mâché lab: carving tools, chisels, files, sanding tools, moulds, pulp preparation containers, lacquer/paint kits, drying shelves and finishing/polishing tools 11. Packaging, labelling and merchandising lab: product photography light box, weighing scale, label printer, barcode/QR demo, packaging materials, catalogue templates, display shelves and e-commerce listing station 12. Quality and testing corner: measuring scales, calipers, colourfastness demo kit, moisture meter, finish inspection lights, product defect boards, craft-wise QC checklists and artisan production logbooks 13. Entrepreneurship and market-linkage lab: costing templates, inventory registers, GST/e-invoice awareness samples, digital payment demo, marketplace onboarding templates, buyer communication role-play and export-readiness samples 14. Assessment infrastructure: CCTV, biometric attendance, online assessment terminals, printer/scanner, secure tool room, practical assessment bays, job cards, sample evaluation sheets and assessor observation checklists; 15. (Preferred) AI-assisted motif and product-design ideation demo; AR/VR craft-process and heritage storytelling simulation; digital catalogue and 3D product visualisation setup; QR/blockchain-based artisan-to-market traceability simulation; e-

Parameters	Specifications
	commerce fulfilment and social-commerce studio; natural dye and sustainable material innovation corner; and circular craft/recycling simulation using textile waste, wood offcuts, paper waste, metal scrap and eco-friendly packaging
Criteria for Trainers/Assessors	1. Minimum qualification: ITI/Diploma/Degree/B.Voc/Certificate in Fine Arts, Textile Design, Craft Design, Product Design, Handicrafts, Carpet Weaving, Wood Craft, Ceramics, Fashion Jewellery, Bamboo/Natural Fibre Craft, Interior/Product Design or relevant traditional craft domain 2. Minimum 5 years practical experience for trainers in craft production, design development, artisan cluster work, quality control, merchandising, exports, e-commerce or entrepreneurship 3. Trainers for textiles/block printing should have hands-on skills in fabric preparation, motif alignment, dye/pigment use, printing sequence, drying, curing, finishing and defect correction 4. Trainers for carpet/weaving should understand loom setup, warp preparation, knotting/tufting/weaving techniques, design reading, yarn handling, finishing and quality inspection; the Carpet Weaver model curriculum includes modules on loom installation, warp preparation and carpet weaving processes 5. Trainers for bamboo/woodware/toys should have practical capability in material selection, cutting, shaping, joinery, sanding, finishing, safe tool handling and product assembly 6. Trainers for ceramics/blue pottery should understand clay preparation, moulding, drying, glazing, kiln operation awareness, finishing and product defect identification 7. Trainers for metalware/fashion jewellery/glassware/stonecraft should have relevant craft-specific skills in shaping, beading, soldering/adhesive use, polishing, engraving, finishing and safe handling of tools/materials 8. Trainers must also teach workplace hygiene, artisan entrepreneurship, costing, digital payments, product photography, packaging, branding, quality standards, customer handling, e-commerce onboarding and market linkage.
Safety requirements	1. PPE: aprons, gloves, cut-resistant gloves, masks/respirators, goggles/face shields, closed footwear, ear protection and heat-resistant gloves where required 2. Tool safety: controlled issue/return of knives, chisels, blades, cutters, needles, awls and carving tools; safe storage, sharpening protocol and damaged-tool tagging 3. Machine safety: guards, emergency stops, authorised operation and supervised use for drills, sanders, small lathes, grinders, sewing machines, tufting tools and cutting machines

Parameters	Specifications
	4. Chemical and dye safety: labelled dyes, pigments, solvents, adhesives, glazes and cleaning chemicals; MSDS file, dilution charts, ventilation, spill kit and restricted chemical storage 5. Fire safety: extinguishers, smoke detectors, emergency exits, evacuation plan, assembly point, no-smoking signage and periodic fire drills, especially near kilns, soldering, paints and solvents 6. Kiln/heat safety: heat-resistant gloves, hot-surface signage, restricted access, safe loading/unloading, ventilation and burn first-aid procedure 7. Dust and fume control: dust extraction or local ventilation for wood, stone, ceramics, polishing and sanding; masks/respirators and regular cleaning of work areas 8. Glass and sharp-material safety: safe cutting procedure, goggles, gloves, edge protection, secure storage and safe disposal of broken glass/sharp waste 9. Ergonomics: proper bench/loom height, task lighting, posture training, anti-fatigue seating and periodic breaks for detailed handwork 10. Material handling: safe stacking of wood, bamboo, yarn, fabric rolls, clay, stone and finished products; clear walkways and trolleys for heavy materials 11. Textile and yarn safety: lint control, safe storage away from ignition sources, colour-coded bins and housekeeping around looms 12. Waste management: segregation of textile waste, wood offcuts, bamboo waste, paper pulp, clay waste, metal/glass scrap, chemical waste and recyclable packaging 13. Product safety: use of non-toxic paints/finishes for toys and household products, smooth edges, safe fastening and product inspection before dispatch 14. First aid and emergency readiness: first-aid box, eye-wash station, trained first-aiders, emergency contact board, incident register and cut/burn/chemical exposure response 15. Assessment safety: practical assessments under trainer/assessor supervision only, safe material issue, defined work area and stop-work authority for unsafe acts
Regulatory clearance	-

16. Healthcare

Parameters	Specifications
Centre Built-up areas (Sq.ft)	1,000

Parameters	Specifications
Equipment	1. Smart classrooms with projector/interactive panel, whiteboard, audio system, anatomy charts, healthcare/AYUSH workflow charts, digital content and LMS-enabled setup. 2. Basic nursing and GDA simulation lab with hospital beds, bedside lockers, over-bed tables, wheelchairs, stretchers, IV stands, mannequins, linen sets, bedpan/urinal demo and patient-transfer aids. 3. Emergency Medical Technician lab with CPR mannequins, AED trainer, spine board, cervical collars, splints, trauma kits, oxygen demo, BVM, suction demo, emergency trolley and ambulance-layout simulation. 4. Phlebotomy and sample collection lab with venipuncture arms, vacutainers, tourniquets, syringes/needles demo, lancets, sample tubes, centrifuge demo, labelling station, cold box and biomedical waste bins. 5. Medical laboratory assistant lab with microscopes, centrifuge, micropipettes, test tubes, slides, reagent demo, sample racks, biosafety cabinet demo, autoclave, refrigerator and lab documentation formats. 6. Dental assistant lab with dental chair demo, dental instruments, sterilisation trays, suction demo, dental models, impression trays, oral hygiene models and infection-control kits. 7. Physiotherapy assistant lab with therapy couch, parallel bars, walker, crutches, exercise balls, resistance bands, hot/cold pack demo, electrotherapy demo units, posture charts and rehabilitation aids. 8. Pharmacy assistant and medical store lab with medicine shelves, prescription samples, inventory software demo, drug classification charts, cold-chain refrigerator demo, expiry register and dispensing simulation counter. 9. Radiology and imaging awareness lab with X-ray positioning charts, radiation safety posters, lead apron demo, imaging workflow simulator, PACS/DICOM demo and reporting documentation practice. 10. Infection prevention and CSSD lab with handwash stations, PPE donning/doffing kits, autoclave demo, sterilisation pouches, disinfectants, colour-coded bins, sharps containers, spill kits and sanitation checklists. 11. Patient communication and hospital front-office lab with reception counter, appointment register/HMIS demo, patient file formats, consent forms, discharge-summary samples, telecalling headsets and role-play setup.

Parameters	Specifications
	12. Digital health and telemedicine lab with computers/tablets, webcam, internet, EMR/HMIS demo, teleconsultation simulation, digital vital-sign devices, data privacy module and e-health documentation templates. 13. AYUSH practical and wellness support lab with AYUSH OPD workflow simulation, patient registration/case-taking formats, Ayurveda prakriti awareness charts, yoga mats, posture charts, meditation/breathing aids, naturopathy awareness charts, Homoeopathy dispensing simulation, Unani/Siddha awareness charts, AYUSH pharmacy/store simulation, medicinal plant charts/repository and wellness counselling corner. 14. Assessment infrastructure with CCTV, biometric attendance, online assessment terminals, printer/scanner, secure storage, practical skill stations, OSCE-style checklists, AYUSH skill-practice checklists and assessor observation sheets. 15. Placement and counselling cell with interview room, résumé support, hospital/clinic/wellness-centre employer database, apprenticeship/OJT tracking register and learner counselling area. 16. Preferred: AI-based triage and symptom-routing simulation, tele-ICU/remote patient monitoring demo, wearable health-device integration, digital vital-sign dashboard, AR/VR anatomy and emergency-care simulation, robotic rehabilitation demo, AI-based diagnostic workflow awareness, hospital IoT asset tracking, biomedical waste traceability, AYUSH teleconsultation workflow and digital wellness-record simulation.
Criteria for Trainers/Assessors	1. Diploma/Degree/B.Voc/Certificate in Nursing, Allied Health Sciences, Medical Laboratory Technology, Emergency Medical Services, Physiotherapy, Pharmacy, Radiology, Dental Assistance, Hospital Administration, Public Health, Digital Health, AYUSH, Yoga, Naturopathy, Ayurveda, Unani, Siddha, Sowa-Rigpa, Homoeopathy or relevant healthcare/wellness domain. 2. Minimum 5 years relevant experience in hospital, clinic, lab, diagnostic centre, AYUSH hospital/dispensary, wellness centre, yoga centre, public health programme or healthcare operations. 3. Patient-care trainers should be skilled in vital signs, bed making, patient transfer, hygiene assistance, feeding support, infection prevention, communication and hospital documentation. 4. Emergency-care trainers should be competent in BLS/CPR, trauma response, emergency equipment handling, ambulance protocols, triage basics and safe patient transport.

Parameters	Specifications
	5. Diagnostics trainers should understand sample collection, labelling, transport, biosafety, quality control, equipment handling and documentation. 6. Pharmacy/front-office/digital health trainers should understand prescription handling, inventory, patient registration, appointment management, EMR/HMIS workflow, data privacy and customer service. 7. AYUSH trainers should understand AYUSH OPD workflow, system-specific terminology, safe counselling boundaries, wellness protocols, AYUSH medicine storage, herbal medicine handling, referral protocols, documentation, consent and confidentiality. 8. Trainers/assessors must also teach employability, ethics, patient dignity, consent, confidentiality, communication, workplace behaviour, infection control, biomedical waste management and responsible integration of AYUSH with mainstream healthcare services.
Safety requirements	1. PPE: gloves, masks, gowns/aprons, caps, shoe covers, goggles/face shields and activity-specific PPE. 2. Infection prevention: hand hygiene, surface disinfection, PPE donning/doffing, respiratory hygiene, isolation awareness, spill management and sanitation protocols. 3. Biomedical waste safety: colour-coded bins, sharps containers, needle-stick prevention, safe disposal logs and training aligned to applicable biomedical waste rules. 4. Sharps safety: no recapping practice, puncture-proof containers, supervised needle/syringe simulation and needle-stick injury response protocol. 5. Patient simulation safety: use of mannequins/simulators for invasive or sensitive procedures, no unauthorised live procedure, consent-based role-play and privacy safeguards. 6. Electrical and equipment safety: proper earthing, MCB/RCCB, insulated wiring, periodic inspection and safe use of suction, oxygen demo, monitors, autoclave and diagnostic equipment. 7. Fire safety: fire extinguishers, smoke detectors, emergency exits, evacuation plan, assembly point, fire drills and oxygen/fire-risk awareness. 8. Oxygen and cylinder safety: cylinder trolley, chain support, no oil/grease near fittings, leak check, signage and supervised operation. 9. Chemical and reagent safety: labelled storage, MSDS file, spill kit, eye-wash station, ventilation and safe disposal of lab chemicals/reagents.

Parameters	Specifications
	10. Radiation safety awareness: lead apron demo, controlled access, signage and simulation-only imaging unless separately authorised. 11. Ergonomics and patient-handling safety: safe lifting, transfer techniques, wheelchair/stretcher use, fall prevention and back-injury prevention. 12. Data privacy and confidentiality: anonymised/dummy patient records only, access control, secure storage and no sharing of patient-identifiable data. 13. First aid and emergency readiness: first-aid box, trained first-aiders, emergency contact board, incident register and mock emergency drills. 14. Housekeeping: 5S, clean corridors, anti-slip floors, safe cable routing, clear exits and daily lab-cleaning checklist. 15. Assessment safety: practical assessments under supervision only, simulation-first approach, controlled equipment issue and stop-work authority for unsafe acts. 16. AYUSH-specific safety: AYUSH activities restricted to training/simulation unless authorised; no unsupervised diagnosis, prescription or invasive therapy; use dummy/demo materials wherever possible; proper labelling and storage of AYUSH medicines/oils/powders; allergy caution; yoga sessions to follow safe practice protocols; Panchakarma/regimenal therapy limited to awareness/simulation unless conducted in authorised clinical settings by qualified professionals; red-flag referral protocol to be maintained.
Regulatory clearance	-

17. Hydrocarbon

Parameters	Specifications
Centre Built-up areas (Sq.ft)	1,000
Equipment	1. Smart classrooms with projector/interactive panel, whiteboard, audio system, oil & gas process charts, pipeline route maps, refinery/CGD/LPG process flow diagrams and LMS-enabled learning setup 2. Drilling and production simulation lab: drilling rig model, wellhead/X-mas tree model, blowout preventer demo, mud circulation model, choke manifold model, production separator demo, pump/compressor cut-section models and drilling/production control-panel simulator

Parameters	Specifications
	3. City Gas Distribution and PNG/CNG lab: MDPE/steel pipe samples, service regulator, gas meter, PE fusion machine demo, electrofusion tools, gas leak detector, pressure testing kit, PNG installation board, CNG cascade demo model and CGD safety signage 4. LPG operations lab: LPG cylinder handling demo, regulator and valve samples, hose pipe, leak-testing solution, weighing scale, cylinder trolley, delivery-personnel kit, LPG bottling plant model and customer safety demonstration setup 5. Retail outlet operations lab: fuel dispensing unit demo, nozzle and hose assembly, tank dip rod, density hydrometer, temperature correction chart, sample jar, POS/billing demo, fire bucket stand, spill kit and forecourt safety layout 6. Pipeline and maintenance lab: pipeline pigging model, valves, flanges, gaskets, pressure gauges, pipe supports, cathodic protection demo, coating defect detector demo, line patrol checklist, pipeline marker posts and emergency isolation model 7. Welding, pipe fitting and fabrication lab: welding machines, pipe cutting/bevelling tools, pipe threading tools, pipe alignment clamps, welding screens, welding tables, gas cutting demo, hydro-test pump and welding inspection samples 8. Instrumentation and electrical lab: pressure/temperature/flow/level transmitters, control valves, PLC/SCADA demo, loop calibrator, multimeter, clamp meter, motor starter panel, intrinsically safe equipment samples and instrument calibration bench 9. Fire and safety lab: fire extinguishers, fire hydrant demo, foam monitor model, gas detector, breathing apparatus demo, PPE display, emergency shower/eye-wash demo, confined-space tripod demo and emergency response drill area 10. Laboratory and petroleum product testing lab: density testing kit, flash point demo apparatus, viscosity cup/demo, sample bottles, glassware, pH meter, thermometer, water content demo, product sample storage and lab safety cabinet 11. Tank lorry and logistics simulation: tank truck compartment model, loading/unloading arm demo, bonding/earthing demo, wheel chocks, permit-to-work templates, transport documents and HAZCHEM signage 12. Digital operations lab: computers, internet, ERP/terminal automation demo, route planning software, digital permit-to-work simulation, incident reporting dashboard, e-learning modules and online assessment terminals 13. Assessment infrastructure: CCTV, biometric attendance, secure storage, practical assessment bays, job cards, logbooks, tool issue register, emergency drill records and assessor observation sheets

