





**GOVERNMENT OF INDIA** MINISTRY OF SKILL DEVELOPMENT AND ENTREPRENEURSHIP

# **Directorate General of Training** Advance Diploma (Vocational) in

# IT, Networking and Cloud Computing

NSQF Level-6





Batch 2022-202

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### ABBREVATIONS

AICET	All India Common Entrance Test
NSTI	National Skill Training Institute
NCVT	National Council of Vocational Training
СТЅ	Craftsmen Training Scheme
EWS	Economically Weaker Sections
NTC	National Trade Certificate





## Government of India Directorate General of Training Ministry of Skill Development and Entrepreneurship

### Advanced Diploma (Vocational) in IT, Networking and Cloud Computing – NSQF

#### About the Course:

Directorate General of Training (DGT) under Ministry of Skill Development & Entrepreneurship offers a range of Vocational Training courses catering to the need of different sectors of economy/ Labour market. The Vocational Training Programmes are delivered under aegis of National Council of Vocational Training (NCVT). Craftsman Training Scheme (CTS) and Apprenticeship Training Scheme (ATS) are two pioneer programmes of NCVT for propagating vocational training. Recently DGT has started Technical Diplomas for different streams and primarily implemented at DGT's field institutes, ie., National Skill Training Institutes and planned to expand to State Directorates in future.

IT, Networking and Cloud Computing course is very much essential in the current scenario due to a lot of demand in software industries where every industry is using cloud as base. After passing the training programme, the trainee will be awarded Technical Diploma by NCVT which has worldwide recognition.

### A Candidate who has completed this course can: -

- Pursue higher technical education like BE/B. Tech, MCA
- Start their own enterprise on cloud maintenance, computer hardware maintenance
- Apply for jobs in Industry as system technician, cloud developer, web designer and trainers.



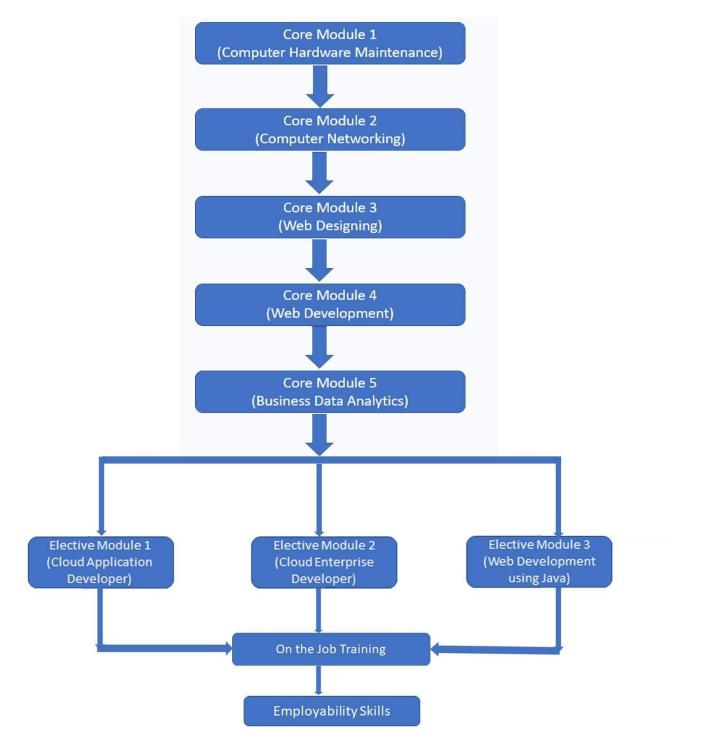


### **Core Modules:-**

Module	Duration (Hours)	
Core Module 1 - Computer Hardware Maintenance	320	
Core Module 2 - Computer Networking	320	
Core Module 3 - Web Designing	320	
Core Module 4 - Web Development	320	
Core Module 5 - Business Data Analytics	320	
Elective Module 1 - Cloud Application Developer	320	Only 2 modules out of 3to be taken
Elective Module 2 - Cloud Enterprise Developer	320	
Elective Module 3 - Web Development using Java	320	
On-the-Job Training	800	
Employability Skills	160	
Total	3200	







### Computer Hardware Maintenance

- Safety
- Disassemble and assemble Personal Computer (PC)
- Troubleshoot Input and Output devices Using cables and connectors effectively.





