Sub: Roadmap for rolling out Skill Programmes at College / Higher Education Institution level in J&K UT under Community College Scheme & Other Skill Schemes.

The skills and knowledge are the driving forces of economic growth and social development for any country. Presently there is demand – supply mismatch, as the economy needs more 'skilled' workforce than that is available. In the higher education sphere, knowledge and skills are required for diverse forms of employment in the sector of education, health care, manufacturing and service sector. Potentially, the target group for skill development comprises all those in the labour force, including those entering the labour market for the first time, those employed in the organized sector and also those working in the unorganized sector. Government of India, taking note of the requirement for skill development among students launched National Vocational Education Qualification Framework which was later on assimilated into National Skills Qualifications Framework. Various Sector Skill Councils are developing Qualification Packs / Model Curriculum, National Occupational Standards and assessment mechanisms in their respective domains, in alignment with the needs of the industry.

Objectives

- 1. To integrate relevant skills into the higher education system in order to make higher education relevant to the learner and the community by making the learner to think and identify the opportunities of livelihood
- 2. To provide employable and certifiable skills based on National Occupational Standards (NOSs) with necessary general education to Senior Secondary School pass-outs, with general education and /or vocational education background
- 3. To provide for up-gradation and certification of traditional / acquired skills of the learners irrespective of their age
- 4. To provide opportunities for community—based life-long learning by offering courses of general interest to the community for personal development and interest
- 5. To provide opportunity for vertical mobility to move to higher education in future
- 6. To offer bridge courses to certificate holders of general / vocational education, so as to bring them at par with appropriate NSQF level.
- 7. To ensure that the students have adequate knowledge and skills, so that they are work ready at each exit point of the programme.

The roadmap for rolling out Skill Programmes at College / Higher Education Institution level shall comprise of following steps:

1. Identification & Selection of Skill Areas

The Skill Gap Analysis Report of NSDC for J&K reveal that there is incremental demand of about 1.1 million people across the sector identified and incremental demand for minimally skilled workers is mainly concentrated in agriculture and allied sectors. Demand for semi-skilled workers is concentrated in sectors such as agriculture and allied, followed by other manufacturing, handicrafts and handlooms, banking and insurance, and trade, hotels and restaurants. Therefore demand for skilled

workers is expected to be driven by sectors such as education, banking, insurance, information technology and healthcare. It is expected that during the period 2012-22, there shall be excess supply of manpower in semi-skilled and skilled levels but shortage of labour in minimally skilled category. The shortage of minimally skilled has to be bridged by skilling initiatives. Taking qualitative aspect of the skill set into consideration there is surplus supply of human resource available, however quantitatively in the semi skilled and skilled levels, the quality of the skill set demanded by the industry might not be met by the present workforce. Though the person might be available for the job role, he/she might not possess the particular knowledge and skills that is demanded by the industry for that particular job role.

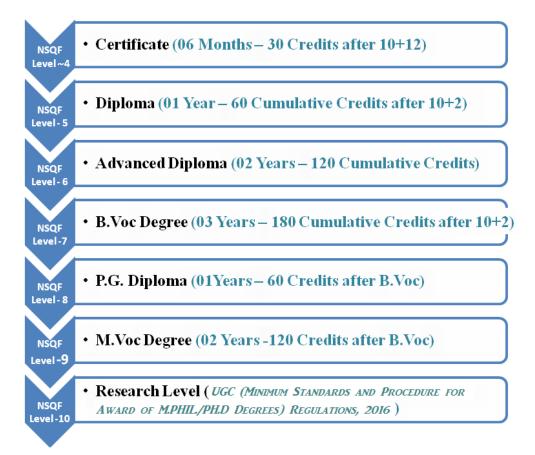
Keeping above into consideration there is need for identification and selection of economic areas/ activities which have employment potential and require skilled persons.