Parameters	Specifications
	14. Placement and industry interface cell: interview room, employer database, apprenticeship/OJT tracker, safety induction records and MoU documentation support 15. (Preferred) Green hydrogen plant operation simulator, compressed biogas plant operation demo, EV charging and battery swapping activity simulator for fuel retail outlets, IoT-based pipeline leak detection demo, AI-based predictive maintenance/fault diagnosis dashboard for pumps/compressors/instruments, digital twin of refinery/CGD/pipeline operations, drone-based pipeline patrolling simulation, AR/VR-based confined-space and fire emergency training, and carbon capture/energy efficiency awareness module
Criteria for Trainers/Assessors	1. Minimum qualification: ITI/Diploma/Degree/B.Voc in Mechanical, Electrical, Instrumentation, Chemical, Petroleum, Fire & Safety, Welding, Civil/Pipeline, Refinery Operations, Gas Technology or relevant oil & gas trade 2. Minimum 5 years relevant industry experience for trainers in drilling, production, refinery, LPG, CGD, CNG/PNG, pipeline, tank farm, petroleum retail, instrumentation, welding, safety or maintenance 3. Trainers/Assessors for drilling/production/refinery roles should understand process flow, equipment operation, isolation, permit-to-work, emergency shutdown, process safety, housekeeping and documentation 4. Trainers/Assessors for CGD/LPG/retail outlet roles should understand gas safety, leak detection, customer handling, installation basics, cylinder handling, dispensing operations, stock reconciliation and emergency response 5. Trainers/Assessors for welding/pipe fitting/pipeline maintenance should have hands-on exposure to pipe preparation, welding joints, flange/gasket fitment, hydrotesting, line patrolling, cathodic protection awareness and pipeline safety 6. Trainers/Assessors for instrumentation/electrical roles should understand control loops, calibration, hazardous-area awareness, intrinsically safe equipment, SCADA basics and troubleshooting
Safety requirements	1. PPE: flame-retardant coverall, safety helmet, safety shoes, goggles/face shield, gloves, ear protection, gas mask/respirator, reflective jacket and fall-arrest harness where required 2. Fire and explosion safety: flameproof equipment in hazardous demo zones, no-smoking policy, emergency shutdown simulation, gas detection, fire extinguishers, hydrant/foam demo and periodic fire drills 3. Gas leak safety: combustible gas detectors, leak-testing procedure, ventilation, isolation valve demo, emergency contact board and evacuation practice

Parameters	Specifications
	4. Permit-to-work system: hot work, cold work, electrical isolation, confined space, work at height and excavation permit simulations 5. Electrical safety: proper earthing, MCB/RCCB, lockout/tagout, insulated tools, intrinsically safe equipment awareness and restricted access to live panels 6. Welding and hot-work safety: welding screens, fume extraction, fire watch, flashback arrestors, gas cylinder chain/trolley, hot-work permit and burn first-aid kit 7. Pressure system safety: pressure relief awareness, hydro-test barricading, gauge calibration, controlled pressurisation and depressurisation procedure 8. Chemical and petroleum product safety: labelled samples, MSDS file, spill kit, bunded storage, grounding/bonding demo, no open flame and safe disposal 9. LPG/CNG/PNG safety: approved regulator/hose demos, cylinder upright storage, valve protection, leak test, regulator handling and customer safety briefing 10. Confined-space safety: gas testing, entry permit, ventilation, standby person, tripod/rescue demo and rescue drill 11. Material handling safety: cylinder trolley, lifting aids, manual handling training, safe stacking and clear access routes 12. Environmental safety: spill prevention, waste segregation, used oil/sample disposal, vapour control awareness and emergency spill response 13. First aid and emergency readiness: first-aid box, eye-wash station, emergency shower demo, trained first-aiders, incident register and mock drills 14. OISD is the technical directorate under MoP&NG that formulates and coordinates self-regulatory safety measures for India's oil & gas industry, while PESO regulates safety of hazardous substances including explosives, compressed gases and petroleum
Regulatory clearance	1. PESO compliance/approval may be required wherever petroleum products, compressed gases, gas cylinders, pressure vessels or hazardous substances are stored, handled or used beyond training-demo thresholds 2. PNGRB technical and safety standards should be referenced for CGD, natural gas pipelines, petroleum product pipelines, LNG and related facilities; PNGRB regulates petroleum, petroleum products and natural gas activities and maintains technical/safety regulations. 3. OISD standards/guidelines should be referenced for oil & gas safety training, audits, emergency response, pipeline, refinery, LPG, POL marketing and E&P safety practices.

18. Iron & Steel

Parameters	Specifications
Centre Built-up areas (Sq.ft)	5,000
Equipment	1. Smart classrooms with projector/interactive panel, whiteboard, audio system, steel process-flow charts, plant-layout charts, safety posters and LMS-enabled content 2. Raw material handling lab with screen/crusher model, conveyor trainer, idlers, pulleys, magnetic separator demo, hopper/chute model and dust-control demonstration 3. Coke oven/sinter/agglomeration simulation lab with coke oven battery model, heating regulator panel, sinter plant process model, temperature monitoring demo and refractory lining samples 4. Ironmaking and steel-making demo lab with blast furnace model, basic oxygen furnace/electric arc furnace model, ladle metallurgy model, tundish/caster model, slag samples and process control charts 5. Rolling mill and finishing lab with rolling mill model, roll stand demo, reheating furnace model, descaling demo, cooling bed model, straightening/cutting demo and product samples 6. Mechanical maintenance lab with pumps, gearboxes, bearings, couplings, alignment kits, vibration meter, lubrication kits, hydraulic/pneumatic trainers and belt conveyor maintenance setup 7. Electrical and instrumentation lab with motor control panels, VFD demo, PLC/SCADA trainer, sensors, transmitters, thermocouples, loop calibrator, multimeter, clamp meter and electrical safety boards 8. Welding, cutting and fabrication lab with SMAW/GTAW/MIG demo units, plasma cutter, gas cutting set, welding tables, fume extraction, welding screens, bevel preparation tools and weld inspection samples 9. Mobile equipment and material handling simulation lab with EOT crane simulator, slinging/rigging kit, forklift/dumper/excavator simulator, crane signalling charts and load-handling models 10. Metallurgy and quality lab with microscopes, hardness tester, tensile-testing demo access, impact tester demo, sample preparation tools, spectrometer demo, vernier calipers, micrometers and gauge blocks 11. Refractory and furnace maintenance lab with refractory brick samples, mortar, lining tools, gunning demo model, heat-resistant PPE and furnace lining cut-section

Parameters	Specifications
	12. Safety and environment lab with PPE display, gas detector, fire extinguishers, emergency shower/eye-wash demo, confined-space tripod demo, heat-stress monitoring kit, dust/fume monitoring demo and spill kit 13. Digital manufacturing lab with CAD/CAM workstations, production planning software demo, plant maintenance dashboard, digital checklist system, e-learning modules and online assessment terminals 14. Assessment infrastructure with CCTV, biometric attendance, secure tool room, practical job stations, logbooks, job cards, maintenance checklists and assessor observation sheets 15. (Preferred) AI-based predictive maintenance dashboard for conveyors, motors, cranes and rolling mill equipment; Industry 4.0 steel plant digital twin simulation; AR/VR-based blast furnace, rolling mill, crane and confined-space safety training; IoT-based energy monitoring and furnace efficiency demo; green steel and hydrogen-based DRI awareness simulator; scrap sorting and circular steel recycling simulation; and AI-based quality inspection/defect-detection demo for rolled products
Criteria for Trainers/Assessors	1. Minimum qualification: ITI/Diploma/Degree/B.Voc in Mechanical, Electrical, Metallurgy, Production, Welding, Instrumentation, Mechatronics, Industrial Safety or relevant engineering trade 2. Minimum 5 years industry experience for trainers in steel plant operations, rolling mills, maintenance, welding, quality, mobile equipment, refractory or safety 3. Trainers/Assessors for plant operations should understand raw material handling, coke/sinter/ironmaking, steel-making, rolling, process control, shift handover and production documentation 4. Trainers/Assessors for maintenance should have hands-on capability in alignment, balancing, bearing maintenance, lubrication, hydraulics, pneumatics, conveyor maintenance and preventive maintenance 5. Trainers/Assessors for welding/cutting should understand welding parameters, joint preparation, defect identification, gas cutting, plasma cutting, WPS awareness and hot-work safety 6. Trainers/Assessors for quality/metallurgy should understand basic metallurgy, heat treatment, sampling, testing, inspection, dimensional checks, defect analysis and quality documentation
Safety requirements	1. PPE: safety helmet, safety shoes, flame-resistant clothing, goggles/face shield, leather gloves, ear protection, respirator/dust mask and heat-resistant PPE

Parameters	Specifications
	2. Heat and molten-metal safety: heat shields, safe distance marking, emergency shower, burn response protocol and restricted access to furnace/casting simulation areas 3. Machine safety: guards, emergency stops, interlocks, lockout/tagout, authorised operation and safe isolation before maintenance 4. Electrical safety: proper earthing, MCB/RCCB, insulated tools, lockout/tagout, safe panel access and periodic electrical inspection 5. Welding/hot-work safety: welding screens, fume extraction, fire watch, flashback arrestors, gas cylinder trolley, hot-work permit and burn first-aid kit 6. Crane and rigging safety: certified lifting tackles, sling inspection, load-limit display, signalling practice, exclusion zones and supervised lifting simulation 7. Conveyor safety: pull-cord switches, guards, nip-point awareness, zero-energy isolation and safe belt maintenance practice 8. Dust, fume and gas safety: ventilation, dust extraction, gas detection, respiratory protection and confined-space entry simulation 9. Fire safety: extinguishers, fire alarm, emergency exits, evacuation plan, assembly point and periodic mock drills 10. Housekeeping: 5S, clear walkways, anti-slip floors, scrap segregation, oil-spill control and safe stacking of materials 11. First aid and emergency readiness: first-aid room/box, trained first-aiders, stretcher, eye-wash station, emergency contact board and incident register 12. The Factories Act covers health and safety provisions such as cleanliness, waste disposal, ventilation, dust/fume control, machinery fencing, lifting machines, pressure plant, dangerous fumes and fire precautions
Regulatory clearance	-

19. Infrastructure Equipment

Parameters	Specifications
Centre Built-up areas (Sq.ft)	5,000

Parameters	Specifications
Equipment	1. Smart classrooms with projector/interactive panel, whiteboard, audio system, machine-system charts, equipment operating manuals, safety posters, digital content and LMS-enabled training setup 2. Earthmoving equipment training yard with backhoe loader, excavator, wheel loader, skid steer loader demo or cut-section/simulator, attachments, buckets, teeth, hydraulic quick coupler and practical manoeuvring area 3. Road-building equipment lab with compactor/roller demo, paver screed model, hot mix plant model, asphalt sample boards, levelling tools, road-layer cross-section models and compaction testing demo 4. Concrete equipment lab with batching plant model, transit/self-loading mixer demo, concrete pump demo, delivery pipeline, slump cone, cube moulds, vibrator, admixture demo and washout management setup 5. Crane and lifting equipment lab with hydra crane simulator, tyre-mounted/crawler/tower crane simulator, lifting tackles, slings, shackles, hooks, load chart display, outrigger pads and signalman training charts 6. Drilling and specialised equipment lab with borewell drilling machine model, compressor demo, drill bits, rods, mud circulation model, rigging accessories and safe drilling workflow charts 7. Engine and powertrain workshop with diesel engine cut-section, engine test bench demo, fuel injection system, turbocharger, radiator, filters, clutch/transmission components and preventive maintenance tools 8. Hydraulics and pneumatics lab with hydraulic trainer, pumps, valves, cylinders, hoses, fittings, pressure gauges, flow meters, filtration demo and troubleshooting panels 9. Electrical/electronics/instrumentation lab with wiring harnesses, alternator/starter demo, sensors, relays, ECU demo, CAN bus trainer, diagnostic scanner, multimeters, clamp meters and machine control-panel simulator 10. Maintenance and service workshop with tool kits, torque wrenches, jacks, lifting stands, grease guns, lubrication equipment, oil drain pans, tyre tools, battery charger, welding/cutting demo and service documentation station 11. Operator simulation and VR lab with excavator, backhoe loader, crane, paver and compactor simulators; VR modules for pre-start inspection, blind-spot awareness, trenching, lifting, loading and emergency response

Parameters	Specifications
	12. Inspection and quality lab with machine inspection checklists, hydraulic oil contamination kit, digital calipers, pressure testing kit, vibration meter, thermal camera demo, tyre pressure gauge and undercarriage wear gauges 13. Safety and traffic management yard with barricades, cones, reflective signage, flagman tools, lockout/tagout kits, fire extinguishers, first-aid station, spill kit, emergency assembly point and reversing-alarm demo 14. Assessment infrastructure with CCTV, biometric attendance, online assessment terminals, secure tool room, practical assessment bays, logbooks, job cards, machine inspection sheets and assessor observation checklists 15. (Preferred) Connected equipment telematics dashboard, GPS/GNSS machine guidance demo, AI-based fault diagnosis and predictive maintenance system, fuel-efficiency and idle-time analytics, remote equipment monitoring, digital twin of construction equipment operation, AR/VR safety simulation for crane lifting/trenching/working near utilities, electric/hybrid construction equipment awareness module and battery diagnostics/charging safety demo for emerging e-construction equipment.
Criteria for Trainers/Assessors	1. Minimum qualification: ITI/Diploma/Degree/B.Voc in Mechanical, Automobile, Diesel Mechanic, Heavy Equipment Maintenance, Electrical, Mechatronics, Civil/Construction Equipment, Hydraulics or relevant trade 2. Minimum 5 years relevant industry/site/workshop experience for trainers in equipment operation, maintenance, hydraulics, engines, electrical/electronics, cranes, road equipment or construction project sites 3. Trainers for operator roles should have hands-on capability in pre-start inspection, machine controls, safe operating envelope, manoeuvring, loading, trenching, lifting, compaction, road work and shutdown procedure 4. Trainers for mechanic roles should understand diesel engines, hydraulics, powertrain, brakes, steering, undercarriage, electrical/electronics, diagnostics, maintenance schedules and breakdown troubleshooting 5. Trainers for crane/lifting roles should understand load charts, outrigger setup, ground bearing, rigging, signalling, blind-spot control, lift planning and exclusion-zone management

Parameters	Specifications
Safety requirements	1. PPE: safety helmet, safety shoes, reflective jacket, goggles/face shield, gloves, ear protection, dust mask/respirator and seat belt use during equipment operation 2. Equipment safety: daily pre-start inspection, horn/reverse alarm check, lights, brakes, mirrors/camera, tyres/tracks, hydraulics, fluid leaks, guards and emergency stop verification 3. Operator yard safety: barricaded training zones, speed limits, one-way movement plan, spotter/flagman system, pedestrian exclusion zones and blind-spot awareness 4. Crane/lifting safety: inspected slings/shackles/hooks, load-limit display, load chart use, outrigger pads, ground stability checks, tag lines and no-load-over-person rules 5. Excavation/trenching safety: underground utility awareness, edge distance, slope/benching awareness, barricading, safe spoil placement and trench-collapse awareness 6. Hydraulics safety: pressure release before maintenance, hose inspection, pinhole leak awareness, eye/hand protection and controlled pressure testing 7. Electrical and battery safety: lockout/tagout, insulated tools, battery charging ventilation, no sparks near batteries, safe jump-start procedure and periodic electrical inspection 8. Fuel, oil and chemical safety: labelled storage, MSDS file, spill kit, drip trays, used-oil collection and no smoking/open flame near fuel areas 9. Fire safety: DCP/CO_2 extinguishers, fire alarm, emergency exits, evacuation plan, assembly point and periodic fire drills 10. Workshop safety: jack/stand use, wheel chocks, tool control, safe compressed-air use, welding screens, fume extraction and housekeeping; 11. Material handling safety: proper lifting aids, safe storage of attachments, tyres, buckets, rods and heavy components 12. First aid and emergency readiness: first-aid box, trained first-aiders, emergency contact board, incident register, rescue plan and mock drills 13. The Factories Act covers safety provisions relevant to workshop training such as machinery guarding, lifting machines, pressure plant, floors/access, excessive weights, dangerous fumes/gases and fire precautions
Regulatory clearance	-

20. Instrumentation Automation Surveillance & Communication

Parameters	Specifications
Centre Built-up areas (Sq.ft)	5,000
Equipment	1. Smart classrooms with projector/interactive panel, whiteboard, audio system, automation process charts, instrumentation loop diagrams, surveillance network diagrams, communication protocol charts and LMS-enabled training setup 2. Industrial automation lab with PLC trainer kits, HMI panels, SCADA demo software, VFD drives, motor control panels, relays, contactors, sensors, actuators and control-panel wiring benches 3. Instrumentation and process-control lab with pressure, temperature, flow and level transmitters, control valves, I/P converters, loop calibrators, signal isolators, PID controller trainers, pneumatic trainer and process-control simulation rig 4. DCS/SCADA programming lab with computers, licensed/sandbox automation software, DCS simulator, HMI/SCADA development stations, tag database practice, alarm configuration demo and trend/reporting dashboard 5. Industrial communication lab with Ethernet/IP, Modbus, Profibus/Profinet, HART, OPC-UA, RS-485, CAN and industrial switch/router demo kits 6. Building automation lab with BMS controller, HVAC sensor demo, access-control demo, lighting automation, fire alarm interface, energy meter integration, occupancy sensors and building automation dashboard 7. Surveillance and security systems lab with IP CCTV cameras, NVR/DVR, PTZ camera, PoE switch, access-control system, biometric reader, video door phone, intrusion alarm, public-address demo and camera alignment tools 8. Radio/broadcast and communication installation lab with AM/FM radio station installation demo, head-end system model, cabling tools, RF connectors, spectrum analyser demo, antenna alignment demo and structured cabling racks 9. Cabling and network infrastructure lab with LAN racks, patch panels, fibre splicing kit, OTDR demo, cable testers, crimping tools, cable trays, conduits, labelling kits and structured cabling practice walls 10. Robotics, pneumatics and mechatronics lab with industrial robot/cobot demo, pick-and-place trainer, pneumatic trainer, electro-pneumatic kits, servo motor demo, stepper motor kit and machine safety interlock demo 11. Additive manufacturing and digital manufacturing lab with 3D printer, slicer software, CAD workstation, 3D scanner demo, filament/resin storage and post-processing tools

