

UGC GUIDELINES FOR B.Voc.

UNIVERSITY GRANTS COMMISSION

GUIDELINES FOR INTRODUCTION OF BACHELOR OF VOCATION (B.VOC.) PROGRAMME IN UNIVERSITIES AND COLLEGES UNDER THE NATIONAL SKILLS QUALIFICATIONS FRAMEWORK (NSQF)

1. Introduction

It has been a long felt necessity to align higher education with the emerging needs of the economy so as to ensure that the graduates of higher education system have adequate knowledge and skills for employment and entrepreneurship. The higher education system has to incorporate the requirements of various industries in its curriculum, in an innovative and flexible manner while developing a holistic and well groomed graduate.

Ministry of HRD, Government of India had issued an Executive Order in September 2011 for National Vocational Education Qualification Framework (NVEQF). Subsequently, Ministry of Finance, in pursuance of the decision of Cabinet Committee on Skill Development in its meeting held on 19th December, 2013, has issued a notification for National Skills Qualifications Framework (NSQF) which supersedes NVEQF.

Under the National Skills Development Corporation, many Sector Skill Councils representing respective industries have/are being established. One of the mandates of Sector Skill Councils is to develop National Occupational Standards (NOSs) for various job roles in their respective industries. It is important to embed the competencies required for specific job roles in the higher education system for creating employable graduates.

The University Grants Commission (UGC) has launched a scheme on skills development based higher education as part of college/university education, leading to Bachelor of Vocation (B.Voc.) Degree with multiple exits such as Diploma/Advanced Diploma under the NSQF. The B.Voc. programme is focused on universities and colleges providing undergraduate studies which would also incorporate specific job roles and their NOSs alongwith broad based general education. This would enable the graduates completing B.Voc. to make a meaningful participation in accelerating India's economy by gaining appropriate employment, becoming entrepreneurs and creating appropriate knowledge.

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2. Objectives

- 2.1 To provide judicious mix of skills relating to a profession and appropriate content of General Education.
- 2.2 To ensure that the students have adequate knowledge and skills, so that they are work ready at each exit point of the programme.
- 2.3 To provide flexibility to the students by means of pre-defined entry and multiple exit points.
- 2.4 To integrate NSQF within the undergraduate level of higher education in order to enhance employability of the graduates and meet industry requirements. Such graduates apart from meeting the needs of local and national industry are also expected to be equipped to become part of the global workforce.
- 2.5 To provide vertical mobility to students coming out of 10+2 with vocational subjects.

3. Levels of Awards

The certification levels will lead to Diploma/Advanced Diploma/B. Voc. Degree in one or more vocational areas and will be offered under the aegis of the University. This is out-lined in Table I.

Table 1: Awards

Award	Duration	Corresponding NSQF level
Diploma	1 Year	5
Advanced Diploma	2 Years	6
B.Voc. Degree	3 Years	7

Each of the awards shall specify within parenthesis, the Skill(s) specialization for example:

- B. Voc. (Renewably Energy Management)
- B. Voc. (Retail Management)
- B.Voc. (Retail Management and IT)
- Advanced Diploma (Food Processing)
- Advanced Diploma (Health Care)
- Advanced Diploma (Hospitality and Tourism)
- Diploma (Green House Technology)
- Diploma (BPO)
- Diploma (Jewellery Designing)

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A suggestive list of vocational sectors and related specializations is given below: Universities and colleges may like to identify additional sectors/specializations in view of the potential for employment in the local industries and meet the standards laid down by National Occupational Standards.

No.	Sector	Specialization
1.	Automobiles	
		1. Engine Testing
		2. Vehicle Testing
		3. Vehicle Quality
		4. Auto Electricals and Electronics
		5. Farm Equipment and Machinery
2.	Entertainment	
		1. Theatre and Stage Craft
		2. Contemporary Western Dance
		3. Theatre studies
		4. Acting
3.	Information Technology	
		1. Software Development
4	Telecommunications	
		1. Mobile Communication
5.	Marketing	
		1. Retail
6.	Agriculture	
		1. Farm Machinery and Power Engineering
		2. Green House Technology
		3. Renewable Energy
		4. Processing and Food Engineering
		5. Soil and Water Conservation
7.	Construction	
		1. Building Technology
8.	Applied Arts	
		1. Fashion Technology
		2. Interior Design
		3. Jewellery Design
9.	Tourism	
		1. Tourism and Service Industry
10.	Printing and Publishing	
		1. Printing Technology

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4. Eligibility /Target

All universities and colleges included under Sections 2(f) and 12(B) of the UGC Act, 1956 and receiving plan grant from the UGC are eligible for UGC financial assistance under the scheme.

5. Eligibility for admission in B.Voc.

The eligibility condition for admission to B.Voc.programme shall be 10+2 or equivalent, in any stream.

6. Curriculum

6.1 The curriculum in each of the years of the programme would be a suitable mix of general education and skill development components. Curriculum details should be worked before introduction of the courses.