The College / Higher Education Institution need to frame Skill Programme Committee at College / Higher Institution level for identification and selection of skills to be imparted to students, conducting skill gap analysis at institutional level, identifying areas which have potential of employment / livelihood generation. The Committee shall identify skill sets which have global demand and can also strengthen and upscale local economy. The composition of the committee shall be as:

- College / Higher Education Institution Faculty members from subject / domain of Food Technology, Information Technology, Computer Applications, Fashion Technology, Tourism Hospitality, Catering and Business Management etc.
- Representatives from J&K Industries Department, Jammu & Kashmir Entrepreneurship Development Institute, J&K Handicrafts Deptt., J&K Khadi & Village Industries, J&K Livelihood Mission, Himayat Mission Rural Dev. Deptt.
- 3. Representatives from CII Chapter Kashmir / Jammu, FICCI, Jammu / Kashmir Chamber of Commerce / Trade Bodies / Local Business Associations.
- 4. Subject experts / Resource Persons from Sector Skill Councils, Central / State Universities and Central funded Institutions or Independent Resource Persons & Consultants.

2. Courses and Awards

This will be credit-based modular programmes, wherein banking of credits scores for skill and general education components shall be permitted so as to enable multiple exit and entry.



The multiple entry and exit enables the learner to seek employment after any level of Award and join back as and when feasible to upgrade qualifications / skill competencies either to move higher in the job profile or in the higher educational system. This will also provide the learner an opportunity for vertical mobility to second year of B.Voc degree programme after one year diploma and to third year of B.Voc degree programme after a two year advanced diploma. The students may further move to Masters and Research degree programmes mapped at NSQF Level 8 – 10. The students eligible to take up the skill course in the institution will be existing students of the college institution or fresher who have not taken admission after class 12th or dropouts, who may or may not be pursuing any course in the College / Institution. The course will be run by the Colleges / Institutions for which suitable time gaps will be identified in normal working hours 9 Am to 5 Pm.

3. Curriculum Development for Skill Programme

In order to make education more relevant and to create industry fit skilled workforce, the institutions recognized for offering skill based courses will have to be in constant dialogue with the industry and respective Sector Skill Councils so that they remain updated and upscale the skills required for the workforce for the local economy and taking it to next higher stage. These also include skills in cultural heritage of the region, be it art, craft, handicraft, music, architecture, environment or any such thing, through appropriately designed curriculum leading to gainful employment including self-employment and entrepreneurship development. The curriculum in each of the semester / years of the skill programmes will be a suitable mix of general education

and skill development components. The General Education Component will be 40% of the total credits and balance 60% credits shall be of Skill Component. The institutions shall prepare draft curriculum as per the UGC guidelines for Curricular Aspects Assessment Criteria and Credit System for Skill based Vocational Courses and place it for approval by the College / Higher Institution Skill Advisory Committee constituted as per Skill guidelines of UGC. The composition will have composition as under:

i.	Vice-Chancellor / Principal	Chairperson
ii.	Two Experts (nominated by the Chairman, UGC)	Member
iii.	Two academicians in the relevant fields (nominated by the	Member
	VC/Principal)	
iv.	One nominee of State Higher Education Department	Member
V.	Representatives of industries relevant to the Specializations	Member
vi.	Representatives of relevant Sector Skill Councils	Member
vii.	Representatives from J&K Industries Department, Jammu &	Member(s)
	Kashmir Entrepreneurship Development Institute, J&K	
	Handicrafts Deptt., J&K Khadi & Village Industries, J&K	
	Livelihood Mission, Himayat Mission Rural Dev. Deptt.	
viii.	One UGC Nominee	Member
ix.	Nodal Officer for Skill Programme	Member-
		Secretary

After approving of Curriculum by Skill Advisory Committee referred above, the Curriculum shall be put before the Board of Studies (BoS) and Academic Council of the University / Autonomous College for approval. The Universities where BoS for Vocational subjects has not yet been constituted, the curriculum may be considered by the BoS in allied subject area or an ad-hoc BoS may be constituted till the time regular BoS is notified in the university. The BoS will approve the programme wise curriculum based Qualification Pack for skill component and relevant general education component. The curriculum for the specified programmes will be uniform throughout the UT and may be slight additions and alterations as may be required in sub-regions specifically for skill component.

a) Skill Development Components (60% Weightage)

i. Skill component of the programmes/courses shall be employment oriented. The institutions shall offer programmes / courses in domain areas which have significant demand in the job market. The institutions, in consultation with the industry partner(s) and based upon skills Gap analysis report published by the NSDC, industry associations, Sector Skills Councils, Government agencies etc, may decide specific Job Role(s) to be embedded in curriculum. The exit profiles of the learners at different levels i.e. Certificate / Diploma / Advanced Diploma should be clearly defined in output terms.