Parameters	Specifications
	12. Testing and calibration lab with multimeters, clamp meters, insulation tester, earth tester, pressure calibrator, temperature calibrator, digital vernier, micrometer, dial gauge, gauge blocks and calibration documentation formats 13. Control-panel assembly workshop with DIN rails, ducts, terminals, ferrules, cable glands, wiring tools, crimpers, ferrule printer, torque screwdriver, continuity tester, panel cooling demo and panel inspection checklist 14. Assessment infrastructure with CCTV, biometric attendance, online assessment terminals, secure tool room, practical assessment bays, job cards, wiring diagrams, calibration sheets and assessor observation checklists 15. (Preferred) AI-based fault diagnosis and predictive maintenance dashboard for PLC/SCADA/instrumentation systems; digital twin of industrial process and smart building automation; edge-AI CCTV video analytics for surveillance; IIoT sensor network with cloud dashboard; private 5G/Wi-Fi 6 industrial communication demo; AR/VR-based control-panel commissioning and plant-safety simulation; cybersecurity testbed for OT/SCADA networks; and smart city command-and-control simulation integrating CCTV, access control, environmental sensors, alarms and communication systems
Criteria for Trainers/Assessors	1. Minimum qualification: ITI/Diploma/Degree/B.Voc in Instrumentation, Electronics, Electrical, ECE, Industrial Automation, Mechatronics, Control Systems, Computer Networking, IT, Communication Engineering or relevant field 2. Minimum 5 years relevant industry experience for trainers in PLC/SCADA, instrumentation, process control, building automation, surveillance systems, industrial networking, robotics, testing/calibration or control-panel commissioning 3. Trainers/Assessors for automation roles should have hands-on capability in PLC programming, HMI/SCADA configuration, wiring, I/O testing, interlocks, alarms, commissioning, troubleshooting and documentation; the Industrial Automation Technician curriculum covers control panel installation, testing, integration and commissioning 4. Trainers/Assessors for instrumentation roles should understand loop checking, calibration, control valves, transmitter configuration, process-control basics, P&ID reading, signal standards and safety isolation 5. Trainers/Assessors for surveillance and communication roles should understand CCTV installation, IP networking, access control, structured cabling, fibre optics, RF basics, cybersecurity hygiene and customer-site commissioning

Parameters	Specifications
	6. Trainers/Assessors for building automation should understand BMS architecture, HVAC integration, sensors, energy metering, fire/security interface, lighting automation and facility-management workflows 7. Trainers/Assessors must also demonstrate employability, technical documentation, client communication, work permits, site safety, cybersecurity basics, data privacy, energy efficiency and maintenance reporting
Safety requirements	1. PPE: safety shoes, safety goggles, insulated gloves, ESD wrist strap, ESD coat/apron, helmet for site training, reflective jacket and appropriate hand tools 2. Electrical safety: proper earthing, MCB/RCCB, insulated tools, lockout/tagout practice, safe panel access, low-voltage training for beginners and periodic electrical inspection 3. Control-panel safety: de-energised wiring practice, ferrule/labelling discipline, continuity testing before energisation, torque checks, cable dressing and supervised power-up 4. ESD safety: ESD mats, wrist straps, grounded benches, anti-static storage and ESD-safe handling for PLCs, sensors, controllers and communication modules 5. Machine and automation safety: emergency stop, interlocks, guarded moving parts, restricted robot/cobot zones, safe teach-mode practice and supervised operation 6. Work-at-height and installation safety: ladder safety, harness awareness, barricading, tool lanyards and supervised CCTV/antenna/cabling installation practice 7. Network and cybersecurity safety: segregated training network, dummy credentials, no use of live customer networks, secure password policy and safe handling of CCTV/video data 8. Data privacy: use only dummy/anonymised footage and records in surveillance labs 9. RF/wireless safety: use approved low-power demo devices, antenna safety, RF exposure awareness and no unauthorised transmission 10. Fire safety: CO_2/DCP extinguishers, smoke detectors, emergency exits, evacuation plan, assembly point and periodic fire drills 11. Tool and cabling safety: safe use of crimpers, cutters, fibre cleavers, soldering tools, cable pullers and drills; disposal of fibre shards in dedicated containers

Parameters	Specifications
	12. Battery and UPS safety: battery ventilation, no short-circuit practice, insulated terminals, correct polarity checks and safe charging procedure 13. Housekeeping: 5S, cable management, anti-slip floors, labelled storage, clear walkways, tool issue/return register and controlled access to labs 14. First aid and emergency readiness: first-aid box, eye-wash station, trained first-aiders, emergency contact board, incident register and electrical-shock response protocol 15. Factory/workshop safety provisions such as machinery guarding, electrical safety, lifting, dangerous fumes/gases and fire precautions should be reflected in practical lab SOPs where workshop-style training is conducted
Regulatory clearance	1. WPC/DoT Equipment Type Approval may be required for wireless/RF devices used, imported, sold or demonstrated commercially 2. TEC/MTCTE compliance should be checked where notified telecom/network equipment is sold, deployed or used in telecom networks

21. IT-ITeS

Parameters	Specifications
Centre Built-up areas (Sq.ft)	1,000
Equipment	1. Smart classrooms with projector/interactive panel, whiteboard, audio system, digital learning content, LMS and hybrid training camera setup 2. Computer labs with atleast 100 desktops/laptops, licensed operating systems, office productivity suite, programming IDEs, database tools, browsers and collaboration tools 3. High-speed internet, enterprise Wi-Fi, LAN switches, routers, firewall, structured cabling, server rack, UPS and backup power 4. Software development lab with IDEs, Git/version-control platform, API testing tools, DevOps sandbox, CI/CD demo, containerisation demo and project-management tools 5. Web and mobile application development lab with UI/UX tools, wireframing software, mobile testing devices, responsive testing setup and cloud deployment sandbox 6. Cloud computing and virtualization lab with private cloud/virtualisation server, virtual machines, cloud console sandbox, storage demo, backup demo and cloud cost-monitoring dashboard

Parameters	Specifications
	7. Cybersecurity and SOC simulation lab with SIEM demo, vulnerability scanner, firewall lab, IDS/IPS demo, endpoint security tools, phishing simulation, password/MFA lab and incident-response playbooks 8. Data analytics and AI lab with Python/R environment, SQL databases, BI dashboards, data visualisation tools, machine learning notebooks, GPU-enabled workstation/server where feasible and curated datasets 9. Generative AI and automation lab with prompt-engineering sandbox, AI coding assistant demo, chatbot-building tools, RPA/bot development tools, workflow automation software and model-evaluation templates 10. BPM/BPO and customer support lab with call-centre dialer simulation, headsets, CRM demo, ticketing system, knowledge-base software, quality monitoring forms, soft-skill recording setup and language lab 11. IT helpdesk and desktop support lab with service-desk ticketing tool, troubleshooting kits, imaging/OS deployment tools, remote support tools, printers/scanners, networking kits and asset-management templates 12. Emerging technology lab with IoT kits, AR/VR headsets, blockchain demo, digital twin simulation, low-code/no-code tools, API integration sandbox and future-skills learning modules 13. Assessment infrastructure with CCTV, biometric attendance, online assessment terminals, secure test environment, proctoring setup, printer/scanner, locked storage and assessment evidence repository 14. Placement and innovation cell with interview rooms, résumé-building systems, mock interview recording, hackathon/project area, employer database, apprenticeship/OJT tracker and startup/entrepreneurship support desk 15. (Preferred) AI-based coding, testing and debugging sandbox; GenAI-powered contact-centre simulation; cybersecurity digital range for ransomware/phishing/SOC drills; cloud-native DevSecOps pipeline; responsible AI and data-governance simulation; MLOps model deployment dashboard; digital twin for enterprise IT operations; blockchain-based credential verification demo; and green IT/sustainable data-centre energy monitoring simulation

Parameters	Specifications
Criteria for Trainers/Assessors	1. Minimum qualification: Graduate/Diploma/B.Tech/BCA/MCA/B.Sc. IT/Computer Science/Engineering or equivalent for technical trainers; MBA/Commerce/Communication background may be suitable for BPM/customer-service trainers with relevant experience 2. Minimum 5 years relevant industry experience for trainers in software development, IT support, cloud, cybersecurity, data analytics, AI, BPM, digital operations or IT project delivery 3. Trainers for software/cloud/data roles should have hands-on capability in programming, databases, APIs, cloud basics, data handling, dashboards, testing, debugging, documentation and agile project workflows 4.Trainers for cybersecurity should understand secure configuration, vulnerability assessment, SOC workflows, incident reporting, access control, phishing prevention, endpoint security and log review 5. Trainers for BPM/ITeS should have experience in customer communication, CRM, ticketing systems, process documentation, quality monitoring, escalation handling, data privacy and workplace behaviour 6. Trainers must also demonstrate employability, digital professionalism, workplace communication, ethics, cyber hygiene, data privacy, documentation, teamwork, time management and interview readiness

Parameters	Specifications
Safety requirements	1. Electrical safety: proper earthing, MCB/RCCB, UPS safety, server-room load management, cable trays, safe plug points and periodic electrical inspection 2. Fire safety: smoke detectors, CO_2/DCP extinguishers, emergency exits, evacuation plan, assembly point, server-room fire precautions and periodic fire drills 3. Cybersecurity safety: secure Wi-Fi, firewall, endpoint protection, patching, MFA, role-based access control, log monitoring and safe use of lab credentials 4. Data privacy: use dummy/anonymised datasets only, avoid real customer/personal data in training, maintain learner consent and restrict access to assessment records 5. CERT-In compliance awareness: maintain cyber incident escalation protocol, log-retention awareness, incident-reporting contacts and cyber drill records 6. Lab network safety: segregated training network, no attack practice on public/live systems, isolated cyber range, controlled admin access and sandboxed malware/phishing simulation 7. Ergonomics: proper chairs, desk height, monitor height, lighting, ventilation, screen-break protocol and safe posture training 8. Device and asset safety: asset tagging, issue/return registers, secure laptop storage, antivirus checks, USB control and secure wipe process for training devices 9. Online assessment safety: proctored systems, secure browsers where applicable, identity verification, CCTV in assessment areas and restricted access to question/evidence repositories 10. Emergency readiness: first-aid box, emergency contact board, trained first-aiders, incident register and cyber/physical emergency SOPs
Regulatory clearance	1. Compliance with the Information Technology Act, 2000 for lawful use of electronic records, systems and cyber practices 2. Compliance with DPDP Act/Rules for digital personal data processing, learner records, CCTV recordings, placement data and assessment records 3. CERT-In incident reporting and cybersecurity directions awareness for labs, servers, cloud sandboxes and network infrastructure 4. Software licence compliance for operating systems, IDEs, cloud tools, cybersecurity tools, analytics platforms and digital content

22. Leather

Parameters	**Specifications**
Centre Built-up areas (Sq.ft)	5,000
Equipment	1. Smart classrooms with projector/interactive panel, whiteboard, audio system, leather-process charts, footwear anatomy charts, product samples, digital content and LMS-enabled training setup 2. Leather identification and material lab with finished leather samples, hides/skins charts, synthetic material samples, thickness gauge, leather grading boards, defect charts and material-testing kits 3. Footwear design and product-development lab with sketching tables, pattern boards, lasts, footwear components, CAD/CAM workstation, 2D/3D footwear design software, printer/plotter and sample-development tools 4. Cutting/clicking lab with clicking press, cutting dies, hand knives, cutting boards, pattern templates, measuring tools, leather nesting demo and safety guards 5. Skiving, splitting and preparation lab with skiving machine, splitting machine demo, edge skiving tools, strap cutting machine, thickness measurement tools and leather preparation tables 6. Stitching and closing lab with flat-bed sewing machines, post-bed sewing machines, zig-zag sewing machines, cylinder-bed machine, thread stands, needles, guides, edge folders and upper-closing practice kits 7. Footwear assembly and lasting lab with lasting machine demo, moulding machine demo, sole attaching press, heel attaching demo, cementing station, roughing machine, heat setter, sole press and finishing tools 8. Leather goods and garments lab with pattern-cutting tables, leather goods sewing machines, embossing machine, riveting/snap button machines, zipper/lining tools, bag-making moulds, garment assembly tools and accessories hardware 9. Finishing and polishing lab with buffing machine demo, edge finishing tools, polishing wheels, spray booth demo, colour-matching station, adhesives, waxes, creams, dyes and finishing sample boards 10. Quality control and testing lab with tensile strength tester demo, flexing tester demo, abrasion tester demo, colour fastness kit, water resistance demo, stitch strength demo, calipers, scales, templates and QC checklists 11. Tannery process awareness and sustainability lab with drum operation model, wet-end process charts, chrome tanning awareness module, ETP/CETP process model, water-use monitoring demo and sludge/waste segregation samples

Parameters	Specifications
	12. Packaging, merchandising and export-readiness lab with product photography light box, label printer, barcode/QR demo, packaging materials, costing templates, buyer specification sheets, export documentation samples and retail display shelves 13. Digital and entrepreneurship lab with computers, internet, inventory software demo, e-commerce listing templates, digital payment demo, production planning sheets and market-linkage resources 14. Assessment infrastructure with CCTV, biometric attendance, online assessment terminals, secure tool room, practical assessment bays, job cards, sample evaluation sheets and assessor observation checklists 15. (Preferred) AI-based footwear and leather-goods design ideation; 3D foot scanning and customised last/fit simulation; CAD-to-CAM digital pattern nesting and cutting optimisation; AR/VR-based footwear assembly and machine-safety simulation; IoT-enabled production tracking for cutting, stitching and lasting lines; AI-based leather defect detection and QC analytics; sustainable material innovation corner for vegan leather, recycled leather fibre and bio-based alternatives; chrome-free/low-water tanning awareness simulation; and circular leather recycling/upcycling simulation for scraps, offcuts and returned products
Criteria for Trainers/Assessors	1. Minimum qualification: ITI/Diploma/Degree/B.Voc/Certificate in Leather Technology, Footwear Design, Footwear Manufacturing, Leather Goods, Fashion Design, Apparel/Garment Technology, Production, Industrial Engineering or relevant domain 2. Minimum 5 years relevant industry experience for trainers in footwear manufacturing, leather goods, garments, tannery operations, quality control, CAD/CAM, product development or production supervision 3. Trainers/Assessors for footwear roles should have hands-on capability in pattern making, cutting, skiving, stitching, closing, lasting, sole attachment, finishing, inspection and production-line discipline 4. Trainers/Assessors for leather goods/garments should understand material selection, pattern making, cutting, stitching, lining, hardware fixing, finishing, quality checks and product costing 5. Trainers/Assessors for tannery/finished leather awareness should understand hide/skin defects, wet operations, finishing, effluent treatment, chemical safety, environmental compliance and sustainable processing

Parameters	Specifications
	6. Trainers/Assessors must also demonstrate employability, workplace communication, productivity, lean basics, quality documentation, buyer specification compliance, digital literacy, entrepreneurship and market linkage
Safety requirements	1. PPE: safety shoes, apron, gloves, cut-resistant gloves, goggles/face shield, dust mask/respirator, ear protection and appropriate machine-specific PPE 2. Cutting and blade safety: guarded clicking presses, safe knife handling, blade storage, cut-resistant gloves, damaged-tool tagging and controlled tool issue/return 3. Sewing machine safety: needle guards, finger guards, correct threading, emergency stop awareness, machine isolation before maintenance and safe posture 4. Chemical and adhesive safety: labelled adhesives, dyes, solvents, polish, finishing chemicals and cleaning agents; MSDS file, ventilation, spill kit, no open flames and restricted chemical storage 5. Dust and fume control: exhaust/ventilation for buffing, sanding, spraying and adhesive use; masks/respirators and regular cleaning of dust collection areas 6. Fire safety: extinguishers suitable for electrical/chemical fires, smoke detectors, emergency exits, evacuation plan, assembly point and periodic fire drills 7. Electrical safety: proper earthing, MCB/RCCB, insulated wiring, safe plug points, periodic inspection and lockout/tagout for machine maintenance 8. Ergonomics: correct table height, seating, lighting, posture training, anti-fatigue mats and work-rest cycles for repetitive stitching/cutting tasks 9. Machine safety: guards, emergency stops, authorised operation, safe feed practices and supervised use of skiving, splitting, roughing, buffing, pressing and finishing machines 10. Waste management: segregation of leather offcuts, synthetic scraps, adhesive containers, chemical waste, used needles/blades, packaging waste and general waste 11. Tannery-process safety awareness: chrome/chemical handling, wastewater treatment, sludge handling, odour control and safe storage awareness for centres offering tannery modules 12. First aid and emergency readiness: first-aid box, eye-wash station, trained first-aiders, emergency contact board, incident register and cut/burn/chemical exposure response protocol
Regulatory clearance	Pollution-control compliance through SPCB/PCC where tanning, wet processing, dyeing, spraying, buffing dust, solvent use, adhesive fumes, chemical waste, wastewater or hazardous waste is generated

