

**NATIONAL VOCATIONAL EDUCATION QUALIFICATION  
FRAMEWORK [NVEQF]**

**GENERAL SCHEMA  
(CONSTRUCTION)**

**ALL INDIA COUNCIL FOR TECHNICAL EDUCATION**

**7<sup>TH</sup> FLOOR, CHANDERLOK BUILDING**

**JANPATH, NEW DELHI – 110 001**

[www.aicte-india.org](http://www.aicte-india.org)

## **Introduction**

All [India](#) Council for Technical Education, (AICTE), the apex body for making and maintaining the norms of Technical Education in the country has framed a National [Vocational](#) Education Qualification Framework (NVEQF) for the polytechnics and Engineering Colleges.

NVEQF is introduced by Government in order to formally integrate vocational education together with its current conventional educational streams across school and higher education space and provide an opportunity and incentive to students to explore a large universe of opportunity.

It is important that a Vocational Educational Qualification Framework is in place that allow cross mobility of standards and their absorption in Industry with certain skill gained over a fixed period of time or their seamless integration into higher learning that enable them to acquire formal degree and higher skill so that they perform higher level jobs in Industry.

## **Rational of NVEQF**

- **Across sectors and across the country.** The Initiative addresses skills in all sectors and areas.
- **Short duration, focused and modular programs** allow for quick and effective delivery of skills training. This allows a person to become productive relatively quickly at younger age. The modular approach also means that he can add on to his portfolio of skills for vertical and horizontal progression. At the same time the content is focused to allow for dissemination of only relevant skill. The duration is decided taking into account the objectives and content of the constituent programs. Amongst other things it would be based on Employer-Employee needs, availability of Infrastructure and Equipment, Characteristics of the Training Content, etc
- Programmes of varied durations ranging from **short courses** to more protracted ones, depending on the skill and the requirements at particular certificate level.
- The practical hands on skills for **delivery in the local language**, thereby allowing for provision of local trainers, congenial and effective delivery.
- The delivery of the program is flexible it could be **full day, half day or week end programs**. This would again be decided on availability of candidate's spare time, availability of training infrastructure and spare capacities, etc.
- Training could be delivered through a **network of centres** that could include Technical and Non-Technical Schools and Colleges industry centres, Training Organizations, Services, In addition, for practical training, laboratories of industries could be used as Training Sites for skill enhancement, where required.

		<b>Case I</b>		<b>Case II</b>	
<b>Certification Level</b>	<b>Normal Qualification</b>	<b>Vocational Qualification</b>	<b>Certifying Body</b>	<b>Vocational Qualification</b>	<b>Certifying Body</b>
7	3 <sup>rd</sup> yr bachelors	Advanced Diploma	Board of Technical Education	Degree	University
6	2 <sup>nd</sup> yr bachelors				
5	1 <sup>st</sup> yr bachelors	Diploma	Board of Technical Education	Grade XII	School Board
4	Higher Secondary School Grade XII				
3	Higher Secondary School Grade IX				
2	Secondary School Grade X	Grade X	School Board	Grade X	School Board
1	Secondary School Grade IX	Grade IX	School Board	Grade IX	School Board

**Framework options for a student**

## GENERAL SCHEME OF STUDIES

There shall be Seven Certificate level; each level will have following distribution for General and Vocational education -

Certificate Level	Contact Hours for Vocational & General Education	
	Vocational	Academic
1	200-300	700-800
2	200-300	700-800
3	300-400	600-700
4	300-400	600-700
5	400-500	500-600
6	500-600	400-500
7	600-700	300-400

- Internal distribution of teaching hours for each subjects to be done by concerned board/university as per the need
- For any clarification at level I to IV of General Content, Syllabus of C.B.S.E. may be referred
- The given contents are indicative one and concerned Boards/ University may make desirable changes as per the local needs
- The evaluation of Vocational part shall be done by respective SKPs and shall award grades on five point scale.
- The concerned institutes shall forward the grade to Board/University for the purpose of issuing Level Certificate.