- ii. The curriculum should be aligned to Qualification Packs (QPs) / National Occupational Standards (NOSs) of selected job role(s) within the industry sector(s). This would enable the students to meet the learning outcomes specified in the NOSs. If a progressive QP is not available in the concerned trade by the SSC, the relevant entrepreneur/occupational role may be incorporated with well defined duties and work standards identified with industry partners through proper consultation with the experts in the field.
- iii. The curricula and system of certification for the skill component should be as per the UGC guidelines for curricular aspects, assessment criteria and credit system for skill based vocational courses or as per the provisions in MHRD Skill Assessment Matrix for Vocational Advancement of Youth (SAMVAY).
- iv. For skills component, the model curriculum developed by the concerned Sector Skill Councils, wherever available, may be adopted or adapted in consultation with the industry partners. Wherever the curriculum is not available, the same may be developed in consultation with the relevant Sector Skill Councils and industry partners. While doing so, the institutions may work towards aligning the curriculum with the National Occupational Standards being developed by the respective/allied Sector Skill Councils. This would promote national and global mobility of the learners, as well as higher acceptability by the industry for employment purposes.
- v. The overall design of the skill development component along with the job roles selected should be such that it leads to a comprehensive specialization in one or two domains.
- vi. In case, NOS is not available for a specific area / job role, the university/college should get the curriculum for this developed in consultation with industry experts as provided at (ii) above.
- vii. The curriculum should also focus on work-readiness in terms of skills in each of the three years.
- viii. Adequate attention needs to be given in curriculum design to practical work, on the job training, development of student portfolios and project work.

b) General Education Component (40% Weightage)

- i. The general education component should adhere to the university / collegiate education norms and shall be decided by the Board of Studies of the concerned University / Autonomous College. It should lay emphasise on offering courses which provide holistic development.
- ii. The general education component will include the course(s) which are supportive to core trade in addition to communication skills, soft skills, ICT skills, critical thinking, problem solving, environmental studies and value education and demand and supply principles.

The practical / hands on skills component of the curriculum shall be transacted in face to face mode in actual work environment as is done in industry. The skill component of these programmes will conform to the QPs/NOSs and the general education component will

conform to the university norms. The curriculum should be designed in a manner that at the end of year-1, year-2 and year-3, students are able to meet below mentioned level descriptors for level 5, 6 and 7 of NSQF, respectively which are as given below:

Level	Process required	Professional knowledge	Professional skill	Core skill	Responsibility
Level 5	Job that requires well developed skill, with clear choice of procedures in familiar context	Knowledge of facts, principles, processes and general concepts, in a field of work or study	A range of cognitive and practical skills required to accomplish tasks and solve problems by selecting and applying basic methods, tools materials and information	Desired mathematical skill, understanding of social, political and some skill of collecting and organizing information, communication.	Responsibility for own work and learning and some responsibility for other's works and learning
Level 6	Demands wide range of specialized technical skill, clarity of knowledge and practice in broad range of activity involving standard / nonstandard practices	Factual and theoretical knowledge in broad contexts within a field of work or study	A range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study	Reasonably good in mathematical calculation, understanding of social, political and, reasonably good in data collecting organizing information, and logical communication	Responsibility for own work and learning and full responsibility for other's works and learning
Level 7	Requires a command of wide ranging specialized theoretical and practical skill, involving variable routine and non- routine context	Wide ranging, factual and theoretical knowledge in broad contexts within a field of work or study	Wide range of cognitive and practical skills required to generate solutions to specific problems in a field of work or study	Good logical and mathematical skill understanding of social political and natural environment good in collecting and organizing information, communication and presentation skill	Full responsibility for output of group and development

As an illustration, awards shall be given at each stage as per Table below for cumulative credits awarded to the learners in skill based vocational courses.