23. Life Sciences

Parameters	Specifications
Centre Built-up areas (Sq.ft)	1,000
Equipment	1. Smart classrooms with projector/interactive panel, whiteboard, audio system, pharma/cosmetics/biotech/medical-device process charts, GMP posters, clean-room behaviour charts and LMS-enabled content; 2. Pharmaceuticals and cosmetics manufacturing simulation lab with tablet compression demo, capsule filling demo, granulator/blender demo, coating pan demo, sample dispensing station, cosmetic mixing/filling demo, batch manufacturing records and line-clearance formats; 3. Packaging and labelling lab with blister packing demo, bottle filling/capping demo, label printer, batch coding machine, visual inspection station, packaging material samples, batch packaging records and product labelling samples; 4. ASU&H lab with Ayurveda, Siddha, Unani and Homoeopathy product-awareness charts, herbal/raw material samples, formulation demo kits, storage-labelling formats, dispensing simulation and quality documentation templates; 5. QC chemistry lab with analytical balances, pH meter, conductivity meter, UV-Vis spectrophotometer, HPLC demo/simulator, dissolution/disintegration/friability/ hardness tester demos and glassware; 6. Microbiology and aseptic technique lab with biosafety cabinet demo, laminar airflow workstation, autoclave, incubator, colony counter, microscope, media preparation area, swab kits and aseptic gowning practice; 7. Biotechnology lab with fermenter/bioreactor demo, centrifuge, micropipettes, gel electrophoresis unit, PCR demo, cold storage demo, downstream processing charts, cell culture awareness module and bioprocess documentation templates; 8. Medical devices and IVD lab with device assembly demo, clean assembly benches, sensor/diagnostic strip demo, packaging validation samples, risk classification charts, device labelling samples, UDI/traceability demo and QMS documentation; 9. Clean-room and HVAC training area with gowning room simulation, air shower demo, HEPA filter demo, pressure differential gauges, particle counter demo, environmental monitoring plates and cleaning/disinfection SOPs; 10. Utilities and maintenance lab with purified water system model, compressed air/gas demo, steam trap demo, HVAC panel, calibration bench, preventive maintenance charts and utility logbook formats;

Parameters	Specifications
	11. Research & development services lab with lab-scale mixer, homogenizer, stability chamber demo, sample preparation tools, formulation design templates, lab notebooks, method development records and technology transfer formats; 12. Drug-device distribution and pharmacy simulation lab with pharmacy counter, prescription samples, cold-chain demo, inventory software, FEFO/expiry tracking, barcode/QR traceability, storage racks and dispensing documentation; 13. Regulatory affairs and documentation lab with mock dossiers, SOP templates, deviation/CAPA formats, change-control forms, validation protocols, audit checklists, data-integrity records and pharmacovigilance awareness material; 14. Digital and compliance lab with computers, LIMS/eQMS demo, ERP/MES demo, e-BMR/e-BPR simulation, barcode/QR traceability demo, data-integrity exercises and online assessment terminals; 15. EHS and waste-management lab with spill kits, chemical storage cabinet, eyewash/shower demo, fire extinguishers, colour-coded waste bins, sharps containers, biomedical waste charts and ETP process model; 16. Assessment infrastructure with CCTV, biometric attendance, secure storage, practical bays, OSCE-style skill stations, lab logbooks, batch records, calibration sheets and assessor observation checklists; 17. Preferred: AI-based drug discovery/formulation screening simulation, BioE3-aligned biomanufacturing and bioeconomy awareness module, digital twin of pharma/biotech/clean-room operations, IoT cold-chain monitoring, AI visual inspection, AR/VR clean-room gowning, eQMS/LIMS/MES sandbox and green pharma/biomanufacturing simulation.
Criteria for Trainers/Assessors	1. Diploma/Degree/B.Pharm/M.Pharm/B.Sc./M.Sc./B.Tech/M.Tech/B.Voc in Pharmacy, Pharmaceutical Sciences, Cosmetics, Biotechnology, Microbiology, Biochemistry, Chemistry, Life Sciences, Medical Devices, Biomedical Engineering, Chemical Engineering, QA/QC, Regulatory Affairs or relevant domain; 2. Minimum 5 years relevant industry/lab experience in pharmaceutical/cosmetics manufacturing, ASU&H, biotechnology, bioprocessing, medical devices, QA/QC, R&D, regulatory affairs, distribution, pharmacy, clean-room operations or EHS; 3. Pharma/cosmetics trainers should understand GMP, batch records, line clearance, weighing, dispensing, manufacturing, packaging, documentation and deviation reporting;

Parameters	Specifications
	4. ASU&H trainers should understand basic ASU&H product categories, raw material handling, storage, labelling, dispensing boundaries, quality documentation and regulatory awareness; 5. Biotechnology trainers should understand biosafety, aseptic technique, bioprocessing, contamination control, fermentation/bioreactor basics, downstream processing and BioE3-aligned sustainable biomanufacturing awareness; 6. Medical device/IVD trainers should understand device workflow, clean assembly, QMS, risk management, labelling, traceability, testing and regulatory basics; 7. R&D trainers should understand formulation development, lab documentation, stability, method development, technology transfer, research ethics and data integrity; 8. Distribution/pharmacy trainers should understand prescription handling, inventory, storage conditions, cold chain, expiry control, recall awareness, pharmacovigilance reporting and customer communication;
Safety requirements	1. PPE: lab coat/coverall, gloves, mask/respirator, goggles/face shield, hair cover, shoe cover, clean-room gowning kit and chemical-resistant apron where required; 2. Laboratory safety: SOP-based working, supervised practical sessions, restricted access, proper labelling, sample tracking and no unauthorised live biological/chemical handling; 3. Biosafety: biosafety cabinet practices, decontamination, autoclaving, spill response, exposure reporting and regulated biological material handling only with required approvals; 4. Chemical safety: labelled reagents, MSDS file, compatibility-based storage, fume hood/ventilation, spill kit, eyewash station, emergency shower and controlled disposal; 5. Clean-room safety: gowning discipline, entry/exit protocol, hand hygiene, contamination-control practices, environmental monitoring awareness and line clearance; 6. Equipment safety: authorised operation, calibration checks, preventive maintenance, centrifuge balancing, autoclave pressure safety, hot-surface caution and lockout/tagout for maintenance; 7. ASU&H safety: use dummy/demo materials where possible; no therapeutic claims, diagnosis or prescription by trainees; real formulations, if used, to be labelled, stored and handled as per applicable norms; 8. Pharmacy/distribution safety: dummy prescriptions for training, FEFO/expiry discipline, cold-chain awareness, recall simulation and no sale/dispensing of real drugs unless licensed;

Parameters	Specifications
	9. Fire safety: CO_2/DCP extinguishers, smoke detectors, emergency exits, evacuation plan, assembly point and periodic fire drills; 10. Waste management: segregation of chemical, biological, glass, sharps, general and biomedical waste with controlled disposal; 11. Data integrity and cybersecurity: controlled user access, audit-trail awareness, no shared passwords, secure records and dummy/anonymised datasets only; 12. First aid and emergency readiness: first-aid box, eyewash station, safety shower, trained first-aiders, incident register, emergency contact board and spill/exposure response drills.
Regulatory clearance	1. CDSCO/state drug authority approvals are required if the centre undertakes actual drug, cosmetic, biologic, vaccine, medical-device or IVD manufacturing/testing/service activities beyond simulation 2. GMP compliance under revised Schedule M should be referenced for pharma manufacturing training and any production-style demonstration 3. Biosafety approval/IBSC requirements should be followed for work involving recombinant DNA, genetically engineered organisms, hazardous microorganisms or regulated biological materials

24. Logistics

Parameters	Specifications
Centre Built-up areas (Sq.ft)	5,000

Parameters	Specifications
Equipment	1. Smart classrooms with projector/interactive panel, whiteboard, audio system, logistics process charts, warehouse layout charts, transport documentation samples, digital content and LMS-enabled training setup 2. Warehouse simulation lab with racking systems, pallet storage, bins, totes, SKU labels, barcode labels, picking carts, packing tables, dispatch staging area, receiving area and inventory-control practice zone; 3. Material handling equipment lab with manual pallet truck, hand trolley, stacker demo, forklift simulator, reach-truck simulator, dock leveller demo, loading bay model, pallet wrapping machine and weighing scales; 4. Warehouse management system lab with computers, WMS software demo, barcode scanners, RFID readers, label printers, handheld terminals, inventory dashboard, pick-pack-ship simulation and cycle-counting templates; 5. Packaging and fulfilment lab with cartons, cushioning material, strapping machine, tape dispensers, shrink-wrap demo, dimensioning tools, volumetric weight calculator, e-commerce packaging samples and return-processing station; 6. Transport and fleet operations lab with TMS demo, GPS tracking dashboard, route planning software, e-way bill practice templates, driver trip sheets, vehicle inspection checklist, consignment note samples and proof-of-delivery simulation; 7. Cold chain logistics lab with cold-room demo/refrigerated cabinet, temperature data loggers, thermal packaging, gel packs, insulated boxes, reefer vehicle model, temperature excursion records and pharma/food cold-chain SOPs; 8. EXIM, freight forwarding and customs documentation lab with bill of lading, airway bill, shipping bill, invoice, packing list, HS code/classification practice, Incoterms charts, container booking simulation and customs process flow charts; 9. Port, ICD/CFS and container operations simulation with container model, container seal demo, yard layout, reach stacker/crane simulator access, container stuffing/de-stuffing practice, cargo survey checklist and port safety signage; 10. Air cargo and ground operations lab with ULD model, cargo acceptance checklist, dangerous goods awareness charts, airway bill practice, cargo screening workflow, load planning demo and ground operation process simulation; 11. Last-mile delivery and courier/express lab with delivery route maps, handheld delivery app demo, COD/digital payment simulation, returns management, customer communication scripts, parcel sorting racks and hub-spoke model;

Parameters	Specifications
	12. Supply chain analytics lab with computers, spreadsheet/BI tools, demand planning templates, inventory optimisation dashboards, KPI tracking, cost-to-serve simulation and logistics performance analytics; 13. Safety and emergency lab with PPE display, fire extinguishers, spill kit, first-aid kit, dock safety demo, load securing kits, MSDS samples, hazardous cargo awareness and traffic management cones/barricades; 14. Assessment infrastructure with CCTV, biometric attendance, online assessment terminals, secure storage, practical assessment bays, job cards, warehouse checklists, trip sheets and assessor observation forms; 15. (Preferred) AI-based demand forecasting and route optimisation simulator; warehouse automation demo with conveyor/AMR/AGV or digital twin; drone logistics and inventory scanning demonstration; IoT-enabled cold-chain monitoring with cloud dashboard; RFID/blockchain-based shipment traceability; computer vision-based package dimensioning and damage detection; green logistics carbon-footprint calculator; EV fleet charging and battery-health monitoring demo; and control-tower simulation integrating WMS, TMS, GPS, inventory and customer visibility dashboards.
Criteria for Trainers/Assessors	1. Minimum qualification: ITI/Diploma/Degree/B.Voc/Graduate in Logistics, Supply Chain Management, Transport Management, Warehousing, Operations, Commerce, Engineering, Aviation/Air Cargo, Shipping/Port Operations or relevant domain 2. Minimum 5 years relevant industry experience for trainers in warehousing, transport, freight forwarding, cold chain, e-commerce fulfilment, port/ICD/CFS, air cargo, fleet management or supply chain operations; 3. Trainers/Assessors for warehouse roles should have hands-on capability in receiving, put-away, binning, picking, packing, dispatch, cycle counting, inventory accuracy, WMS operation, 5S and warehouse safety; 4. Trainers/Assessors for transport/fleet roles should understand route planning, vehicle documentation, consignment tracking, driver coordination, delivery performance, vehicle inspection, e-way bill basics and POD management; 5. Trainers/Assessors for EXIM/air cargo/port operations should understand cargo documentation, freight forwarding workflow, Incoterms, container handling, cargo acceptance, customs documentation and terminal safety; 6. Trainers/Assessors for cold chain/liquid logistics should understand temperature monitoring, data logging, excursion management, safe handling, hygiene, product-specific SOPs and emergency response.

Parameters	Specifications
Safety requirements	1. PPE: safety shoes, reflective jacket, helmet, gloves, goggles, dust mask where required and high-visibility clothing for yard/dock simulations; 2. Warehouse safety: safe stacking height, aisle marking, rack load-limit display, pallet inspection, clear emergency exits, anti-slip floors and 5S housekeeping; 3. Material handling safety: forklift/pallet-truck simulator training, horn/reverse alarm awareness, pedestrian exclusion zones, speed limits, seat belt use and trained operator-only movement; 4. Dock and loading safety: wheel chocks, dock leveller checks, trailer restraint awareness, fall protection, clear communication between loader and driver, and no standing under suspended/unstable loads; 5. Manual handling safety: correct lifting posture, team lifting, use of trolleys, weight-limit awareness and ergonomic workstations; 6. Fire safety: fire extinguishers, smoke detectors, emergency exits, evacuation plan, assembly point, fire drills and safe storage of flammable packaging materials; 7. Cold-chain safety: freezer gloves, temperature monitoring, safe handling of dry ice/gel packs where used, cold-room entry protocol and emergency release awareness; 8. Hazardous goods awareness: segregation, labelling, MSDS reading, spill control, PPE, emergency response and restricted handling by trained personnel; 9. Transport yard safety: traffic circulation plan, speed limit signage, reverse parking guidance, spotter usage, pedestrian pathways and night-visibility measures; 10. Electrical and IT safety: proper earthing, MCB/RCCB, UPS safety, cable management, server/network protection and periodic electrical inspection; 11. Data and cybersecurity safety: secure use of WMS/TMS credentials, dummy data for training, role-based access, endpoint protection and safe handling of customer/shipment information; 12. First aid and emergency readiness: first-aid box, trained first-aiders, emergency contact board, incident register, spill response drill and vehicle accident response drill.
Regulatory clearance	FSSAI/food safety compliance may be required if the centre handles real food products in cold-chain or food logistics training; otherwise use dummy packages and simulation.

25. Management

Parameters	Specifications
Centre Built-up areas (Sq.ft)	1,000
Equipment	1. Smart classrooms with projector/interactive panel, whiteboard, audio system, digital content, LMS-enabled setup and hybrid training camera/microphone system. 2. Computer and digital productivity lab with at least 40 desktops/laptops, office productivity software, email/calendar tools, cloud storage demo, spreadsheet/presentation tools, document-management software and printer/scanner. 3. Assessment infrastructure with CCTV, biometric attendance, online assessment terminals, secure storage, printer/scanner, learner records, practical task sheets and assessor observation checklists. Preferred 4. Office management simulation lab with reception desk, workstations, filing cabinets, stationery, visitor register, appointment diary, intercom/phone system and office workflow charts. 5. Business communication and language lab with headsets, recording system, pronunciation software, group discussion setup, interview recording, role-play modules and customer interaction scripts. 6. Entrepreneurship and business-planning lab with business model canvas boards, costing templates, GST/invoice samples, digital payment demo, business registration awareness material, market research templates and pitch-deck tools. 7. HR and people-management lab with recruitment templates, attendance/payroll demo, appraisal formats, employee file samples, HRMS demo and workplace role-play setup. 8. Operations and project-management lab with process mapping boards, Kanban boards, project planning software, KPI dashboards, MIS templates and quality-improvement case studies. 9. Finance and business analytics lab with budgeting templates, cash-flow formats, accounting software demo, invoice processing, expense claims, MIS dashboards and data visualisation tools. 10. Customer service and front-office lab with mock reception, CRM demo, complaint register, ticketing system, visitor management system and service-quality checklist. 11. Training and assessment lab with trainer podium, lesson-plan templates, facilitation tools, assessment rubrics, online assessment terminals, classroom recording setup and feedback forms.