- Install operating systems Windows and Linux
- Create document, spread sheets and make presentations using open office.
- Customize PC in Windows and Linux environment.
- Will manage Device manager and Task manager in Window/Linux environment
- Secure PC with antivirus, maintain Hardware components of PC.

#### Computer Networking

- Basic computer network technology
- Data Communications System and its components
- Types of network topologies and protocols.
- Enumerate the layers of the OSI model and TCP/IP
- Explain the function(s) of each layer.
- Diploma in IT, Networking and Cloud identify the different types of network devices.
- Understand and build their functions within a network the skills of sub netting and routing mechanisms.
- Understand the basic protocols of computer networks, and how they can be used to assist in network design and implementation. Understand Client server concepts.

#### Web Designing

- how to create simple web pages using HTML
- Create Styles of web pages using CSS C 5 create own account in cloud and launch and track no. of visitors
- Host in Amazon web server Embedded database with different web pages using Mongo DB Design and develop dynamic websites with PHP
- make websites, web servers, game frameworks, desktop and CLI (Command Language Interpreter) applications, and IDE using Python

#### Web Development

- In this module the trainee will be able to Create an interactive website using any of the mentioned development language.
- Integrate application with database.
- Create multimedia applications by using authoring tools
- Gain familiarity with a very convenient, flexible server front end scripting language HTML 5 and CSS.
- Get exposed to programming concepts of JAVA.
- Use of HTML and CSS for structuring and styling of the webpage
- Enhance their build website by storing and using customer data to generate dynamic page content using PHP.

#### Business Data Analytics

- In this module the trainee will Understand business analytics.
- Develop business intelligence
- Develop graphical representation of data
- Develop cluster analysis and its applications
- Perform data partition method for model evaluation and cross validation
- Data transformation
- Demonstrate important predictive models





### Elective Modules: Cloud Application Developer

- In this module the trainee will learn to
- Describe the emerging paradigms that are leading to the adoption of cloud computing and its service model.
- Use of Cloud platform and its service.
- Application development on the cloud (using Eclipse, Node.js).
- Working with the WebSphere /Deployment environment

### Cloud Enterprise Developer

- In this module the trainee will learn to Build a web application with the Express framework.
- Use Web Sphere Development Tools to deploy applications to a server.
- Hands-on on Cloud Integration.
- Use cloud tools to monitor, tune, and troubleshoot.

#### Web Development using Java

- In this module the trainee will be able to Understand the object-oriented approach in programming.
- Analyze and design computer programs to solve real world problems based on object-oriented principles.
- Develops the Web Pages using java and deploying the pages in Web server.
- Develops database support for Webpages for storing and retrieving of web data.

#### • On the Job Training:

• In this module the trainees will be working/ training in the Industry for 800 hours. They work as apprentices

/Personnel.

### **Duration of the Course:**

The course is for two years duration. In the first year there are five core modules each module is credit based and employable. Each module is of 320 hours and is very much independent. In second year, the trainee will be taking two elective modules out of three electives each of 320 hours and will be doing on the job training in Industry for 800 hours. In addition, the trainees will pick up employability skills for 160 hours.

### All India Common Entrance Test (AICET) for Advanced Diploma (Vocational) Admission:

DGT conducts All India Common Entrance Test (AICET) in online for admission to Advanced Diploma Course through centralized Counselling. Online applications are invited from candidates who are interested to appear for All India Common Entrance Test (AICET) for this Advanced Diploma Course. The link is given below

### http://nimionlineadmission.in | http://dgt.gov.in

Examination System	Duration	Date of registration of Application to appear for All India Common Entrance Examination
Computer Based test (CBT)	2 Hrs.	From 06.04.2022 to 20.04.2022

Advanced Diploma(Vocational) in IT, Networking and Cloud Computing course will be conducted in the Institutes given in **Annexure -II** from June 2022 session:





### Date of All India Common Entrance Test for Diploma Admission: 28.04.2022

### Eligibility qualification:

X/XII Std pass with NTC (NCVT certificate) in any trade of one year or Two-year with minimum 60%marks/First Class. Candidates pursuing CTS, in NSTI / ITI who have appeared or appearing in their final exams can also apply, provided they should have scored minimum of 60% marks in their CTS trade. In case of not satisfying the minimum 60% marks they will not be allowed to continue the course.