NSQF Level	Skill Component Credits	General Education Credits	Total Credits for Award	Normal Duration	Exit Points / Awards
7	108	72	180	Six Semester s	B.Voc Degree
6	72	48	120	Four semesters	Advanced Diploma
5	36	24	60	Two semesters	Diploma
4	18	12	30	One semester	Certificate

The institutions should provide additional study curriculum and arrange for skill intensive training / teaching for the learners belonging to the category-2 and 3 during the first six months for which they shall be at NSQF Level 4 of skill competency by concerned SSC at the end of first semester. Learners belonging to category-1 need not undergo any additional intensive training and teaching as they already have NSQF level 4 certificates in same industry sector / job role required for specified skill credits. From second semester onwards they will follow the common programme for further course of study. Students may exit after

six months with a Certificate (NSQF Level 4) or may continue for diploma or advanced diploma level courses. An academic progression for the students in skilling stream is illustrated below:

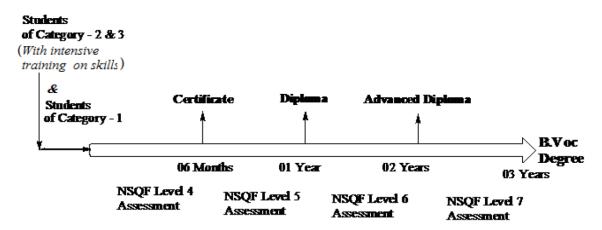


Fig. 1: Vertical Mobility and Multiple Entry / Exit Options for Learners

4. Admission & Fee for Skill Programme

The minimum educational qualification for admission for skill programme shall be class 12th pass or equivalent from any recognized board or university. Equal weight age should be given to vocational subjects at +2 level while considering the students for admission into B.Voc courses for recognition of skills credits. Reservation to SC, ST, OBC, PwD and other categories will be available as per the extant Govt. policy. There shall be no age bar for admission in the skill based certificate /diploma/ degree programmes under NSQF. While deciding criteria for admission into any particular trade, the institutions will consider students having background in relevant stream at 10+2 level and desire / aptitude. The courses that shall be offered under Skill Programme will be credit-based modular programmes, wherein banking of credits for skill and general education components shall be permitted so as to enable multiple exit and entry. The fee for skill programme shall be nominal and decided as per the prevalent practices of the institution.

5. Role of Sector Skill Councils

The concerned Sector Skill Council will support in framing the regionally relevant skill curriculum based on the appropriate QPs / NOSs in the sector as provided under para 4 of the guidelines. The SSC will also conduct assessment for skill component on mutually agreed dates as per the previously shared performance and assessment criteria based on Curriculum framed for the programme at different levels. The SSC will declare Pass/Fail as per predefined assessment criteria and will also provide performance grades to those who passed as under para 5.6. of the UGC skill guidelines along with level certification either singly or jointly with the institution. In case there is SSC in the concerned trade or SSC expressed its inability to conduct assessment in time giving justifiable reasons, the assessment for skill component may be conducted by 'Skill Assessment Board' comprised of Director/Nodal Officer, University

Representative and Senior Representative(s) from industry partner. The assessment outcomes of skill component shall be communicated by the Director/Nodal Officer to University to club it with academic assessment of 'General Education Component' for compilation of final results.

6. Role of the University

The University will constitute appropriate BoS / adhoc BoS for B.Voc courses to consider and approve the course of study / curriculum prepared by the institution for courses in consultation with the Sector Skill Councils vetted by the 'UGC Advisory Committee' at the institute. The course ordinance (in consonance of the UGC guidelines), curriculum / course contents shall be considered and approved by the appropriate academic mechanism of the University. The University has to conduct examination of the academic component of the course and club the results with skill assessment. The University may appoint an Observer during the skill assessment conducted by the SSC / Skill Assessment Board on mutually agreed dates within timelines of the programme. The results in totality will be declared by the University and it will award the degree accordingly.

7. Assessment

The Skill component of the course will be generally assessed by the respective Sector Skill Councils. The general education component will be assessed by the concerned university as per the prevailing standards and procedures. The General Education credit refers to a unit by which the course work is measured. It determines the number of hours of instructions required per week. One credit is equivalent to one hour of teaching (lecture or tutorial) or two hours of practical work/field work per week. Accordingly, one Credit would mean equivalent of 14-15 periods of 60 minutes each or 28 – 30 hrs of workshops / labs. For internship / field work, the credit weightage for equivalent hours shall be 50% of that for lectures / tutorials. For self-learning, based on e-content or otherwise, the credit weightage for equivalent hours of study shall be 50% of that for lectures / tutorials.