Parameters	Specifications
	12. Private security simulation lab with CCTV monitoring demo, access-control demo, visitor pass system, guard post mock-up, frisking/DFMD/HHMD demo, incident reporting formats, patrol register, emergency communication charts, fire/emergency response charts and basic surveillance workflow. 13. Digital collaboration and remote-work lab with video conferencing setup, shared calendars, collaboration tools, digital whiteboard, cloud document workflow and remote meeting etiquette simulation. 14. Soft skills and employability studio with mock interview room, group discussion space, presentation stage, workplace ethics scenarios and confidence-building activities. 15. AI-enabled productivity lab, HR analytics dashboard, AI interview simulator, RPA office workflow demo, digital entrepreneurship/e-commerce simulation, CRM analytics, cybersecurity module, management decision simulation and AI-enabled surveillance/incident reporting awareness demo.
Criteria for Trainers/Assessors	1.Graduate/Postgraduate/Diploma/B.Voc/MBA/BBA/Commerce/HR/Operations/Office Administration/Entrepreneurship/Training & Development/Security Management or relevant professional qualification. 2. Minimum 5 years relevant experience in office management, HR, operations, entrepreneurship, customer service, training delivery, administration, professional skills or private security operations. 3. Office management trainers should be skilled in documentation, filing, scheduling, email communication, MIS reporting, visitor handling, meeting coordination and office systems. 4. Entrepreneurship trainers should understand business planning, costing, pricing, basic finance, digital payments, market linkage, pitch preparation and compliance awareness. 5. Employability trainers should be competent in communication, workplace behaviour, problem solving, digital literacy, teamwork, leadership, interview preparation and presentation skills. 6. Training/assessment trainers should understand adult learning, lesson planning, facilitation, assessment, learner feedback, evidence collection and digital assessment tools. 7. Private security trainers should understand guarding duties, access control, visitor management, patrolling, emergency response, fire safety awareness, incident

Parameters	Specifications
	reporting, CCTV monitoring, workplace conduct, crowd-control basics and legal/compliance boundaries.
Safety requirements	1. Fire safety: extinguishers, smoke detectors, emergency exits, evacuation plan, assembly point and periodic fire drills. 2. Electrical safety: proper earthing, MCB/RCCB, UPS safety, safe plug points, cable management and periodic electrical inspection. 3. Ergonomics: proper chairs, desk height, lighting, ventilation, screen-break protocol and posture training. 4. Digital safety: secure Wi-Fi, antivirus/endpoint protection, controlled system access, password policy, MFA awareness and safe browsing practices. 5. Data privacy: use dummy/anonymised data for HR, customer, finance, security and business simulations; maintain learner consent and restrict access to records. 6. CCTV and assessment safety: CCTV only in common/assessment areas, surveillance signage, restricted footage access and secure assessment evidence storage. 7. Workplace conduct safety: anti-harassment policy, grievance redressal mechanism, code of conduct, respectful communication norms and safe classroom behaviour. 8. Emergency readiness: first-aid box, trained first-aiders, emergency contact board, incident register and mock evacuation drills. 9. Private security safety: no weapons or live-force practice unless specifically authorised; frisking/access-control training to be simulation-based and consent-based; emergency drills to be supervised; incident escalation and lawful conduct protocols to be followed. 10. Cybersecurity awareness should be included because management and security trainees handle emails, documents, visitor records, customer files, financial data and workplace systems.
Regulatory clearance	Certificate under Private Security Agencies Regulation Act, 2005 for Private Security training

26. Media & Entertainment

Parameters	Specifications
Centre Built-up areas (Sq.ft)	1,000

Parameters	Specifications
Equipment	1. Cinema/video cameras, DSLR/mirrorless cameras, lenses, tripods, monopods, gimbals and camera rigs 2. Lighting equipment- LED panels, Fresnel lights, soft boxes, reflectors, flags, C-stands, grip kits and DMX lighting controller; 3. Audio equipment- microphones, boom poles, field recorders, audio interface, mixers, headphones, studio monitors and acoustic panels; 4. Green screen/chroma setup, cyclorama wall, backdrop system and studio floor markings; 5. Editing systems with professional NLE software, colour-grading monitor, storage server/NAS and backup drives; 6. Animation/VFX systems - high-performance workstations, pen tablets, 2D/3D animation software, compositing software and render farm access; 7. Graphic design and digital content systems - design software, UI/UX tools, social-media production tools and content scheduling dashboards; 8. Gaming and AR/VR lab- game-development software, VR headsets, AR demo devices, motion-capture starter kit and interactive media tools; 9. Podcast and dubbing studio- sound booth, pop filters, voice-over mics, audio console, DAW software and soundproofing; 10. Live-event tools- stage lights, PA system, small stage truss demo, event console, cables, connectors and event-production checklists; 11. Art, costume and make-up tools- make-up mirrors, basic prosthetic demo kit, costume racks, prop-making tools and set-design materials; 12. Photography setup- flash lights, light modifiers, product photography table and photo-editing systems; 13. Broadcast/OTT demo setup- streaming encoder, switcher, teleprompter, multi-camera setup and live-streaming workstation; 14. LMS, smart boards, biometric attendance, CCTV and assessment terminals; 15. (Preferred) Virtual production, AI-assisted editing, generative content workflow, volumetric capture demo, real-time game engine production, creator-commerce studio and IP/copyright clinic.

Parameters	Specifications
Criteria for Trainers/Assessors	1. Minimum qualification: Diploma/degree/certification or proven professional portfolio in filmmaking, direction, cinematography, sound, editing, animation, VFX, graphic design, gaming, AR/VR, music production, broadcasting, advertising, digital marketing, production management or relevant domain; 2. Minimum 5 years industry experience for Trainers/Assessors in studio leads and Centre of Excellence faculty; 3. Trainers/Assessors should have demonstrable project credits, portfolio links, showreels, published work, client work, broadcast/OTT/event exposure or equivalent production experience; 4. Trainers/Assessors for animation, VFX, gaming and AR/VR should be hands-on with current software pipelines, asset creation, compositing, rendering, game engines and project workflows; 5. Trainers/Assessors for production and live events should understand call sheets, shoot planning, set discipline, rigging basics, crowd control, power distribution, safety briefings, production budgeting and documentation.
Safety requirements	1. Electrical and lighting safety: proper earthing, ELCB/RCCB, load calculation, cable ramps, no loose wiring, heat-safe lighting operation and qualified supervision; 2. Studio fire safety: CO_2/DCP extinguishers, smoke detectors, fire alarm, emergency exits, evacuation plan, assembly area and mock drills; 3. Rigging and set safety: rated stands, sandbags, clamps, overhead-fixture safety chains, restricted access below suspended loads and pre-shoot safety checklist; 4. Camera and equipment safety: tripod locking, battery charging SOP, safe storage of lenses/cameras, anti-theft tagging and equipment issue-return register; 5. Audio and hearing safety: controlled sound-pressure levels, ear protection for live-event training and safe headphone monitoring practice; 6. Computer lab ergonomics: proper seating, screen height, anti-glare lighting, periodic breaks, eye-care guidance and safe workstation layout; 7. VR/AR safety: supervised VR use, clear play area, cable management, hygiene for headsets and controlled exposure time; 8. Make-up/costume safety: skin-safe products, patch-test awareness, clean brushes, separate storage, ventilation and hygiene SOP; 9. Set-construction safety: cut-resistant gloves, goggles, dust masks, safe tool use, waste segregation and no unsupervised power-tool operation; 10. Drone/filming safety, where applicable: DGCA/Digital Sky compliance, propeller guards, battery safety, no-fly-zone awareness and supervised flight only;

Parameters	Specifications
	11. Data and cyber safety: secure storage, password control, copyright-safe media libraries, backup protocol and access control for project files; 12. First-aid and emergency: first-aid box, burn-care kit, trained first-aiders, emergency contact board, incident register and emergency shut-off for studio power.
Regulatory clearance	-

27. Mining

Parameters	Specifications
Centre Built-up areas (Sq.ft)	8,000
Equipment	1. Smart classrooms with projector/interactive panel, whiteboard, audio system, mine-layout charts, safety posters, HEMM charts, ventilation diagrams, blasting-process charts and LMS-enabled setup. 2. Surface/Open-cast mining simulation yard with haul roads, bench/slope model, dump yard model, barricades, traffic signs, loading/dumping zones, haul-road gradients and pit-safety demonstration area. 3. Underground mining simulation gallery with mock tunnel, roof-support model, ventilation ducting, gas monitoring demo, refuge chamber model, SDL/LHD simulator, track-laying model and emergency evacuation route. 4. HEMM simulator lab with excavator, dumper/tipper, bulldozer, loader, drill rig, grader/dozer simulators or VR modules. 5. Drilling and cutting lab with drill simulator/model, jack hammer, drill bits, rods, compressor demo, wire saw model, drilling-pattern charts, dust-control demo and safety checklist. 6. Blasting and explosives safety simulation lab with dummy explosives, detonator models, stemming tools, blast design charts, charging sequence model, warning-signal system, blast shelter model and shot-firer documentation formats. 7. Mine electrical lab with motors, starters, MCC panel, flameproof equipment demo, cables, earthing system, insulation tester, multimeter, relay/protection demo and lockout/tagout kit. 8. Mine mechanical and HEMM maintenance lab with diesel engine cut-section, hydraulic/pneumatic trainers, transmission parts, brake/steering components, lubrication tools, tyre/track components and maintenance checklists.

Parameters	Specifications
	9. Mine survey and GIS lab with total station, GPS/GNSS demo, level, measuring tapes, mine plans, drone survey simulation, GIS mapping software, slope monitoring demo and field notebooks. 10. Mineral processing and ore handling lab with crusher model, screen model, conveyor trainer, feeder model, sample splitter, sieve set, weighing balance, ore/mineral samples and beneficiation flow charts. 11. Mine safety and rescue lab with self-rescuer demo, breathing apparatus demo, gas detectors, first-aid kit, stretcher, rescue tripod, CPR mannequin, firefighting equipment and rescue drill area. 12. Environmental and mine-closure lab with dust-monitoring demo, noise meter, water-quality testing kit, overburden/reclamation model, green belt plan, mine water reuse model and environmental monitoring formats. 13. Digital mining and control room lab with dispatch system demo, fleet dashboard, proximity-warning demo, IoT sensor dashboard, production reporting software, drone/remote inspection simulation and incident reporting system. 14. Assessment infrastructure with CCTV, biometric attendance, online assessment terminals, secure tool room, practical bays, logbooks, pre-start checklists, permit-to-work formats and assessor observation sheets. 15. Preferred: autonomous haulage simulator, AI-based fatigue/collision monitoring demo, drone-based survey and stockpile simulation, mine digital twin, IoT-based slope/dust/vibration monitoring, VR-based blasting and underground evacuation training, predictive HEMM maintenance dashboard and ESG/mining compliance dashboard.
Criteria for Trainers/Assessors	1. ITI/Diploma/Degree/B.Voc in Mining Engineering, Mechanical, Electrical, Automobile, Heavy Equipment Maintenance, Geology, Mine Surveying, Mineral Processing, Industrial Safety or relevant trade. 2. Minimum 5 years relevant experience in surface/open-cast mining, underground mining, HEMM operation, drilling/blasting, mine electrical, mine mechanical maintenance, mine survey, mineral processing or mine safety. 3. Surface/Open-cast mining trainers should understand bench design, haul-road discipline, loading/dumping safety, slope awareness, traffic management, HEMM operation and pit safety. 4. Underground mining trainers should understand ventilation, roof support, gas monitoring, haulage/track systems, refuge/escape routes, confined-space risk, communication and rescue protocols.

Parameters	Specifications
	5. HEMM trainers should be competent in pre-start inspection, safe operation, loading, hauling, dumping, blind-spot control, communication and shutdown procedures. 6. Drilling/blasting trainers should understand drilling patterns, blast safety, statutory restrictions, dummy explosive handling, warning signals, evacuation, misfire awareness and blast documentation. 7. Electrical/mechanical trainers should understand troubleshooting, preventive maintenance, hydraulics, engines, flameproof equipment awareness, earthing, isolation and lockout/tagout.
Safety requirements	1. PPE: safety helmet, safety shoes, reflective jacket, gloves, goggles/face shield, ear protection, dust mask/respirator, cap lamp, self-rescuer demo and fall-arrest harness where applicable. 2. Surface/Open-cast safety: haul-road rules, speed limits, berms, edge protection, slope monitoring, highwall restriction, loading/dumping discipline and traffic segregation. 3. Underground safety: ventilation awareness, gas testing, roof-fall prevention, refuge/escape route, cap lamp checks, communication protocol and emergency evacuation drills. 4. HEMM safety: pre-start checks, seat belt, horn/reverse alarm, blind-spot awareness, parking brake, supervised simulator/live-yard practice and shutdown procedure. 5. Drilling safety: dust suppression, hearing protection, safe compressor handling, drill rod handling, exclusion zone, stable footing and safe maintenance shutdown. 6. Blasting safety: dummy explosives only for training; no live explosive handling without statutory approval; warning signals, evacuation, misfire awareness and shot-firer supervision. 7. Electrical safety: lockout/tagout, test-before-touch, earthing, insulation testing, flameproof equipment awareness, safe cable handling and authorised access only. 8. Dust, noise and vibration control: respirators, water spraying demo, noise monitoring, hearing protection and exposure-control awareness. 9. Fire and emergency safety: extinguishers, fire alarm, emergency exits, assembly point, mine rescue drill, first-aid box, stretcher and incident reporting procedure. 10. Compliance awareness: DGMS is the regulatory agency under the Ministry of Labour & Employment for occupational safety, health and welfare in mines; mining safety is governed by the Mines Act, 1952 and related rules/regulations.

Parameters	Specifications
Regulatory clearance	Clearance from Directorate General of Mines Safety (DGMS)

28. Water Management & Plumbing

Parameters	Specifications
Centre Built-up areas (Sq.ft)	1,000
Equipment	1. Smart classrooms with projector/interactive panel, whiteboard, audio system, plumbing drawings, pipe-sizing charts, water supply and drainage diagrams, WASH charts, safety posters and LMS-enabled content; 2. Basic plumbing workshop with work benches, pipe vices, pipe cutters, hacksaws, threading tools, measuring tools, spanners, pipe wrenches, pliers, deburring tools and tool racks; 3. Industrial and non-industrial plumbing lab with GI, CPVC, UPVC, PPR, HDPE, PVC, copper and composite pipe samples, fittings, valves, flanges, couplers, solvent cementing station, fusion welding demo and leak testing kits; 4. Water supply installation lab with overhead/underground tank models, booster pump, pressure pump, gauges, PRV demo, valves, float valves, water meter, distribution manifold and hot/cold water mock-up; 5. Drainage and sanitation lab with soil/waste/vent pipe mock-up, traps, gully traps, inspection chamber, manhole model, drainage slope demo, clean-out points, rainwater downpipe model and sewer connection simulation; 6. Sanitary fixtures lab with wash basin, WC, urinal, kitchen sink, shower mixer, faucets, floor drains, concealed cistern, flush valve, health faucet and fixture installation frames; 7. Water supply, treatment and quality control lab with water quality test kit, pH/TDS/turbidity/chlorine testing demo, filtration model, chlorination demo, softening/RO awareness model, sampling bottles and water quality reporting formats; 8. Pumping and distribution lab with centrifugal pump, submersible pump demo, pump control panel, foot valve, NRV, pressure tank, alignment tools, troubleshooting board and water distribution simulator;

Parameters	Specifications
	9. Hot water and heating plumbing lab with solar water heater demo, geyser demo, hot-water circulation model, insulation samples, thermostatic mixing valve, expansion valve and pipe insulation practice setup; 10. Fire-fighting plumbing lab with sprinkler head samples, hydrant valve demo, hose reel, fire pump model, pressure gauge, test header model, alarm valve demo and fire line schematic; 11. Water resource management lab with rainwater harvesting model, first-flush device, filter unit, recharge pit model, groundwater recharge awareness model, greywater reuse model, low-flow fixtures and water audit templates; 12. WASH management lab with handwashing station demo, toilet hygiene charts, safe drinking-water handling demo, sanitation behaviour-change materials, community water-point model and hygiene monitoring formats; 13. Plumbing drawing and estimation lab with computers, CAD/BIM demo, plumbing layouts, isometric drawings, BOQ templates, rate analysis sheets, material take-off tools and project documentation formats; 14. Testing and commissioning lab with hydrostatic pressure test pump, smoke/dye test demo, air pressure test kit, leak detector, inspection camera demo, flow meter and inspection checklists; 15. Maintenance and troubleshooting lab with clogged-pipe models, drain cleaning rods, sink auger, wall chaser demo, leakage simulation board, repair panels and preventive maintenance formats; 16. Assessment infrastructure with CCTV, biometric attendance, online assessment terminals, secure tool room, practical bays, job cards, installation checklists, pressure-test reports and assessor observation sheets; 17. Preferred: Smart water meter, IoT leakage detection, AI-based water consumption dashboard, BIM-based plumbing coordination, greywater reuse simulation, rainwater harvesting calculator, smart pump control with VFD, sensor-based tank automation and QR-based asset tagging;
Criteria for Trainers/Assessors	1. ITI/Diploma/Degree/B.Voc in Plumbing, Civil, Mechanical, Public Health Engineering, Water Supply/Sanitation, Building Services, Fire Services, WASH or relevant trade; 2. Minimum 3 years relevant industry/site experience for trainers in plumbing, water supply, drainage, pump systems, fire plumbing, water treatment, WASH or project supervision;

