

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

**GENERAL SCHEMA
(INFORMATION TECHNOLOGY)**

ALL INDIA COUNCIL FOR TECHNICAL EDUCATION

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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.

		Case I		Case II	
Certification Level	Normal Qualification	Vocational Qualification	Certifying Body	Vocational Qualification	Certifying Body
7	3 rd yr bachelors	Advanced Diploma	Board of Technical Education	Degree	University
6	2 nd yr bachelors				
5	1 st 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 GENERAL CONTENT

Sector	Specialization	General Content
Information Technology		Science Stream
1	Software Development	

NATIONAL VOCATIONAL EDUCATIONAL QUALIFICATION FRAMEWORK (NVEQF)
SECTOR: INFORMATION TECHNOLOGY

SPECIALIZATION: SOFTWARE DEVELOPMENT: NVEQF/IT/SD/LI

CERTIFICATE LEVEL- I

S.N O	VOCATIONAL CONTENT (DETAIL CONTENT AT L All Vocational Ed IT)	HRS .	S.N O	GENERAL CONTENT	HRS .
1.	DIGITAL LITERACY:	30		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. (DETAIL CONTENT AT L_1_Language)	
			1.	LANGUAGE I	140
			2.	LANGUAGE II	140
2.	WORD PROCESSING SPREADSHEET:	90	3.	MATHEMATICS (DETAIL CONTENT AT L_1_General_Ed)	140
3.	PRESENTATION AND LANGUAGE	50	4.	SCIENCE (DETAIL CONTENT AT L_1_General_Ed)	180

4.	E-MAIL MESSAGING	30	5.	SOCIAL SCIENCE (DETAIL CONTENT AT L_1_General_Ed)	180
	TOTAL VOC CONTENT	200		TOTAL GENERAL CONTENT	780
	GRAND TOTAL			980 HRS.	

SPECIALIZATION: SOFTWARE DEVELOPMENT: NVEQF/IT/SD/LII

CERTIFICATE LEVEL- II

S.N O	VOCATIONAL CONTENT (DETAIL CONTENT AT L All Vocational Ed IT)	HRS .	S.N O	GENERAL CONTENT	HRS .
1.	DIGITAL LITERACY: WORD PROCESSING, SPREADSHEET;, PRESENTATION	150		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. (DETAIL CONTENT AT L_2_Language)	
			1.	LANGUAGE I	140
			2.	LANGUAGE II	140
2.	E-MAIL MESSAGING	20	3.	MATHEMATICS (DETAIL CONTENT AT L_2_General_Ed)	140
3.	DATABASE	30	4.	SCIENCE (DETAIL CONTENT AT L_2_General_Ed)	180
4.	LANGUAGE	50	5.	SOCIAL SCIENCE (DETAIL CONTENT AT L_2_General_Ed)	180
	TOTAL VOC CONTENT	250		TOTAL GENERAL CONTENT	780
	GRAND TOTAL			1030 HRS.	

SPECIALIZATION: SOFTWARE DEVELOPMENT: NVEQF/IT/SD/LIII

CERTIFICATE LEVEL- III

S.N O	VOCATIONAL CONTENT (DETAIL CONTENT AT L All Vocational Ed IT)	HRS .	S.N O	GENERAL CONTENT	HRS .
1.	DIGITAL LITERARY	30	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. (DETAIL CONTENT AT L_3_Language) LANGUAGE I LANGUAGE II	120 120
2.	WORD PROCESSING	60		ANY THREE PAPERS OUT OF FOLLOWING (DETAIL CONTENT AT L_3_General_Ed_Science_Stream)	
3.	SPREADSHEET:	60		MATHEMATICS	150
4.	PRESENTATION	20		PHYSICS	150
5.	E MAIL MESSAGING	25		CHEMISTRY	150
6.	COMPUTER NETWORKS	40		BIOLOGY	150
7.	WEB DESIGN	50		BIOTECHNOLOGY	150
8.	OTHER IT COURSES	25		ENGINEERING GRAPHICS	150
9.	LANGUAGE	50		AGRICULTURE	150
				COMPUTER SCIENCE	150
				INFORMATICS PRACTICES	150

			MULITMEDIA AND WEB TECHNOLOGY	150
	TOTAL VOC CONTENT	350	TOTAL GENERAL CONTENT	690
	GRAND TOTAL		1040 HRS.	

SPECIALIZATION: SOFTWARE DEVELOPMENT: NVEQF/IT/SD/LIV

CERTIFICATE LEVEL- IV

S.N O	VOCATIONAL CONTENT (DETAIL CONTENT AT L All Vocational Ed IT)	HRS .	S.N O	GENERAL CONTENT	HRS .
1.	WORD PROCESSING	60		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. 1. (DETAIL CONTENT AT L_4_Language) 2. LANGUAGE I LANGUAGE II	120 120
2.	SPREADSHEET:	60		ANY THREE PAPERS OUT OF FOLLOWING (DETAIL CONTENT AT L_4_General_Ed_Science_Stream)	
3.	PRESENTATION	35		MATHEMATICS	150
4.	E MAIL MESSAGING	30		PHYSICS	150
5.	SOFTWARE DEVELOPMENT	50		CHEMISTRY	150
6.	WEB DEVELOPMENT	50		BIOLOGY	150
7.	PROJECT	25		BIOTECHNOLOGY	150
8.	LANGUAGE	50		ENGINEERING GRAPHICS	150
				AGRICULTURE	150
				COMPUTER SCIENCE	150
				INFORMATICS PRACTICES	150

				MULITMEDIA AND WEB TECHNOLOGY	150
	TOTAL VOC CONTENT	350		TOTAL GENERAL CONTENT	690
	GRAND TOTAL			1040 HRS.	