8. Award of Certificate

Diploma / Advanced Diploma/ B.Voc and other degrees as the case may be, would depend on acquisition of requisite credits and not on the duration of the calendar time spent in pursuing the course. The certificate for skilling component would be awarded by the Sector Skill Council in terms of NSQF level either singly or jointly with the institution concerned and the general education grades will be certified along with the skill component in terms of certificate/diploma awarded by the institution. Each of the awards shall specify within parenthesis, the Skill(s) specialization, such as:

- B. Voc. (Renewably Energy Management)
- B. Voc. (Retail Management)
- B.Voc. (Banking & Financial Services)

- Advanced Diploma (Food Processing)
- Advanced Diploma (Health Care)
- Advanced Diploma (Hospitality and Tourism)
- Diploma (Green House Technology)
- Diploma (Beauty & Wellness)
- Diploma (Jewellery Designing)

Letter Grades and Grade Points: it is recommended to adopt 10- point grading system with the Letter grades as given below:

Grade Point
10
9
8
7
6
5
4
0
0

9. Infrastructure & Financial Assistance

For rolling out of skill programme at College / Higher Education Institution level the financial assistance shall be as given below:

a) Start-up assistance (Non – Recurring)

One-time start-up financial assistance shall be provided for developing the infrastructure, setting up of laboratories / workshops / labs / teaching learning facilities, procurement of teaching and learning materials including courseware, machineries / equipments and renovation of buildings.

b) Faculty and Staff (Recurring):

The faculty would consist of existing faculty with the institution wherever possible having the required skills and a pool of resource persons/ guest / visiting / part time faculty taken from either the industry or open market or NSDC or other approved training partners for imparting skills. The mix of permanent / part time / guest / visiting / adjunct faculty would be decided by the institution with the approval of Advisory Committee, depending on the requirement of the programme. The laboratory staff / instructors will be planned and approved by Principal, as per the need. Remuneration to the guest faculty may be paid under this scheme at the locally prevalent rates. However, there will be no cap on the total payment to a particular faculty in a month. For guest lecture/ part time faculty etc, sufficient knowledge of the sector, training / teaching skills along with relevant industry experience of minimum 2-5 years is desirable.

c) Operative / Recurring Training Cost (Recurring)

The training / operative cost may be utilized to meet the operational expenditure under the scheme on transportation, travel / field visits/industrial visits, curriculum development, preparation of materials, organizing seminars / workshops / faculty training programmes, web creation, honorarium for engagement of guest / visiting faculty / resource persons, hiring services, contractual lab staff, meetings and contingency/consumables, examination and assessment including assessment fee of Sector Skill Council for skills components and other miscellaneous expenses.

10. Monitoring of Performance Outcome

- a. Every institution, implementing the programme, shall prepare a schedule of activities along with time lines. While the Principal / Director will be responsible for time bound achievement of the milestones, the Advisory Committee under the scheme would monitor its progress periodically, but at least once in six months. The monitors will form a format giving different components of the skill / general component that the students are expected to know at the completion of the course taking minimum learning standards into consideration and will evaluate the students, the institution implementing the programme the faculty imparting the training and working environment into account. The review report of this Monitoring Cum Advisory Committee shall be submitted to the administrative department / funding agency, along with the information in given format. The Higher Education Deptt. may constitute an Expert Committee to visit any of the institution approved under the scheme(s) for on the spot inspection of its activities at any point of time and will evaluate the programme on the expected outcome basis and frame a report for the consideration of administrative department.
- b. The Monitoring of the scheme should necessarily also look at the following areas:
 - i. Funds received and utilised by the college.
 - ii. Student admitted, student drop outs and the students who complete the course.
 - iii. Student's placement role / designation, organisation, starting salary, location or connected with entrepreneurship institutions for starting their own ventures.
 - iv. Industry engagement / MoU signed, guest lecturers invited, internship and on job training, workshop facilities provided on their premises / in institution, commitment on recruiting students, students actually recruited and their average salary, financial assistance provided to the college.
 - v. Curriculum alignment with industry requirements, National Occupational Standards and NSQF.
 - vi. Lab / workshop facilities. Extent of alignment with the needs of the local community.
 - vii. The approved institutions are essentially required to timely furnish the information as may be required from time to time.
- viii. It will be the general responsibility of the institutions to coordinate with the State Govt. University, SSCs, and Industry for smooth implementation

- of the scheme and timely conduct of assessment / examinations and declaration of results
- ix. Evaluation of support received from the institutions like Skill Councils / Mentor Institutions / Affiliating University and others and identifying the weak links if any.