**SKILL SECTORS/ SPECIALISATIONS AND AVAILABLE GENERAL CONTENT**

<b>Sector</b>	<b>Specialization</b>	<b>Availabe General Content</b>
Construction		Science Stream
1	Building Technology	

**NATIONAL VOCATIONAL EDUCATIONAL QUALIFICATION FRAMEWORK (NVEQF)**  
**SECTOR: CONSTRUCTION**

**SPECIALIZATION: BUILDING TECHNOLOGY: NVEQF/CONST/BT/LI**

**CERTIFICATE LEVEL- I**

<b>S.N O</b>	<b>VOCATIONAL CONTENT (DETAIL CONTENT AT L_All_Vocational_Ed_Constructi on)</b>	<b>HRS .</b>	<b>S.N O</b>	<b>GENERAL CONTENT</b>	<b>HRS .</b>
1.	INFRASTRUCTURE MASONRY	85		SUBJECT OF STUDIES THE LANGUAGES WILL BE FROM THE FOLLOWING WITH THE FOLLOWING STRUCTURE (ANY TWO) HINDI, ENGLISH, ASSAMESE, BENGALI, GUJRATI, KANNADA, KASHMIRI, MARATHI, MALAYALAM, MANIPURI, ORIYA, PUNJABI, SINDHI, TAMIL, TELUGU, URDU, LEPCHA, LIMBU, BHUTIA, SANSKRIT, ARABIC, PERSIAN, FRENCH, GERMAN, PORTUGUESE, RUSSIAN, SPANISH, NEPALI, TIBETAN AND MIZO, TANGKHUL AND BODO. <b>(DETAIL CONTENT AT L_1_Language)</b>	
			1.	LANGUAGE I	140
			2.	LANGUAGE II	140
2.	BARBENDING	60	3.	MATHEMATICS  (DETAIL CONTENT AT L_1_General_Ed)	140
3.	PLUMBING & SANITATION	30	4.	SCIENCE  (DETAIL CONTENT AT L_1_General_Ed)	180
4.	PAINTING	25	5.	SOCIAL SCIENCE  (DETAIL CONTENT AT L_1_General_Ed)	180
	<b>TOTAL VOC CONTENT</b>	<b>200</b>		<b>TOTAL GENERAL CONTENT</b>	<b>780</b>
	<b>GRAND TOTAL</b>			<b>980 HRS.</b>	



**SPECIALIZATION: BUILDING TECHNOLOGY: NVEQF/CONST/BT/LII**

**CERTIFICATE LEVEL- II**

<b>S.N O</b>	<b>VOCATIONAL CONTENT (DETAIL CONTENT AT L_All_Vocational_Ed_Constructi on)</b>	<b>HRS .</b>	<b>S.N O</b>	<b>GENERAL CONTENT</b>	<b>HRS .</b>
1.	INFRASTRUCTURE	10		SUBJECT OF STUDIES THE LANGUAGES WILL BE FROM THE FOLLOWING WITH THE FOLLOWING STRUCTURE (ANY TWO) HINDI, ENGLISH, ASSAMESE, BENGALI, GUJRATI, KANNADA, KASHMIRI, MARATHI, MALAYALAM, MANIPURI, ORIYA, PUNJABI, SINDHI, TAMIL, TELUGU, URDU, LEPCHA, LIMBU, BHUTIA, SANSKRIT, ARABIC, PERSIAN, FRENCH, GERMAN, PORTUGUESE, RUSSIAN, SPANISH, NEPALI, TIBETAN AND MIZO, TANGKHUL AND BODO. <b>(DETAIL CONTENT AT L_2_Language)</b>	
			1.	LANGUAGE I	140
			2.	LANGUAGE II	140
2.	MASONRY	70	3.	MATHEMATICS  (DETAIL CONTENT AT L_2_General_Ed)	140
3.	BARBENDING	70	4.	SCIENCE  (DETAIL CONTENT AT L_2_General_Ed)	180
4.	PLUMBING & SANITATION	50	5.	SOCIAL SCIENCE  (DETAIL CONTENT AT L_2_General_Ed)	180
5.	ROADS	25			
6.	WELDING	25			
	<b>TOTAL VOC CONTENT</b>	<b>250</b>		<b>TOTAL GENERAL CONTENT</b>	<b>780</b>
	<b>GRAND TOTAL</b>			<b>1030 HRS.</b>	