Parameters	Specifications
	4. Plumbing Trainers should be hands-on in pipe cutting, threading, joining, pipe support, fixture installation, leakage testing, troubleshooting and maintenance; 5. Industrial plumbing Trainers should understand high-pressure lines, process piping basics, valves, pumps, safety isolation, fabrication drawings and preventive maintenance; 6. Water supply and treatment trainers should understand pumps, tanks, valves, meters, water quality testing, treatment basics, O&M records and consumer complaint handling; 7. Water resource management trainers should understand rainwater harvesting, groundwater recharge, water conservation, greywater reuse, water audit and community-level water planning; 8. WASH trainers should understand safe water handling, sanitation, hygiene behaviour, toilet maintenance, community awareness, public health risks and monitoring documentation; 9. Fire plumbing trainers should understand hydrant/sprinkler layouts, pump room basics, pressure testing, valve operation and inspection schedules;
Safety requirements	1. PPE: safety shoes, gloves, goggles/face shield, helmet, dust mask/respirator, ear protection, apron and chemical-resistant gloves for solvent/adhesive work; 2. Tool safety: safe use of pipe cutters, threading machines, drills, wall chasers, soldering/brazing tools, power tools and drain-cleaning equipment; 3. Wet-work safety: anti-slip floors, drainage, electrical isolation near water, no trailing cables, wet-floor signage and controlled discharge; 4. Pressure testing safety: pressure-rated hoses, gauge monitoring, barricaded test zone, gradual pressurisation, safe distance from joints and controlled depressurisation; 5. Chemical safety: labelled solvent cement, adhesives, flux, descaling chemicals, MSDS file, ventilation, spill kit and restricted storage; 6. Hot-work safety: supervised soldering/brazing, fire blanket, extinguisher, ventilation, burn first-aid protocol and hot-work permit simulation; 7. Confined-space and sewer safety awareness: gas testing demo, ventilation, harness/tripod demo, buddy system, no unauthorised entry and rescue awareness; 8. Electrical and pump safety: earthing, MCB/RCCB, lockout/tagout before pump maintenance, insulated tools and safe pump panel operation; 9. Water quality safety: use safe test samples, avoid contaminated water exposure, maintain hygiene, label samples and disinfect work areas after demonstrations;

Parameters	Specifications
	10. WASH safety: handwashing, safe handling of wastewater mock-ups, separation of potable-water and wastewater zones, toilet hygiene and public health awareness; 11. Fire safety: DCP/CO_2 extinguishers, smoke detectors, emergency exits, evacuation plan, assembly point and periodic fire drills; 12. First aid and emergency readiness: first-aid box, eye-wash station, trained first-aiders, emergency contact board, incident register and mock drill records.
Regulatory clearance	-

29. Power

Parameters	Specifications
Centre Built-up areas (Sq.ft)	1,000
Equipment	1. Smart classrooms with projector/interactive panel, whiteboard, audio system, power-sector process charts, single-line diagrams, safety posters, electrical symbols charts and LMS-enabled digital learning setup; 2. Electrical fundamentals lab with AC/DC trainers, resistive/inductive/capacitive load banks, multimeters, clamp meters, insulation testers, earth testers, continuity testers and wiring practice boards; 3. Distribution line training yard with LT/HT pole structures, cross arms, insulators, conductors, AB cable, stay wire, earthing set, service connection demo, line hardware, line tools and pole-top work simulation; 4. Transformer and distribution equipment lab with distribution transformer demo/cut-section, oil testing kit demo, transformer winding samples, LT panel, HT panel, RMU demo, fuse units, isolators, lightning arresters and earthing pits; 5. Substation operation and maintenance lab with 11 kV/33 kV switchgear demo, circuit breaker model, CT/PT samples, relay testing demo, protection relay panels, battery charger demo, mimic panel and substation safety signage; 6. Metering and smart meter lab with single-phase/three-phase meters, smart meters, meter testing bench, CT-operated metering demo, AMI/AMR dashboard, meter sealing tools, billing demo and consumer complaint simulation; 7. Power plant operation and maintenance lab with thermal plant process model, boiler-turbine-generator model, coal handling/ash handling/water treatment process charts, millwright fitter tools, pump/compressor models and maintenance checklists;

Parameters	Specifications
	8. Transmission line lab with tower model, conductor stringing demo, insulator strings, tower erection tools, sag-tension chart, survey tools, binoculars, transmission hardware and foundation/earthing model; 9. Renewable energy and hybrid systems lab with solar PV panels, inverter, charge controller, battery bank demo, net-metering demo, wind turbine model, hybrid controller and renewable energy monitoring dashboard; 10. EV charging station lab with AC charger demo, DC fast-charger simulator, connector types, charger communication demo, safety interlocks, earthing checks, billing/payment simulation and fault diagnosis tools; 11. Electrical machine and winding lab with motors, alternators, starters, contactors, MCB/MCCB/RCCB/ELCB, winding tools, coil samples, motor testing bench and electrical winder practice setup; 12. SCADA, grid and digital power lab with SCADA simulator, feeder monitoring dashboard, outage management demo, GIS mapping workstation, load-flow simulation, smart grid demo and power quality analyser; 13. Safety and rescue lab with PPE, insulated gloves, discharge rods, hot sticks, safety belts, fall-arrest harness, rescue rope, first-aid kit, CPR mannequin, fire extinguishers and electrical shock rescue charts; 14. Assessment infrastructure with CCTV, biometric attendance, online assessment terminals, secure tool room, practical assessment bays, job cards, electrical test reports, logbooks and assessor observation sheets; 15. (Preferred) Smart grid and digital substation simulation; AI-based fault diagnosis and predictive maintenance for transformers, feeders and switchgear; IoT-based energy monitoring and power quality analytics; drone/thermal camera-based transmission and distribution line inspection simulation; EV charging load-management and battery diagnostics demo; distributed energy resource and microgrid simulator; energy storage/BESS safety and monitoring demo; AR/VR-based lineman, substation and electrical accident rescue training; and green hydrogen/renewable integration awareness module.
Criteria for Trainers/Assessors	1. Minimum qualification: ITI/Diploma/Degree/B.Voc in Electrical, Power Engineering, Electronics, Instrumentation, Mechanical, Renewable Energy, Power Plant Engineering or relevant trade; 2. Minimum 5 years relevant industry experience for trainers in power distribution, transmission, substation O&M, power plant O&M, metering, renewable energy, EV charging, electrical maintenance or safety;

Parameters	Specifications
	3. Trainers/Assessors for distribution/lineman roles should have hands-on capability in line patrolling, service connection, fault identification, earthing, isolation, permit-to-work, pole-top safety, transformer basics and consumer interface; 4. Trainers/Assessors for substation/transmission roles should understand switching operations, relay/protection basics, substation logs, CT/PT, breakers, isolators, line clear permit, tower hardware, stringing and emergency restoration; 5. Trainers/Assessors for power plant/maintenance roles should understand plant auxiliaries, pumps, compressors, motors, turbines/boilers overview, water treatment, coal/ash handling, predictive maintenance and maintenance documentation; 6. Trainers/Assessors for metering/EV charging/renewables should understand smart meters, AMI, billing workflow, EV charger safety, solar PV installation basics, inverter systems, battery safety and grid integration;
Safety requirements	1. PPE: safety helmet, electrical safety shoes, insulated gloves, arc-rated clothing where required, safety goggles/face shield, reflective jacket, fall-arrest harness and insulating mats; 2. Electrical isolation safety: lockout/tagout, permit-to-work, line clear procedure, test-before-touch, discharge/earthing procedure, danger tagging and authorised access only; 3. Work-at-height safety: full-body harness, double lanyard, ladder safety, pole-top rescue practice, tool lanyards, barricading and supervision during pole/tower training; 4. Substation safety: restricted access, safe approach distance, interlocks, mimic diagram, switching sequence, emergency trip awareness and insulated operating rods; 5. Earthing and shock prevention: proper earthing, earth resistance testing, RCCB/ELCB demonstration, insulation testing and electrical shock rescue drills; 6. Fire safety: CO_2/DCP extinguishers, fire alarm, emergency exits, evacuation plan, assembly point, transformer oil/fire awareness and periodic mock drills; 7. Battery and EV charging safety: ventilation, polarity checks, no short-circuiting, thermal runaway awareness, insulated tools and emergency disconnect procedure; 8. Tool and equipment safety: insulated tools, calibration status checks, damaged-tool tagging, controlled tool issue/return and periodic inspection of ladders, harnesses and hot sticks; 9. Weather and outdoor safety: lightning awareness, wet-condition restrictions, heat-stress management, hydration and safe working around overhead lines;

Parameters	Specifications
	10. First aid and emergency readiness: first-aid box, CPR mannequin, trained first-aiders, emergency contact board, stretcher, incident register and electrical accident response protocol; 11. The CEA Safety Regulations 2023 apply to electrical installations, electrical plants and electric lines, and to persons engaged in generation, transmission, distribution, trading, supply or use of electricity; 12. CEA-related guidance also notes that electrical installation work should be carried out by licensed electrical contractors under competent supervision, except for limited minor replacements.
Regulatory clearance	1. Compliance with Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2023 for electrical installation, testing, operation and safety practices; 2. State electrical inspectorate approval/inspection may be required for live HT/LT installations, transformer yards, substations, EV charging installations or training yards using energised equipment.

30. Retail

Parameters	Specifications
Centre Built-up areas (Sq.ft)	1,000

Parameters	Specifications
Equipment	1. Smart classrooms with projector/interactive panel, whiteboard, audio system, retail process charts, customer-service posters, digital learning content and LMS-enabled training setup; 2. Mock retail store lab with gondola racks, shelves, product display counters, mannequins, signage, category boards, price tags, promotional displays, shopping baskets/trolleys and dummy products; 3. POS and cashiering lab with POS terminals, barcode scanners, receipt printers, cash drawers, card swipe/UPI payment demo, billing software, coupon/discount simulation and cash reconciliation templates; 4. Customer service and sales lab with role-play counters, complaint handling desk, CRM demo, customer journey maps, selling scripts, product demonstration kits and post-sales service formats; 5. Visual merchandising lab with window display setup, lighting demo, planogram boards, fixture samples, props, colour boards, theme-based display kits, shelf-label tools and VM audit checklist; 6. Inventory and store operations lab with stock room racks, bin cards, stock registers, RFID/barcode labels, handheld scanners, inventory software demo, stock-count sheets, inward/outward registers and shrinkage-control templates; 7. E-commerce and omnichannel retail lab with online seller dashboard demo, digital catalogue creation station, product photography light box, packaging station, order fulfilment simulation, return processing desk and marketplace onboarding templates; 8. Retail analytics and MIS lab with computers, spreadsheet tools, sales dashboards, inventory turnover analysis, customer segmentation demo, KPI tracker and promotion effectiveness templates; 9. Warehousing and back-store practice area with packing tables, cartons, labelling machine, weighing scale, pallet/carton handling tools, goods receiving bay, quality check station and dispatch staging area; 10. Soft skills and employability studio with mock interview room, group discussion space, communication lab, grooming/presentation practice, telephone etiquette setup and workplace behaviour role-play; 11. Security and loss-prevention lab with CCTV monitoring demo, EAS tag demo, access-control demo, shrinkage register, incident reporting forms, store safety signage and emergency response chart;

Parameters	Specifications
	12. Digital retail and CRM lab with tablets, mobile POS demo, loyalty programme simulation, customer feedback tools, WhatsApp/business communication demo, digital payment reconciliation and social commerce demo; 13. Assessment infrastructure with CCTV, biometric attendance, online assessment terminals, secure storage, printer/scanner, practical assessment bays, sales role-play rubrics and assessor observation sheets; 14. Placement and apprenticeship cell with employer database, résumé support, mock interviews, apprenticeship/OJT tracking register, retail job fair desk and learner counselling area; 15. (Preferred) AI-based customer analytics and sales recommendation demo; smart shelf/RFID inventory tracking; computer-vision-based footfall and queue analytics simulation; AR/VR visual merchandising and store layout simulator; omnichannel order management and dark-store fulfilment simulation; chatbot/customer support automation; cashierless checkout/self-checkout demo; retail fraud/shrinkage analytics; and sustainability module for green retail, reverse logistics, packaging reduction and circular retail practices.
Criteria for Trainers/Assessors	1. Minimum qualification: Graduate/Diploma/B.Voc/Certificate in Retail Management, Business Administration, Commerce, Marketing, Hospitality, Customer Service, Supply Chain, Visual Merchandising or relevant domain; 2. Minimum 5 years relevant retail industry experience for trainers in store operations, cashiering, sales, merchandising, e-commerce, customer service, inventory, team leadership or retail training 3. Trainers/Assessors for retail sales roles should have hands-on capability in greeting customers, identifying needs, product demonstration, cross-selling, upselling, objection handling, billing support, complaint handling and post-sales support; the Retail Sales Associate curriculum covers product demonstration, helping customers choose products, maximising sales, resolving customer concerns and working effectively in a retail team; 4. Trainers/Assessors for cashiering and store operations should understand POS billing, cash/card/UPI handling, returns/exchange process, stock receiving, shelf replenishment, planogram compliance, inventory control and store hygiene; 5. Trainers/Assessors for e-commerce/omnichannel retail should understand digital cataloguing, online order fulfilment, packaging, returns, customer communication, marketplace operations and basic retail analytics;

Parameters	Specifications
	6. Trainers/Assessors for visual merchandising should understand store layout, display principles, product grouping, signage, lighting, planograms, promotion zones and VM audit requirements.
Safety requirements	1. Fire safety: fire extinguishers, smoke detectors, emergency exits, evacuation plan, assembly point, fire-drill records and safe storage of packaging materials; 2. Electrical safety: proper earthing, MCB/RCCB, safe plug points, cable management, UPS safety for POS/computer systems and periodic electrical inspection; 3. Customer and crowd safety: clear aisles, anti-slip flooring, safe display fixtures, stable shelving, emergency exit visibility and crowd-flow management during promotions; 4. Manual handling safety: safe lifting, use of trolleys, team lifting for heavy cartons, stockroom aisle clearance and maximum stack-height display; 5. Cash and POS safety: cash-handling protocol, counterfeit note awareness, secure cash drawer, daily reconciliation, supervisor override controls and CCTV-monitored cashier area; 6. Digital and data safety: secure POS credentials, role-based access, dummy customer data for training, password policy, cyber-hygiene awareness and safe handling of payment/customer information; 7. CCTV and privacy safety: visible CCTV signage, restricted access to footage, use of dummy footage in training and secure storage of learner/customer simulation records; 8. Food/grocery retail safety where applicable: hygiene, expiry-date checks, temperature monitoring, allergen awareness, FIFO/FEFO practice and pest-control awareness; 9. First aid and emergency readiness: first-aid box, trained first-aiders, emergency contact board, incident register and mock emergency response drills; 10. Workplace conduct safety: code of conduct, anti-harassment policy, grievance redressal, respectful customer interaction and safe working hours awareness.
Regulatory clearance	If real food/grocery products are used for training or sale, obtain applicable food safety/FSSAI compliance; otherwise use dummy/sample products for simulation

31 I. Rubber

Parameters	Specifications
Centre Built-up areas (Sq.ft)	5,000
Equipment	1. Smart classrooms with projector/interactive panel, whiteboard, audio system, rubber-process charts, tyre/non-tyre product flow charts, compound formulation charts and LMS-enabled training setup; 2. Rubber material and compounding lab with natural rubber, synthetic rubber, carbon black, fillers, oils, accelerators, antioxidants, sulphur, mixing recipe sheets, weighing balances, storage bins and material identification kits; 3. Rubber mixing lab with two-roll mill demo, internal mixer/Banbury demo or simulator, kneader demo, weighing and batch preparation station, temperature monitoring, batch sheet formats and mill safety devices; 4. Rubber adhesive/cement preparation lab with adhesive mixing vessel, stirrer, solvent-safe containers, viscosity cup, weighing scale, fume extraction and storage cabinet; 5. Extrusion and calendaring lab with rubber extruder demo, die samples, calendaring demo, sheet thickness gauge, cooling conveyor demo, profile samples and extrusion defect boards; 6. Moulding and curing lab with compression moulding press, injection/transfer moulding demo, curing press, moulds, temperature controller, timer, de-moulding tools and cured product samples; 7. Tyre manufacturing simulation lab with tyre component samples, bead wire, steel cord/fabric cord, tread, sidewall, inner liner, green tyre model, tyre building drum demo and curing/bladder model; 8. Non-tyre rubber products lab with hose, belt, gasket, seal, footwear sole, rubber sheet, mat, O-ring and moulded product sample kits; 9. Rubber testing and quality lab with Mooney viscometer demo, rheometer demo, hardness tester, tensile testing demo, abrasion tester, compression set apparatus demo, specific gravity kit, thickness gauge and QC checklists; 10. Reclaim/recycling and sustainability lab with rubber crumb samples, devulcanisation awareness model, reclaimed rubber samples, waste segregation bins, tyre recycling process charts and circular-material demonstration; 11. Maintenance and utilities lab with pumps, motors, gearboxes, pneumatic/hydraulic trainers, lubrication tools, preventive maintenance charts, compressor demo and utility safety boards;