OR

XII Std pass with minimum 60% marks/First Class

OR

X std pass with three-year diploma from recognized board and minimum 60% marks/First class in Diploma

OR

Any regular degree from recognized university with minimum 60% marks/First class

### Age:

Minimum 17 years as on closing date i.e., 20.04.2022

### Entrance Examination Fee:

Rs. 500/- for General and all other candidates

#### Rs. 300/- for SC / ST / PH / EWS / Women candidates

Candidates need to remit entrance examination fee online using Net Banking/Credit Card/Debit Card

### Examination Pattern for AICET – All India Council for Technical Education-Diploma Admission

The online entrance examination will be of two hours' duration and the question papers for the entrance test will

be of the following pattern:

- a) 80% questions of objective type (multiple choice type) of Logical reasoning, Analytical, General Knowledge, English Comprehension etc.
- b) 20% questions of objective type pertaining to Computers /IT.

### **Reservation of seats:**

Central reservation policy is followed in the admission process





### Fees:

#### General Fee Structure

Particulars	Unreserved and OBC Category	SC/ST		
Registration Fee	Rs. 200/- per semester	Nil		
Admission Fee	Rs. 300/- per semester	Rs. 60/- per semester		
Tuition Fee	RS. 900/- per semester at Rs. 150/- per month	RS. 300/- per semester at Rs. 50/- per month		
Examination Fee	Rs. 200/- per semester*	Rs. 50/- per semester* Rs. 500/-		
Caution Deposit (Refundable)	Rs. 500/-			
Library Deposit (Refundable)	Rs. 100/-	Rs. 100/-		
Total for Non-Hostellers	Rs. 2200/-	Rs. 1010/-		
Hostel Rent	Rs. 600/- (100 per month)	Rs. 600/- (100 per month)		
Hostel Service Charges	Rs. 100/- for six months	Rs. 100/- for six months		
Hostel Caution Money (Refundable)	Rs. 125/-	Rs. 125/-		
Total for Hostellers	Rs. 3025/-	Rs. 1835/-		
Gymkhana Fee	Rs. 50/- per semester	Rs. 50/- per semester		

\*For each attempt

### Stipend provided by the IBM:

	TRAINING PERIOD					
i.	Rs.3000/- per month for all the students during the training period.					
	INTERNSHIP PERIOD					
i.	Rs.15000/- per month for top 70 students based on the merit during face to face internship at IBM, Bengaluru.					
ii.	Rs. 5000/- per month for the remaining students for remote Internship at IBM or with third party/partners.					

### Placement:

IBM and its channel partners will provide the placement support to students post completion of the course, Placement will be based on overall performance and merit during the course.

### Instructions to the candidates:

- 1. The link for online application will be available at: <u>http://nimionlineadmission.in</u> or <u>http://dgt.gov.in</u>
- 2. The last date for receiving filled online application is **20.04.2022** (till 11.59 PM).
- 3. The hall ticket can be downloaded from <u>http://nimionlineadmission.in by</u> **28.04.2022**.





- 4. The candidates are advised to visit the above websites from time to time for latest information (updates) relating to entrance test/admission.
- 5. The eligibility, syllabus for the trades and exam is provided in the website <u>http://nimionlineadmission.in</u>
- 6. The candidate can select any entrance examination center (mentioned in Annexure-I) as per his/her convenience and indicate his/her preferences. Exam centers might change based on the number of candidates applied for the particular center. If very few candidates have opted for an Exam center, alternate available center will be provided.
- 7. The allotment of seat in an institute will be finalized by respective Institute during counseling solely on the basis of merit (marks secured in the AICET) and as per the choices mentioned by the candidate in his application as well as considering the reservation norms.
- 8. If as per merit, the candidate's preferred seats (choices in application) are not vacant, he will be offered seat wherever available.
- 9. No transfer request for admission will be entertained.
- 10. No direct admission will be entertained in any of the Institutes.