**SPECIALIZATION: BUILDING TECHNOLOGY: NVEQF/CONST/BT/LIII**

**CERTIFICATE LEVEL- III**

<b>S.N O</b>	<b>VOCATIONAL CONTENT (DETAIL CONTENT AT L_All_Vocational_Ed_Constructi on)</b>	<b>HRS .</b>	<b>S.N O</b>	<b>GENERAL CONTENT</b>	<b>HRS .</b>
1.	INFRASTRUCTURE	10	1. 2.	SUBJECT OF STUDIES I&II TWO LANGUAGES OUT OF FOLLOWING HINDI, ENGLISH, ASSAMESE, BENGALI, GUJRATI, KASHMIRI, KANNADA, MARATHI, MALYALAM, MANIPURI, ORIYA, PUNJABI, SINDHI, TAMIL, TELUGU, URDU, SANSKRIT, ARABIC, PERSIAN, LIMBOO, LEPCHA, BHUTIA, MIZO, TANGKHUL, BODO, NEPALI, TIBETAN, FRENCH, GERMAN, PORTUGUESE, RUSSIAN AND SPANISH. <b>(DETAIL CONTENT AT L_3_Language)</b>  LANGUAGE I  LANGUAGE II	120  120
2.	MASON	70		ANY THREE PAPERS OUT OF FOLLOWING (DETAIL CONTENT AT L 3 General Ed Science Stream)	
3.	BARBENDING	45		MATHEMATICS	150
4.	PLUMBING AND SANITATION	70		PHYSICS	150
5.	FORM WORK	50		CHEMISTRY	150
6.	ELECTRICAL HOUSE WIRING	75		BIOLOGY	150
7.	ROADS	10		BIOTECHNOLOGY	150
8.	GREEN BUILDING TECHNOLOGY	20		ENGINEERING GRAPHICS	150

			AGRICULTURE	150
			COMPUTER SCIENCE	150
			INFORMATICS PRACTICES	150
			MULITMEDIA AND WEB TECHNOLOGY	150
	<b>TOTAL VOC CONTENT</b>	<b>350</b>	<b>TOTAL GENERAL CONTENT</b>	<b>690</b>
	<b>GRAND TOTAL</b>		<b>1040 HRS.</b>	

**SPECIALIZATION: BUILDING TECHNOLOGY: NVEQF/CONST/BT/LIV**

**CERTIFICATE LEVEL- IV**

<b>S.N O</b>	<b>VOCATIONAL CONTENT (DETAIL CONTENT AT L_All_Vocational_Ed_Constructi on)</b>	<b>HRS .</b>	<b>S.N O</b>	<b>GENERAL CONTENT</b>	<b>HRS .</b>
1.	INFRASTRUCTURE	10	1. 2.	SUBJECT OF STUDIES I&II TWO LANGUAGES OUT OF FOLLOWING HINDI, ENGLISH, ASSAMESE, BENGALI, GUJRATI, KASHMIRI, KANNADA, MARATHI, MALYALAM, MANIPURI, ORIYA, PUNJABI, SINDHI, TAMIL, TELUGU, URDU, SANSKRIT, ARABIC, PERSIAN, LIMBOO, LEPCHA, BHUTIA, MIZO, TANGKHUL, BODO, NEPALI, TIBETAN, FRENCH, GERMAN, PORTUGUESE, RUSSIAN AND SPANISH. <b>(DETAIL CONTENT AT L_4_Language)</b> LANGUAGE I LANGUAGE II	120 120
2.	ELECTRICAL HOUSE WIRING	80		<b>ANY THREE PAPERS OUT OF FOLLOWING (DETAIL CONTENT AT L_4_General_Ed_Science_Stream)</b>	
3.	PAINTING	50		MATHEMATICS	150
4.	ASSISTANT WORKS SUPERVISOR	150		PHYSICS	150
5.	WELDING	35		CHEMISTRY	150
6.	RENEWABLE ENERGY	15		BIOLOGY	150
7.	BASICS OF INTERIORS	10		BIOTECHNOLOGY	150
				ENGINEERING GRAPHICS	150
				AGRICULTURE	150

				COMPUTER SCIENCE	150
				INFORMATICS PRACTICES	150
				MULITMEDIA AND WEB TECHNOLOGY	150
	<b>TOTAL VOC CONTENT</b>	<b>350</b>		<b>TOTAL GENERAL CONTENT</b>	<b>690</b>
	<b>GRAND TOTAL</b>			<b>1040 HRS.</b>	