6.2 Skill Development Components:

- (i) The focus of skill development components shall be to equip students with appropriate knowledge, practice and attitude, so as to become work ready. The skill development components should be relevant to the industries as per their requirements.
- (ii) The curriculum should necessarily embed within itself, National Occupational Standards (NOSs) of specific job roles within the industry sector(s). This would enable the students to meet the learning outcomes specified in the NOSs.
- (iii) 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.
- (iv) 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.
- (v) The curriculum should also focus on work-readiness skills in each of the three years.
- (vi) Adequate attention needs to be given in curriculum design to practical work, on the job training, development of student portfolios and project work.

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6.3 General Education Component:

- (i) The general education component should adhere to the normal university standards. It should emphasise and offer courses which provide holistic development. However, it should not exceed 40% of the total curriculum.
- (ii) Adequate emphasis should be given to language and communication skills.

6.4 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:

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 / non-standard 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

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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
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- a. *Professional knowledge is what a learner should know and understand with reference to the subject.*
- b. *Professional skills are what a learner should be able to do.*
- c. *Core skills refer to basic skills involving dexterity and use of methods, materials, tools and instruments used to perform the job including IT skills needed for that job.*
- d. *Responsibility aspect determines the (i) nature of working relationship, (ii) level of responsibility for self and others, (iii) managing change and (iv) accountability for actions.*

6.5 Guidelines for credit calculations

6.5.1 This section contains credit framework guidelines. The university/college should use these guidelines or adapt them.

6.5.2 The following formula should be used for conversion of time into credit hours.

- a) One Credit would mean equivalent of 15 periods of 60 minutes each, for theory, workshops/labs and tutorials;
- b) For internship/field work, the credit weightage for equivalent hours shall be 50% of that for lectures/workshops;
- c) For self-learning, based on e-content or otherwise, the credit weightage for equivalent hours of study should be 50% or less of that for lectures/workshops.

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6.5.3 The suggested credits for each of the years are as follows:

Table 3

NSQF Level	Skill Component Credits	General Education Credits	Normal calendar duration	Exit Points / Awards
Year 3	36	24	Six Semesters	B.Voc.
Year 2	36	24	Four semesters	Advanced Diploma
Year 1	36	24	Two semesters	Diploma
TOTAL	108	72		

- 6.6 The university/college should develop the curriculum in consultation with industry. The industry representatives should be an integral part of the academic bodies of the university/college. While doing so, they should work towards aligning the skills components of the curriculum with the NOSs developed by the respective Sector Skill Councils.
- 6.7 The practical/hands-on portion of the skills development components of the curriculum should be transacted normally in face to face mode, either within the institution or at a specified industry partner location. However, if due to the nature of the skill to be learnt, the industry prescribes its acquisition through blended or distance mode, the same may be followed. In nutshell, the emphasis should be on learning outcome and not the input and processes. The general education component of the curriculum may be transacted in any mode without compromising on quality.
- 6.8 The specialization chosen by the university/college should be based on the existing/forecasted skill gaps in the industry.
- 6.9 Relevance of programmes offered, along with that of the curriculum is important. Therefore, monitoring, evaluation and updating of the curriculum needs to be done periodically in consultation with industry, keeping in view their requirements and changes in NOSs. The university/college should incorporate this as a continuous and dynamic process in-built in their system.
- 6.10 The university/college should appropriately use technology to improve the effectiveness of the delivery of courses.

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7. Examination and Assessment

- 7.1 The assessment for the general education component should be done by the university as per their prevailing standards and procedures.
- 7.2 The assessment for the skill development components should necessarily focus on practical demonstrations of the skills acquired. The university may like to consult the respective Sector Skill Council for designing the examination and assessment pattern for the skill development components. The university may also consider using the designated assessors of Sector Skill Councils/industry associations for the conduct of practical assessment.
- 7.3 The university has to necessarily establish a credit based assessment and evaluation system for the B.Voc. programme.

8. Infrastructure and Faculty for B.Voc. programme

- 8.1 University/college needs to have adequate laboratory /workshop facilities for face to face delivery of skills and hands-on practice either owned or arranged through tie-up with the partner industry or any institution recognized by the certification agency.
- 8.2 The university/college should use its regular faculty for the conduct of general education component and also for the skills components, if existing. Additionally, they may hire faculty on contractual basis and guest faculty in the core trades only as per UGC norms.
- 8.3 There is a provision of One Associate Professor and Two Assistant Professors (purely on contractual basis during XII Plan period), under this scheme.

9. Student Fee

Student fee should be decided as per the prevalent mechanism for fee fixation for aided courses in the university/college.

10. Other conditions

- 10.1 The university has to necessarily adopt a credit based assessment and evaluation system in semester mode for the B.Voc. programme.
- 10.2 The B.Voc. programme should be evaluated and monitored by the university/college through its existing mechanism or by setting up an alternate mechanism, with involvement of industry representatives.