Parameters	Specifications
	12. EHS and chemical safety lab with PPE display, MSDS file, spill kit, fire extinguishers, eye-wash station, solvent storage cabinet, dust/fume control demo and emergency response charts; 13. Digital manufacturing lab with computers, production planning sheets, batch traceability demo, formulation database, quality data dashboard, barcode/QR tracking demo and online assessment terminals; 14. Assessment infrastructure with CCTV, biometric attendance, secure tool room, practical assessment bays, logbooks, batch cards, inspection sheets and assessor observation checklists; 15. (Preferred) AI-based rubber compound formulation and defect diagnosis simulator; IoT-enabled mill/mixer temperature and torque monitoring demo; digital twin of tyre and rubber product manufacturing; computer-vision-based surface defect inspection; predictive maintenance dashboard for mixers, mills, presses and extruders; sustainable rubber/reclaimed rubber formulation simulation; tyre recycling and circular-economy workflow; and low-carbon rubber manufacturing dashboard for energy, water, waste and emissions tracking.
Criteria for Trainers/Assessors	1. Minimum qualification: ITI/Diploma/Degree/B.Voc in Rubber Technology, Polymer Technology, Chemical Engineering, Mechanical, Production, Industrial Chemistry, Tyre Technology, Plastics/Polymer Processing or relevant trade; 2. Minimum 5 years relevant industry experience for trainers in rubber compounding, mixing, milling, extrusion, calendaring, moulding/curing, tyre manufacturing, testing, QA/QC, maintenance or EHS; 3. Trainers/Assessors for mixing and compounding should have hands-on capability in material identification, weighing, batch preparation, mill/internal mixer operation, dump temperature control, sheet-out, batch documentation and defect correction; 4. Trainers/Assessors for moulding/curing should understand mould preparation, loading, curing parameters, de-moulding, trimming, finishing, dimensional checks and safety of heated presses; 5. Trainers/Assessors for tyre/non-tyre product roles should understand product construction, component preparation, assembly workflow, curing, inspection, rework and process documentation; 6. Trainers/Assessors for lab/QC should be competent in rubber testing, sampling, rheology basics, hardness/tensile/abrasion/compression testing, calibration, quality records and root-cause analysis

Parameters	**Specifications**
Safety requirements	1. PPE: safety shoes, heat-resistant gloves, cut-resistant gloves, safety goggles/face shield, apron, ear protection, respirator/dust mask and chemical-resistant gloves where required; 2. Mill and mixer safety: nip guards, emergency stop, trip bar, safe feed practice, no loose clothing, authorised operation and lockout/tagout during cleaning/maintenance; 3. Chemical safety: labelled chemicals, MSDS, proper storage of accelerators, sulphur, oils, solvents and adhesives, spill kit, fume extraction and restricted chemical access; 4. Dust and fume control: local exhaust ventilation for carbon black/fillers, respirator use, housekeeping, dust collection and no dry sweeping where dust exposure is possible; 5. Heat and press safety: hot-surface signage, press interlocks, heat-resistant gloves, safe de-moulding tools, burn first-aid protocol and supervised curing press operation; 6. Fire safety: DCP/CO_2/foam extinguishers as applicable, smoke detectors, emergency exits, evacuation plan, assembly point, no-smoking policy and safe solvent storage; 7. Electrical safety: proper earthing, MCB/RCCB, insulated wiring, safe plug points, periodic inspection and electrical isolation before maintenance; 8. Machine safety: guards on extruders, calendaring rolls, cutters, trimming machines and rotating equipment; emergency stops and restricted access for learners; 9. Ergonomics and material handling: safe lifting, trolley use, proper storage of rubber bales/chemicals, clear aisles and team lifting for heavy moulds/materials; 10. Waste management: segregation of rubber scrap, tyre waste, chemical containers, solvent waste, packaging waste, used oil and general waste; 11. First aid and emergency readiness: first-aid box, eye-wash station, trained first-aiders, emergency contact board, incident register and chemical exposure/burn response SOP; 12. Assessment safety: practical assessments under trainer/assessor supervision only, use of safe demo quantities, defined operating zones and stop-work authority for unsafe acts.
Regulatory clearance	-

32. Sports

Parameters	Specifications
Centre Built-up areas (Sq.ft)	5,000
Equipment	1. Smart classrooms with projector/interactive panel, whiteboard, audio system, sports science charts, anatomy charts, coaching methodology content, physical education charts and LMS-enabled training setup; 2. Fitness and conditioning lab with treadmills, cycles, rowing machine, cross trainer, free weights, dumbbells, kettlebells, resistance bands, medicine balls, TRX/suspension trainers, plyometric boxes, agility ladders and cones; 3. Strength and conditioning lab with squat rack, bench press, Olympic bar, bumper plates, cable machine, battle ropes, sled push/pull, jump mats, timing gates and performance tracking tools; 4. Sports coaching arena with multipurpose indoor court markings, mats, cones, bibs, balls, goal posts/nets, skill stations and game-specific training kits for athletics, football, basketball, volleyball, badminton and indigenous games; 5. Physical education and school sports lab with PE lesson-plan templates, motor-skill assessment tools, early-years activity equipment, balance beams, hoops, soft balls, bean bags, mats and physical activity facilitator kits; 6. Self-defence and martial movement studio with mats, striking pads, focus mitts, shields, dummy weapons for safe demonstration, protective guards and scenario-based safety training setup; 7. Sports massage and recovery lab with massage tables, foam rollers, trigger point tools, ice pack/heat pack demo, recovery boots demo, stretching charts and recovery protocol templates; 8. Sports science and testing lab with stadiometer, weighing scale, BMI/body composition analyser, grip dynamometer, sit-and-reach box, vertical jump tester, heart-rate monitors, BP monitor, stopwatch, lactate awareness demo and fitness assessment forms; 9. First-aid, CPR and life-saver lab with CPR manikins, AED trainer, first-aid kits, splints, bandages, spine board/stretcher, rescue tubes and emergency response charts; 10. Sports management and event operations lab with tournament fixtures, scoring software, event planning templates, team registration forms, referee/officials' checklist, venue operations plan and sports event risk assessment templates;

Parameters	Specifications
	11. Digital sports analytics lab with computers, video analysis software, wearable data demo, GPS/fitness tracker demo, athlete monitoring dashboard, match analysis tools and online assessment terminals; 12. Inclusive sports and adapted physical activity lab with para-sport awareness kits, low-impact equipment, accessible mats, modified balls, ramps/markers and adaptive coaching resources; 13. Assessment infrastructure with CCTV, biometric attendance, secure storage, practical assessment bays, coaching demonstration area, fitness testing records, lesson plans and assessor observation sheets; 14. Changing rooms, lockers, hydration station, accessible toilets, shower area, equipment storage and first-aid room; 15. (Preferred) AI-based motion analysis, athlete performance dashboard, injury-risk screening simulation, wearable sensor analytics, VR/AR coaching simulation, smart gym management system, digital coaching portfolio, nutrition planning dashboard, online trainer marketplace support and sports entrepreneurship incubation.
Criteria for Trainers/Assessors	1. Minimum qualification: B.P.Ed/M.P.Ed, Diploma/Degree in Sports Coaching, Sports Science, Exercise Science, Physiotherapy, Fitness Training, Strength & Conditioning, Physical Education, Yoga, Sports Management or relevant discipline; 2. Minimum 5 years relevant experience for trainers in coaching, fitness, physical education, sports science, personal training, strength and conditioning, sports massage or sports event management; 3. Fitness trainers/assessors should be competent in fitness assessment, exercise programming, correct form, progression/regression, warm-up/cool-down, client screening, goal setting and safe supervision; 4. Sports coaches should understand coaching pedagogy, skill development, session planning, athlete monitoring, basic sports psychology, injury prevention and competition preparation; 5. Physical education trainers/assessors should be able to plan inclusive PE sessions, supervise sports events, assess physical education outcomes and ensure safety at play areas; the Physical Education Head model curriculum includes modules on PE department operations, tournaments and safety measures at play areas; 6. Trainers/Assessors must also demonstrate employability, communication, client handling, ethics, safeguarding, documentation, digital fitness tools, entrepreneurship and inclusive coaching;

Parameters	Specifications
Safety requirements	1. PPE and basic safety: sports shoes, mats, protective guards, gloves where required, hydration access and activity-specific protective equipment; 2. Exercise safety: pre-participation screening, warm-up/cool-down, progressive loading, correct technique, supervision during heavy lifts and contraindication awareness; 3. Facility safety: non-slip flooring, shock-absorbent mats, clear walkways, equipment spacing, equipment anchoring, safe storage and daily inspection of gym/sports equipment; 4. First aid and emergency response: first-aid room/box, CPR-trained staff, AED trainer/actual AED where feasible, emergency contact board, stretcher, incident register and emergency action plan; 5. Heat and hydration safety: drinking water, rest breaks, heat-stress awareness, shaded outdoor practice areas and weather-based session modification; 6. Child and learner safeguarding: code of conduct, background verification where applicable, supervision protocols, anti-harassment policy, grievance redressal and safe coaching boundaries; 7. Sports massage and recovery safety: hygiene, clean linen, contraindication screening, informed consent, safe pressure application and referral protocol for injuries; 8. Self-defence studio safety: padded floor, controlled demonstrations, dummy training aids only, protective gear and strict instructor supervision; 9. Fire and building safety: fire extinguishers, smoke detectors, emergency exits, evacuation plan, assembly point and periodic mock drills; 10. Data and digital safety: secure handling of learner fitness data, assessment records, CCTV footage and athlete performance data with role-based access.
Regulatory clearance	If swimming/lifeguard training is added, separate pool safety norms, lifeguard supervision, water quality checks, rescue equipment and local approvals should be obtained; Sports qualification packs have included lifeguard, swimming instructor, aquatic rescue and pool maintenance-related roles

33. Telecom

Parameters	Specifications
Centre Built-up areas (Sq.ft)	5,000

Parameters	Specifications
Equipment	1. Smart classrooms with projector/interactive panel, whiteboard, audio system, telecom network diagrams, fibre route charts, RF planning charts, 4G/5G architecture charts, safety posters and LMS-enabled digital learning setup; 2. Broadband and FTTH lab with ONT/ONU devices, OLT simulator/demo, optical fibre cables, patch cords, splice trays, fibre joint closures, fibre distribution boxes, splitters, routers, Wi-Fi access points and customer-premises installation boards; 3. Optical fibre splicing and testing lab with fusion splicer, mechanical splicing kit, OTDR, optical power meter, laser source, visual fault locator, fibre cleaver, cable stripper, alcohol wipes, safety disposal bin and fibre labelling tools; Optical Fibre Splicer is responsible for efficient splicing and supports OFC installation/testing using OTDR and power meter; 4. Wireless/RF telecom lab with antenna models, feeder cable, RF connectors, spectrum analyser demo, signal generator demo, RF survey tools, drive-test software demo, small cell model, microwave link demo and RF site survey templates; 5. Telecom tower and passive infrastructure lab with tower model, BTS shelter model, earthing system demo, battery bank demo, rectifier/SMPS demo, DG set model, aviation lamp demo, site maintenance checklist and tower safety PPE; 6. Network operations and managed services lab with routers, switches, firewalls, NMS/OSS demo, alarm monitoring dashboard, ticketing system, network topology simulator, fault management cases and SLA reporting templates; 7. 5G, IoT and emerging technology lab with 5G architecture simulator, IoT device kits, sensors, gateways, edge computing demo, private network use-case boards, smart meter/industrial IoT demo and AI/ML telecom analytics dashboard; 8. Handset repair and telecom device lab with mobile handsets/tablets, disassembly tools, hot air station, soldering station, microscope, multimeter, DC power supply, ESD mats, PCB samples, battery safety demo and spare component kits; 9. Telecom electronics manufacturing lab with SMT demo board, hand soldering benches, ESD-safe workstations, PCB inspection tools, component trays, crimping tools, rework station and quality inspection templates; 10. Customer care and sales simulation lab with call-centre headsets, CRM/ticketing demo, relationship-centre desk, customer scripts, broadband sales demo, field sales route planning, complaint handling scenarios and service activation workflow; 11. Cybersecurity and telecom network security lab with firewall demo, SIEM/log review demo, vulnerability awareness, secure configuration exercises, password/MFA practice, phishing awareness and incident response playbooks;

Parameters	Specifications
	12. E-waste and green telecom awareness lab with e-waste sorting bins, handset/PCB recycling awareness, battery disposal workflow, solar-powered tower model, energy-efficiency dashboard and circular economy charts; 13. Assessment infrastructure with CCTV, biometric attendance, online assessment terminals, secure tool room, practical assessment bays, splicing test records, network fault tickets, device repair sheets and assessor observation forms; 14. Placement and apprenticeship cell with employer database, interview room, résumé support, apprenticeship/OJT tracker, telecom job portal access and industry MoU documentation; 15. (Preferred) 5G private network and Open RAN simulation; AI-based network fault prediction and self-healing dashboard; digital twin of telecom tower/FTTH network; drone-based tower inspection simulation; AR/VR fibre splicing and tower safety training; IoT smart city network integration; telecom cybersecurity range; satellite communication awareness demo; and green telecom energy optimisation for towers and edge sites.
Criteria for Trainers/Assessors	1. Minimum qualification: ITI/Diploma/Degree/B.Voc in Electronics, Electrical, Telecommunication, ECE, Computer Networking, IT, Fibre Optics, RF Engineering, Mobile Repair, Embedded Systems or relevant domain; 2. Minimum 5 years relevant telecom industry experience for trainersin fibre deployment, broadband/FTTH, RF/wireless, telecom tower O&M, NOC/network operations, handset repair, telecom manufacturing, customer service or telecom sales; 3. Fibre/broadband trainers/assesors should have hands-on skills in OFC handling, splicing, OTDR testing, power meter testing, ONT/router configuration, customer-premises installation, route documentation and fault restoration; Optical Fibre Technician is responsible for uptime and quality of optical media/equipment through preventive maintenance and fault management; 4. RF/wireless trainers/assessors should understand antenna basics, RF site survey, link alignment, basic spectrum concepts, site safety, network KPIs and troubleshooting; 5. Network/NOC trainers/assessors should understand IP networking, switching/routing basics, NMS/OSS, alarm monitoring, ticketing, SLA reporting, cybersecurity hygiene and incident escalation;

Parameters	Specifications
	6. Handset/device trainers/assessors should understand ESD-safe repair, soldering/rework, mobile diagnostics, component identification, quality checks, battery safety and customer handover.
Safety requirements	1. PPE: safety shoes, helmet, reflective jacket, gloves, safety goggles, ESD wrist strap, fall-arrest harness, ear protection and dust mask where required; 2. Fibre safety: eye protection, no direct viewing into fibre ends, laser safety awareness, safe disposal of fibre shards, clean splicing practices and controlled access to fibre testing benches; 3. Tower and work-at-height safety: full-body harness, double lanyard, anchor-point checks, tool lanyards, rescue plan, weather restrictions, barricading and supervised tower-simulation training; 4. Electrical and battery safety: proper earthing, lockout/tagout, insulated tools, battery ventilation, no short circuits, polarity checks, SMPS/rectifier safety and periodic electrical inspection; 5. RF safety: RF exposure awareness, antenna exclusion zones, no unauthorised RF transmission and use of approved low-power demo equipment; 6. ESD safety: ESD mats, wrist straps, grounded benches, anti-static storage and ESD-safe handling for PCBs, handsets, routers and telecom electronics; 7. Soldering and rework safety: fume extraction, heat-resistant tools, fire-safe workstation, eye protection and burn first-aid protocol; 8. Cybersecurity safety: segregated training network, dummy credentials, no testing on public/live networks, secure password practices and safe handling of network logs; 9. Fire safety: CO_2/DCP extinguishers, smoke detectors, emergency exits, evacuation plan, assembly point and periodic fire drills; 10. First aid and emergency readiness: first-aid box, trained first-aiders, emergency contact board, incident register, electrical shock response protocol and fall rescue drill; 11. Data privacy: use dummy/anonymised customer records in call-centre, CRM and network labs; DPDP framework applies where digital personal data is processed.
Regulatory clearance	WPC/DoT Equipment Type Approval should be checked for wireless/RF devices used, imported, sold or commercially demonstrated; DoT states ETA is required for wireless communication devices operating in de-licensed frequency bands or involving RF transmission.