SPECIALIZATION: SOFTWARE DEVELOPMENT: NVEQF/IT/SD/LV

CERTIFICATE LEVEL- V

S.N O	VOCATIONAL CONTENT (DETAIL CONTENT AT L All Vocational Ed IT)	HRS .	S.N O	GENERAL CONTENT	HRS .
1.	WORD PROCESSING	50		ANY THREE PAPERS OUT OF FOLLOWING (DETAIL CONTENT AT L 5 General Ed Science Stream)	
2.	SPREADSHEET:	50		MATHEMATICS	180
3.	PRESENTATION	30		PHYSICS	180
4.	E MAIL MESSAGING	20		CHEMISTRY	180
5.	SERVER ADMINISTRATION FUNDAMENTALS	40		COMPUTER SCIENCE	180
6.	WINDOW DEVELOPMENT FUNDAMENTALS	40		APPLIED STATISTICS	180
7.	WINDOWS 7: TECHNOLOGY SPECIALIST	40		BOTANY	180
8.	SHAREPOINT FUNDAMENTALS	40		ZOOLOGY	180
9.	SECURITY FUNDAMENTAL	40		BIOCHEMISTRY	180
10.	OTHER IT STREAMS	70		MICROBIOLOGY	180
11.	PROJECT AND LANGUAGE	80		ELECTRONICS	180
	TOTAL VOC CONTENT	500		TOTAL GENERAL CONTENT	540
	GRAND TOTAL			1040 HRS.	

SPECIALIZATION: SOFTWARE DEVELOPMENT: NVEQF/IT/SD/LVI

CERTIFICATE LEVEL- VI

S.N O	VOCATIONAL CONTENT (DETAIL CONTENT AT L All Vocational Ed IT)	HRS .	S.N O	GENERAL CONTENT	HRS .
1.	PROJECT MANAGEMENT	40		ANY TWO PAPERS OUT OF FOLLOWING (DETAIL CONTENT AT L 6 General Ed Science Stream)	
2.	SQL SERVER: TECHNOLOGY SPECIALIST	50		MATHEMATICS	250
3.	SQL SERVER 2008, IMPLEMENTATION AND MAINTENANCE: 60 HOURS	50		PHYSICS	250
4.	WINDOWS SERVER 2008 ACTIVE DIRECTORY, CONFIGURING: 60 HOURS	50		CHEMISTRY	250
5.	CONFIGURING AND TROUBLESHOOTING IDENTITY AND ACCESS SOLUTIONS WITH WINDOWS SERVER 2008 ACTIVE DIRECTORY	50		COMPUTER SCIENCE	250
6.	DESIGNING SECURITY FOR MICROSOFT NETWORKS: 70 HOURS	50		APPLIED STATISTICS	250
7.	WINDOWS COMMUNICATION FOUNDATION DEVELOPMENT WITH MICROSOFT .NET FRAMEWORK 4	60		BOTANY	250
8.	ACCESSING DATA WITH MICROSOFT .NET FRAMEWORK 4	50		ZOOLOGY	250
9.	WINDOWS AZURE SOLUTIONS WITH MICROSOFT VISUAL STUDIO 2010	50		BIOCHEMISTRY	250
10.	OTHER IT STREAMS	100		MICROBIOLOGY	250
11.	LANGUAGE	50		ELECTRONICS	250
	TOTAL VOC CONTENT	550		TOTAL GENERAL CONTENT	500

	GRAND TOTAL			1050 HRS.	
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SPECIALIZATION: SOFTWARE DEVELOPMENT: NVEQF/IT/SD/LVII

CERTIFICATE LEVEL- VII

S.N O	VOCATIONAL CONTENT (DETAIL CONTENT AT L All Vocational Ed IT)	HRS .	S.N O	GENERAL CONTENT	HRS .
1.	TROUBLESHOOTING AND SUPPORTING WINDOWS 7 IN THE ENTERPRISE LENGTH, WINDOWS SERVER 2008 NETWORK INFRASTRUCTURE, CONFIGURING	120		ANY ONE PAPER OUT OF FOLLOWING (DETAIL CONTENT AT L_7_General_Ed_Science_Stream)	
2.	WINDOWS SERVER 2008 APPLICATIONS INFRASTRUCTURE, CONFIGURING, CONFIGURING AND TROUBLESHOOTING WINDOWS SERVER 2008 TERMINAL SERVICES	120		MATHEMATICS	300
3.	CONFIGURING AND TROUBLESHOOTING INTERNET INFORMATION SERVICES IN WINDOWS SERVER 2008	40		PHYSICS	300
4.	WINDOWS APPLICATIONS DEVELOPMENT WITH MICROSOFT .NET FRAMEWORK 4	70		CHEMISTRY	300
5.	WEB APPLICATIONS DEVELOPMENT WITH MICROSOFT .NET FRAMEWORK 4	60		COMPUTER SCIENCE	300
6.	INTRODUCTION TO WEB DEVELOPMENT WITH MICROSOFT VISUAL STUDIO 2010	50		APPLIED STATISTICS	300
7.	WEB DEVELOPMENT SKILLS FROM ASP TO MICROSOFT ASP	60		BOTANY	300
8.	MICROSOFT DYNAMICS CRM 2011 CUSTOMIZATION AND CONFIGURATION	50		ZOOLOGY	300
9.	SERVICE MANAGEMENT IN	30		BIOCHEMISTRY	300

	MICROSOFT DYNAMICS CRM 2011				
10.	PROJECT	100		MICROBIOLOGY	300
11.	LANGUAGE	50		ELECTRONICS	300
	TOTAL VOC CONTENT	750		TOTAL GENERAL CONTENT	300
	GRAND TOTAL			1050 HRS.	