### Important Dates:

Starting of Online Registration	06.04.2022
Ending of Online Registration	20.04.2022 at 11.59 PM
Mock Examination	24.04.2022 to 28.04.2022
Hall Ticket download from website	24.04.2022 to 28.04.2022
Computer Based Exam	28.04.2022
Result Publishing in <b>www.nimionlineadmission.in</b> website	09.05.2022

### Annexure – I

### **EXAM CENTRES FOR AICET Diploma Admission – 2022**

1. Agartala	9. Dehradun	17.Jodhpur	25.Ludhiana	33.Shimla
2. Aizwal	10.Goa	18.Jammu	26.Mumbai	34.Srinagar
3. Allahabad	11.Guwahati	19. Jamshed pur	27.Noida	35.Trichy
4. Bengaluru	12.Haldwani	20.Kanpur	28.Panipat	36.Trivandrum
5. Bhubaneshwar	13.Hyderabad	21.Kavaratti	29.Patna	37.Tura
6. Calicut	14.Indore	22.Kohima	30. Port Blair	38.Vadodara
7. Chennai	15.Itanagar	23.Kolkata	31.Puducherry	39.Vaizag
8. Dadra & Nagar Haveli	16. Jaipur	24.Leh	32.Rajpura	40.Vijaywada

# Note: Exam centers might change based very few candidates have opted for an Exam on the number of candidates applied for the particular center. If center, alternate nearby center will be provided.





### Annexure-II

### LIST OF NSTI'S CONDUCTING ADVANCED DIPLOMA (VOCATIONAL) COURSE

SI No	Name of the Institute	Units	Address	Contact Number
1	National Skill Training Institute, NSTI(W) Allahabad	1	6, New Katra Road, Allahabad- 211002, Uttar Pradesh	0532-2971803, 8130641585, 9451451491
2	National Skill Training Institute, (NSTI) campus–I Bengaluru	2	Outer Ring Road of Tumkur Road,Yeshwanthpur, Bengaluru560022	080-23371209, 9945719225, 9945778353
3	National Skill Training Institute (NSTI-W) Bengaluru	1	Lakkasandra,Hombegowda Nagar, Bengaluru-560029, Karnataka	080-26561955, 9895538991
4	National Skill Training Institute (NSTI) Bhubaneswar	2	NSIC Building, 5th Floor, IDCO Plot No. 06, Mancheswar Industrial Estate, Bhubaneswar-751010, Odisha	0674-2974498/2974438, 8260739057, 9830742749
5	National Skill Training Institute (NSTI) Calicut	1	Govindapuram PO, Eravathukunnu, Calicut-673016, Kerala	0495-2742500, 9958544082, 8547639921, 9447532697
6	National Skill Training Institute (NSTI) Chennai	1	CTI Campus, No.10,Alandur Road,Guindy Industrial Estate, Guindy, Chennai-600032, Tamil Nadu	044-22501211, 9448105633, 8667863511, 7904231646, 9677280495
7	National Skill Training Institute (NSTI) Dehradun	1	Green Park, Niranjanpur,Post Office Majra,Dehradun-248001	0135-2629310, 8750034390, 8948005590
8	National Skill Training Institute (NSTI) Howrah	1	NSTI Kolkata, Dasnagar, Howrah711105	033-26531225, 9440329008, 863904609
9	National Skill Training Institute (NSTI-V) Vidyanagar campus, Hyderabad	1	Vidyanagar, Opposite Shivam, Hyderabad-500007	040-27428058/27428606, 7977886200, 9391955105
10	National Skill Training Institute (NSTI-R) Ramanthapur campus, Hyderabad	1	Uppal Road, Ramanthapur, Telangana, Hyderabad-500013	040-27037266/27038982, 9989297096, 9901001184