**SPECIALIZATION: BUILDING TECHNOLOGY: NVEQF/CONST/BT/LV**

**CERTIFICATE LEVEL- V**

<b>S.N O</b>	<b>VOCATIONAL CONTENT (DETAIL CONTENT AT L_All_Vocational_Ed_Constructi on)</b>	<b>HRS .</b>	<b>S.N O</b>	<b>GENERAL CONTENT</b>	<b>HRS .</b>
1.	ENGINEERING DRAWING	100		<b>ANY THREE PAPERS OUT OF FOLLOWING (DETAIL CONTENT AT L 5 General Ed Science Stream)</b>	
2.	METHODS OF SURVEYING	100		MATHEMATICS	180
3.	ANY ONE BUILDING CONSTRUCTION OR ROADS OR CULVERTS /MINOR BRIDGES BUILDING CONSTRUCTION	300		PHYSICS	180
				CHEMISTRY	180
				COMPUTER SCIENCE	180
				APPLIED STATISTICS	180
				BOTANY	180
				ZOOLOGY	180
				BIOCHEMISTRY	180
				MICROBIOLOGY	180
				ELECTRONICS	180
	<b>TOTAL VOC CONTENT</b>	<b>500</b>		<b>TOTAL GENERAL CONTENT</b>	<b>540</b>
	<b>GRAND TOTAL</b>			<b>1040 HRS.</b>	

**SPECIALIZATION: BUILDING TECHNOLOGY: NVEQF/CONST/BT/LVI**

**CERTIFICATE LEVEL- VI**

<b>S.N O</b>	<b>VOCATIONAL CONTENT (DETAIL CONTENT AT L_All_Vocational_Ed_Constructi on)</b>	<b>HRS .</b>	<b>S.N O</b>	<b>GENERAL CONTENT</b>	<b>HRS .</b>
1.	SURVEYING	75		<b>ANY TWO PAPERS OUT OF FOLLOWING (DETAIL CONTENT AT L 6 General Ed Science Stream)</b>	
2.	BUILDING CONSTRUCTION OR ROADS OR CULVERTS /MINOR BRIDGES (ANY ONE)	300		MATHEMATICS	250
3.	CROSS DRAINAGE WORKS	75		PHYSICS	250
4.	AUTOCAD 1	100		CHEMISTRY	250
				COMPUTER SCIENCE	250
				APPLIED STATISTICS	250
				BOTANY	250
				ZOOLOGY	250
				BIOCHEMISTRY	250
				MICROBIOLOGY	250
				ELECTRONICS	250
	<b>TOTAL VOC CONTENT</b>	<b>550</b>		<b>TOTAL GENERAL CONTENT</b>	<b>500</b>
	<b>GRAND TOTAL</b>			<b>1050 HRS.</b>	

**SPECIALIZATION: BUILDING TECHNOLOGY: NVEQF/CONST/BT/LVII**

**CERTIFICATE LEVEL- VII**

<b>S.N O</b>	<b>VOCATIONAL CONTENT (DETAIL CONTENT AT L_All_Vocational_Ed_Constructi on)</b>	<b>HRS .</b>	<b>S.N O</b>	<b>GENERAL CONTENT</b>	<b>HRS .</b>
1.	SURVEYING	75		<b>ANY ONE PAPER OUT OF FOLLOWING (DETAIL CONTENT AT L 7 General Ed Science Stream)</b>	
2.	AUTO CAD 2	75		MATHEMATICS	300
3.	ANY SUBJECT OR COMBINATION OF THE FOLLOWING SUBJECTS TOTALING 600 OR MORE HRS			PHYSICS	300
4.	ANY ONE BUILDING CONSTRUCTION OR ROADS OR CULVERTS /MINOR BRIDGES OTHER THAN ALREADY STUDIED IN LEVEL 5 OR LEVEL 6			CHEMISTRY	300
5.	MAJOR BRIDGES			COMPUTER SCIENCE	300
6.	STEEL STRUCTURES			APPLIED STATISTICS	300
7.	PRE-STRESSED BRID GES			BOTANY	300
8.	WATER SUPPLY			ZOOLOGY	300
9.	SANITARY ENGINEERING			BIOCHEMISTRY	300
10.	IRRIGATION STRUCTURES			MICROBIOLOGY	300
11.	REPAIRS AND			ELECTRONICS	300



	REHABILITATION OF BUILDINGS REPAIRS AND REHABILITATION OF BRIDGES				
	<b>TOTAL VOC CONTENT</b>	<b>750</b>		<b>TOTAL GENERAL CONTENT</b>	<b>300</b>
	<b>GRAND TOTAL</b>			<b>1050 HRS.</b>	