34. Textiles & Handlooms

Parameters	Specifications
Centre Built-up areas (Sq.ft)	1,000
Equipment	1. Smart classrooms with projector/interactive panel, whiteboard, audio system, textile value-chain charts, fibre-to-fabric charts, loom diagrams, safety posters, quality defect charts and LMS-enabled content. 2. Fibre and yarn testing lab with fibre/yarn samples, yarn count kit, twist tester demo, tensile strength tester demo, moisture meter, weighing balance, magnifying lamps and QC templates. 3. Spinning lab with blowroom model, carding/carding cut-section, drawframe demo, combing demo, roving/speed frame demo, yarn winding samples, spinning components and process charts. 4. Weaving lab with shuttle loom, shuttleless/power loom demo, warp/weft samples, pirn/winding tools, beam samples, reed, heald frames, shuttles, bobbins and fabric defect boards. 5. Handloom & Khadi lab with two-shaft handloom, frame loom, pit loom demo where feasible, warping drum, bobbin winder, charkha/new model charkha/solar charkha demo, hand tools and traditional design samples. 6. Knitting lab with flat-bed knitting machine, circular knitting demo, warp-knitting sample board, needles, yarn feeders, knitted fabric samples and defect charts. 7. Technical textiles lab with samples/demo kits for medical textiles, geotextiles, agrotextiles, protective textiles, automotive textiles, industrial fabrics, nonwoven samples, coated/laminated fabric samples and application charts. 8. Textile processing lab with scouring, bleaching, dyeing and finishing demo units, dye bath samples, pH meter, colour-matching cabinet, drying rack, mini stenter/finishing demo, washing range model and chemical preparation station. 9. Printing and surface ornamentation lab with screen-printing table, screen frames, squeegees, block-printing tools, pigment/dye samples, drying area, design-transfer tools and sample swatches. 10. CAD/CAM textile design lab with computers, textile design software, repeat-pattern tools, digital colour libraries, fabric simulation, trend boards, scanner, printer/plotter and digital portfolio system. 11. Quality control lab with GSM cutter, fabric inspection table/demo machine, colour fastness demo, shrinkage kit, pilling tester demo, seam slippage demo, calipers, measuring scales and QC checklists.

Parameters	Specifications
	12. Maintenance and utility lab with motors, belts, pulleys, lubrication tools, pneumatic/hydraulic demo, preventive maintenance charts, electrical control panel demo and troubleshooting worksheets. 13. Sustainability and circularity lab with water-use demo, ETP/ZLD model, natural dye samples, eco-friendly fibres, textile waste bins, upcycling samples, recycled yarn/fibre samples and carbon/water footprint templates. 14. Assessment infrastructure with CCTV, biometric attendance, online assessment terminals, secure tool room, practical bays, logbooks, job cards, production sheets, inspection sheets and assessor observation forms. 15. Preferred: AI-based fabric defect detection, IoT-enabled loom/spinning monitoring, digital twin for spinning/weaving/processing, computerised Jacquard simulation, smart textiles demo, low-water dyeing corner, textile waste upcycling studio, QR-based handloom traceability and e-commerce enablement for artisan clusters.
Criteria for Trainers/Assessors	1. Minimum qualification: B.Tech/BE/ITI/Diploma/Degree/B.Voc in Textile Technology, Handloom Technology, Textile Design, Textile Processing, Fibre Science, Mechanical, Electrical, Production, Industrial Engineering, Apparel/Textile Manufacturing or relevant domain; 2. Trainers should have minimum 5 years of work experience including minimum 1 year in production and 4 years as a trainer in the relevant job role(s) of spinning, weaving, handloom, khadi, knitting, dyeing, printing, processing, quality control, maintenance, CAD textile design or production supervision; 3. Assessors should have minimum 3 years of production experience to be considered in the relevant job role(s) of spinning, weaving, handloom, khadi, knitting, dyeing, printing, processing, quality control, maintenance, CAD textile design or production supervision; 4. Spinning Trainers should understand fibre preparation, carding, drawing, roving, spinning, winding, yarn defects, productivity, maintenance and shop-floor documentation; 5. Weaving Trainers should understand warping, sizing, loom preparation, shedding, picking, beat-up, fabric defects, loom maintenance and production records; 6. Technical Textiles trainers should understand application-based textile materials, performance requirements, testing awareness, product standards, end-use suitability and safety/performance documentation;

Parameters	Specifications
	7. Handloom & Khadi Trainers should understand pre-weaving, warping, sizing, handloom operation, charkha operation, traditional motifs, quality checks, artisan productivity, cluster entrepreneurship and market linkage; 8. Knitting Trainers should understand flat/circular knitting, needle selection, yarn feeding, fabric structures, machine settings, defects, quality checks and maintenance basics; 9. Processing/dyeing/printing Trainers should understand chemical preparation, dye recipes, shade matching, pH/temperature/time control, effluent awareness, safe chemical handling and process quality. 10. CAD/design Trainers should understand digital design, repeat patterns, colourways, costing, sampling, buyer specifications, digital cataloguing and e-commerce enablement.
Safety requirements	1. PPE: safety shoes, apron, gloves, cut-resistant gloves, goggles/face shield, dust mask/respirator, ear protection and chemical-resistant gloves for processing labs; 2. Machine safety: machine guards, emergency stops, authorised operation, no loose clothing and lockout/tagout before maintenance; 3. Dust and fibre control: ventilation, lint collection, masks/respirators, regular cleaning and prevention of fibre dust accumulation near panels or heat sources; 4. Chemical safety: labelled dyes/chemicals, MSDS file, spill kit, eyewash station, fume extraction and restricted chemical storage; 5. Fire safety: DCP/CO_2 extinguishers, smoke detectors, emergency exits, evacuation plan, assembly point, no-smoking policy and fire drill records; 6. Electrical safety: proper earthing, MCB/RCCB, safe plug points, insulated wiring, periodic inspection and controlled use of heaters, dryers and motors; 7. Ergonomics: correct seating/table height for handloom, CAD, inspection and production tasks; adequate lighting, posture training, rest breaks and anti-fatigue mats; 8. Manual handling safety: safe lifting, trolley use and proper storage of yarn cones, fabric rolls, beams and chemical containers; 9. Effluent and waste safety: segregation of fabric scraps, yarn waste, chemical containers, dye residues, sludge and general waste; processing/dyeing to remain simulation or safe small-batch training unless full compliance systems are installed; 10. First aid and emergency readiness: first-aid box, eyewash station, trained first-aiders, emergency contact board, incident register and chemical exposure/burn response SOP;

Parameters	Specifications
Regulatory clearance	-

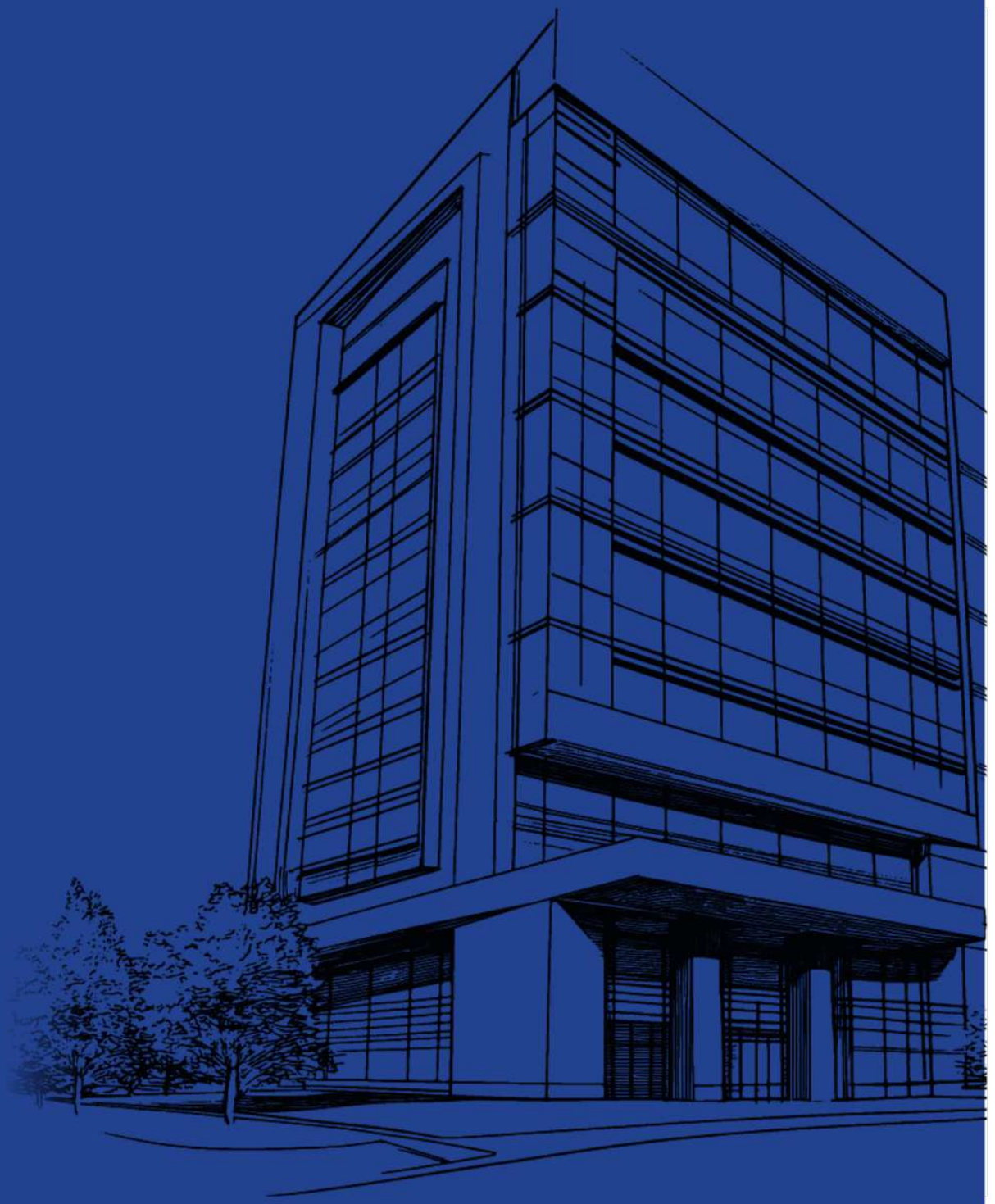
35. Tourism & Hospitality

Parameters	Specifications
Centre Built-up areas (Sq.ft)	1,000
Equipment	1. Smart classrooms with projector/interactive panel, whiteboard, audio system, hospitality process charts, tourism maps, hotel department charts, guest-service SOPs and LMS-enabled digital content; 2. Front office simulation lab with reception counter, PMS/front-office software demo, reservation system, telephone console, guest registration cards, billing formats, key-card demo, concierge desk, bell desk and luggage trolley; 3. Housekeeping lab with mock guest room, bed, linen trolley, housekeeping cart, cleaning tools, vacuum cleaner, room amenities, laundry sorting bins, inspection checklist, lost-and-found register and room-status board; 4. Food & Beverage service lab with restaurant mock-up, dining tables, chairs, side station, crockery, cutlery, glassware, trays, menu cards, POS billing demo, buffet setup, mock bar/barista counter and service sequence charts; F&B model curriculum covers preparation for service, providing F&B service, post-dining operations, communication, guest privacy and basic health and safety standards; 5. Training kitchen and bakery lab with work tables, induction/gas range where permitted, ovens, mixers, refrigerator, deep freezer, chopping boards, knives, cookware, weighing scales, bakery tools, hygiene station, storage racks and food production SOPs; 6. Travel, tourism and tour operations lab with travel desk, itinerary planning software, ticketing/GDS demo, India/world tourism maps, destination information kits, tour costing templates, visa/passport documentation samples and travel consultant role-play station; 7. Adventure and experiential tourism lab with trekking/camping gear demo, first-aid backpack, ropes, helmets, harness demo, route maps, weather-risk charts, emergency communication demo and low/high-altitude guide simulation;

Parameters	Specifications
	8. Facility management and guest services lab with billing desk, complaint handling system, CRM demo, housekeeping coordination board, facility inspection checklist, maintenance request forms and service recovery scenarios; 9. Hospitality communication and language lab with headsets, recording system, customer interaction scripts, role-play videos, soft-skill modules, grooming station, complaint-handling scripts and cross-cultural communication content; 10. Food safety and hygiene lab with handwash station, colour-coded chopping boards, food thermometer, sanitizer demo, pest-control awareness charts, allergen awareness charts, FIFO/FEFO storage display, food labelling formats and cleaning schedules; FSSAI states that every Food Business Operator is required to be licensed under the Food Safety and Standards Authority of India; 11. Digital hospitality and revenue management lab with computers, PMS demo, channel manager demo, OTA listing simulation, CRM, digital review management, basic revenue dashboard, social media marketing templates and online reputation management practice; 12. Assessment infrastructure with CCTV, biometric attendance, online assessment terminals, secure storage, practical assessment bays, guest-service role-play rubrics, kitchen/F&B checklists and assessor observation sheets; 13. Placement and apprenticeship cell with employer database, interview room, résumé support, apprenticeship/OJT tracker, hotel/restaurant/tour operator MoUs and counselling desk; 14. (Preferred) AI-enabled hotel PMS simulation, chatbot-based guest query handling, AR/VR hotel room inspection and F&B service training, smart kitchen IoT monitoring, food waste tracking dashboard, revenue management simulator, digital tourism itinerary builder, contactless check-in/check-out demo, guest sentiment analytics and sustainability dashboard for energy, water, waste and carbon footprint.
Criteria for Trainers/Assessors	1. Minimum qualification: Diploma/Degree/B.Voc/ITI/Certificate in Hotel Management, Hospitality, Tourism, Food Production, F&B Service, Housekeeping, Front Office, Travel & Tourism, Facility Management or relevant domain 2. Minimum 5 years relevant industry experience for Trainers/Assessors in hotel operations, kitchen, F&B service, housekeeping, front office, travel desk, tour operations, facility management or guest services; 3. Front-office Trainers/Assessors should be hands-on in reservation, check-in/check-out, guest registration, billing, room allocation, complaint handling, guest privacy and coordination with housekeeping/F&B

Parameters	Specifications
	4. F&B Trainers/Assessors should be competent in table setup, order taking, tray handling, service sequence, buffet service, POS billing, hygiene, guest interaction and post-dining operations; the F&B service model curriculum specifically covers preparation, service, post-dining operations, communication, guest privacy and health/safety standards; 5. Kitchen Trainers/Assessors should understand food production, mise-en-place, recipe costing, equipment use, hygiene, safe knife handling, allergen awareness, food storage, waste control and kitchen safety; 6. Tourism Trainers/Assessors should understand itinerary planning, destination knowledge, tour costing, documentation, customer handling, travel booking basics, responsible tourism and emergency management;
Safety requirements	1. Food safety and hygiene: handwashing, clean uniforms, hair restraints, gloves where required, food temperature control, allergen awareness, FIFO/FEFO, pest-control awareness and cleaning/sanitisation schedules; FSSAI regulates food business licensing and food safety standards in India; 2. Kitchen safety: safe knife handling, hot-surface caution, LPG/electrical appliance safety, non-slip mats, exhaust/ventilation, safe storage of cleaning chemicals and burn/cut first-aid protocol; 3. Fire safety: fire extinguishers, smoke detectors, gas leak awareness, emergency exits, evacuation plan, assembly point, kitchen fire blanket and periodic fire drills; 4. Housekeeping safety: safe chemical dilution, labelled cleaning agents, wet-floor signage, ergonomic bed-making, safe trolley movement and PPE for cleaning tasks; 5. F&B service safety: safe tray carrying, glassware handling, spill response, food contamination prevention, guest allergy communication and responsible service behaviour; 6. Front office and guest-data safety: secure handling of guest records, ID documents, billing data, CCTV footage and role-based access to PMS/CRM systems; 7. Adventure tourism safety where offered: first-aid kit, risk assessment, weather checks, emergency communication, PPE inspection, route planning and trained guide supervision; 8. First aid and emergency readiness: first-aid box, trained first-aiders, emergency contact board, incident register, CPR awareness and mock drills for fire, food incident and guest emergency;

Parameters	Specifications
	9. Workplace conduct safety: anti-harassment policy, grievance redressal, respectful guest interaction, personal safety for trainees on OJT and clear code of conduct.
Regulatory clearance	FSSAI registration/licence is required if the centre prepares, stores, serves, sells or distributes food beyond dummy/simulation training; FSSAI states every Food Business Operator must be licensed/registered under the FSS Act and FoSCoS is the official system for food licence/registration processes.



Skill India
कौशल भारत-कुशल भारत

कौशल विकास और उद्यमशीलता मंत्रालय
MINISTRY OF SKILL DEVELOPMENT
& ENTREPRENEURSHIP
GOVERNMENT OF INDIA
सत्यमेव जयते

Ministry of Skill Development & Entrepreneurship
Kaushal Bhawan, 3rd Floor, New Moti Bagh New Delhi 110023