11	National Skill Training Institute (NSTI-W) Indore	1	Sukliya Road, Nanda Nagar, Indore452011, Madhya Pradesh	0731-2550105, 8722958213, 9739266816
12	National Skill Training Institute NSTI(W) Jaipur	1	Opposite Kendriya Vidyalaya No. 03, Jhalana Doongri, Jaipur-302017, Rajasthan	0141-2702430, 8902757107, 8527641362, 9968695597
13	National Skill Training Institute (NSTI) Jodhpur	1	Heavy Industrial Area, Phase II, Basni, Jodhpur-342005, Rajasthan	9412084349, 9414294502
14	National Skill Training Institute (NSTI) Kanpur	1	NSTI KANPUR, Udyog Nagar, Near CTI Chouraha, Sanjay Nagar, Kanpur-208022, Uttar Pradesh	0512-2225340/2296088
15	National Skill Training Institute For Women (NSTIW)- Kolkata	1	CP-16, Salt Lake City, Sector-5, Kolkata-700091	033-23673673, 9594216965, 9903815587
16	National Skill Training Institute (NSTI) Ludhiana	1	Gill Road, Ludhiana-141003	0161-2501871/2490187, 9414148915
17	National Skill Training Institute NSTI Mumbai	1	V. N. Purav Marg,Opp. Priyadarshini (RCF),Chunabhatti, Sion,Mumbai400022	022-24053560, 8197536843,9848007337, 9892069813
18	National Skill Training Institute (NSTI-W) Mumbai	1	Kashinath Dhuru Marg, Agar Bazar, Dadar (W), Mumbai-400028	022-24223962, 8197536843, 9848007337, 9892069813
19	National Skill Training Institute (NSTI-W) Noida	2	D-1,Block D, Sector-1 Noida (U.P.)201301	0120-2535266, 6378784177, 9015983271
20	National Skill Training Institute (NSTI-W) Panipat	1	Main G.T. Road, Near NFL Township, Panipat-132103 (Haryana)	0180-2668444/2668445/2661044, 9811942877, 9728284243, 7988825903
21	National Skill Training Institute (NSTI-W) Patna	1	Govt. Women ITI Campus, Third floor, Digha Ghat, Patna-800011	0612-2567333, 9717253929, 9462277778,7303808491
22	National Skill Training Institute (NSTI-W) Trivandrum	1	National Skill Training Institute for Women, Kazhakkoottam, Thiruvananthapuram, Kerala-695582	0471-2418391, 7760769897,995979196, 9995482802, 8885830994





23	National Skill Training Institute (NSTI-W) Tura	1	Dakopgre, TuraWest Garo Hills,Meghalaya-794101	03651-232393, 9838446290, 7005396460,8014082640
24	National Skill Training Institute (NSTI-W) Vadodara	2	Shanti Nagar, Tarsali, Vadodara390009 ,Gujarat	0265-2642678, 6200786857, 9904838465

## Annexure – III Amenities available in NSTI campus

Sno	Name of the Institute		lostel	Mes s	Wi- Fi	Bank / ATM	Cantee n	Library	Recreat ion Hall	Gymk hana
		Men	Women							
1	NSTI-W, Allahabad	x	x	V	v	Outside Campus	x	v	V	V
2	NSTI, Bengaluru	V	V	$\checkmark$	V	Outside Campus	V	٧	$\checkmark$	$\checkmark$
3	NSTI-W, Bengaluru	x	V	V	V	x	V	٧	$\checkmark$	V
4	NSTI, Bhubaneswar	x	x	x	V	x	x	V	V	x
5	NSTI, Calicut	V	V	٧	V	X	X	V	X	V
6	NSTI, Chennai	V	V	V	v	Bank Inside Campus ATM Outside Campus	V	V	V	V
7	NSTI, Dehradun	٧	x	٧	v	Outside Campus	x	v	V	V
8	NSTI, Howrah	V	V	٧	V	V	V	V	x	V
9	NSTI –V, Hyderabad	V	x	V	V	x	V	٧	V	V
10	NSTI – R, Hyderabad	V	V	x	x	Outside Campus	x	v	x	x
11	NSTI-W, Indore	x	٧	V	٧	Outside Campus	V	v	V	٧
12	NSTI-W, Jaipur	x	x	٧	V	x	V	V	V	V
13	NSTI, Jodhpur	x	V	x	٧	Outside Campus	x	v	V	٧
14	NSTI, Kanpur	V	V	٧	V	X	x	V	V	x
15	NSTI-W, Kolkata(Salt Lake)	x	V	٧	V	x	V	V	V	V
16	NSTI, Ludhiana	٧	x	V	V	X	V	V	V	V





17	NSTI, Mumbai	V	x	V	٧	Outside Campus	٧	V	V	V
18	NSTI-W, Mumbai	x	V	V	V	Outside Campus	$\checkmark$	$\checkmark$	V	V
19	NSTI-W, Noida	x	V	٧	V	x	V	V	V	V
20	NSTI-W, Panipat	X	x	٧	V	x	V	V	V	V
21	NSTI-W, Patna	x	x	x	V	Outside Campus	x	V	V	V
22	NSTI-W, Trivandrum	x	V	V	V	Outside Campus	x	V	V	V
23	NSI-W, Tura	x	V	٧	V	x	V	V	V	V
24	NSTI-W, Vadodara	x	x	V	V	x	$\checkmark$	V	V	V