



Government of Goa

Directorate of Skill Development & Entrepreneurship

Shramshakti Bhavan, Patto Plaza, Panaji - Goa



Industrial Training Institute



Prospectus

2024-25

Government ITIs in Goa

Rs.100/-



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LIST OF GOVERNMENT INDUSTRIAL TRAINING INSTITUTES IN GOA:

Sr.No.	Name & Address of ITI	Contact Phone No/s.
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NORTH-GOA

1.	Panaji Government Industrial Training Institute, Altinho, Panaji - Goa; Pin Code - 403 001.	2226333
2.	Mapusa Government Industrial Training Institute, 1st & 2nd floor, BSNL Telephone Exchange Building, P & T Colony, Porvorim Goa and behind District Hospital, Peddem, Mapusa-Goa.	2959999 2262637
3.	Pernem Government Industrial Training Institute, Tuem, Pernem - Goa; Pin Code- 403 512.	2954341
4.	Bicholim Government Industrial Training Institute, Valshi, Bicholim - Goa; Pin Code - 403 504.	2362315
5.	Sattari Government Industrial Training Institute, Honda, Sattari - Goa; Pin Code - 403 530.	2370242

SOUTH-GOA

6.	Farmagudi Government Industrial Training Institute, Farmagudi, Ponda- Goa; Pin Code - 403 401.	9049566932 2956511
7.	Margao Government Industrial Training Institute, Borda, Margao - Goa;& its Extension Building At: Aquem Baixo, Margao - Goa; Both Pin Codes - 403 602. (*Address subject to change)	2714887(Margao); 2765846 (AquemBaixo)
8.	Cacora Government Industrial Training Institute, Cacora, Curchorem- Goa; Pin Code - 403 706.	2993200 9673168555
9.	Canacona Government Industrial Training Institute, Mastimol, Canacona - Goa; Pin Code - 403 702.	2953354 8788042855
10.	Vasco Government Industrial Training Institute, Bogda, Vasco - Goa; Pin Code - 403 802.	2524030/2956232 9421257847

LIST OF PRIVATE INDUSTRIAL TRAINING INSTITUTES IN GOA:

Sr. No.	Name & Address of ITI	Contact Phone No/s.
1.	Sesa Private Industrial Training Institute, Sankhali, Bicholim - Goa; Pin Code- 403 505.	2365509/2365123 7843057129
2.	Montfort Private Industrial Training Institute, Corlim, Tiswadi - Goa; Pin Code - 403 110.	2285524 9545004320
3.	Indo-German Private Industrial Training Institute, Marna, Siolim -Goa ; Pin Code - 403517	9923132899 7522939960 9657985647



Government of Goa

Directorate of Skill Development and Entrepreneurship

COMMON PROSPECTUS 2024-25

for

Government and Private Industrial Training Institutes (With Application Form)

1. INTRODUCTION

Industrial Training Institutes (ITI) have been set up basically under the Craftsmen Training Scheme (CTS) in Goa with an objective to ensure a steady flow of skilled personnel to the Public and Private Sectors, and to reduce unemployment amongst the educated youth by equipping them with the required skills, education and discipline.

There are ten Government and three Private Industrial Training Institutes in the State of Goa imparting training in various Engineering and Non-engineering trade courses suitable to the Indian industrial environment. Most of the trades and units available in these Institutes are affiliated to the National Council for Vocational Training (NCVT), New Delhi through Directorate General of Training (DGT), Ministry of Skill Development & Entrepreneurship, Government of India, New Delhi and the training is imparted as per the syllabus and curriculum approved by Government of India in consultation with NCVT. However, some of the trades/units in these ITIs are affiliated to State Council for Vocational Training (SCVT), Panaji-Goa.

2. ASSOCIATION WITH INDUSTRY

The Government ITIs in the State have been upgraded under various schemes of MSDE, Govt. of India such as Skills Strengthening for Industrial Value Enhancement (STRIVE), Public Private Partnership (PPP) and Model ITI and there is active involvement of industry executives as the Chairpersons and Members of each ITI's Institute Managing Committee (IMC).

A tripartite Memorandum of Understanding has been signed with M/s. Siemens Ltd. and Deutsche Gesellschaft fur Internationale Zusammenarbeit (GIZ) GmbH "GIZ India" which aims at developing the world class German Dual VET (Vocational Education & Training) methodology under "Indo-German Initiative for Technical Education (IGnITE) in Govt. ITIs in Goa.

The Farmagudi Government ITI and Bicholim Government ITI is covered under STRIVE.

The Vasco Government ITI is the sole ITI being upgraded under Government of India's scheme for

“Up gradation of 1396 Government ITIs with Public Private Partnership” with M/s. Zuari Agro Chemicals Ltd. as its Industry Partner.

The Panaji Government ITI is sole ITI being upgraded as a Model ITI through World Bank Funding.

The Sesa ITI is associated with Vedanta Ltd, offering Fitter, Machinist, Electrician and Instrument Mechanic trades and provide placement opportunities in various MNC's through campus selections. From Academic year 2023-24 onwards Computer Operator and Programming Assistant (COPA) one year course would be introduced.

The Montfort Private Industrial Training Institute is associated with Deccan Fine Chemicals (India) Pvt. Ltd., Corlim, Ilhas-Goa for providing training to the trainees.

3. GENERAL INFORMATION

3.1. Working Hours:

A Sessional year in the ITI's is conducted as per the Training Calendar provided by DGT.

The ITIs function in two shifts as per the following timings:

A. Ist shift: 8:00 a.m. to 3:30 p.m. including $\frac{1}{2}$ hour lunch break

B. IInd shift: 10:00 a.m. to 5:30 p.m. including $\frac{1}{2}$ hour lunch break

3.2. Holidays:

Trainees are allowed to avail the same number of holidays as declared by the Government of Goa from time to time.

3.3. Leaves Admissible to Trainees:

A. Casual leave: Casual leave of 12 days per year subject to a maximum of 10 days at a time.

B. Medical leave: Medical leave of 15 days in case of illness duly supported by medical documents from registered medical practitioner. A further period not exceeding 3 weeks for one-year trade course and 6 weeks for 2-year trade courses shall be granted in continuation or in addition to 15 days absence on medical grounds.

C. Special leave: Special leave on private affairs shall be allowed to a trainee up to 10 days. However, this limit can be extended to 15 days or 30 days if supported by proper justification and subject to the satisfaction of the Head of the Institute on the basis of genuine reasons. No scholarship will be admissible during the period of special leave to a trainee who is a scholarship holder.

3.4. Suspensions/Discharge:

A trainee found guilty of unsatisfactory progress in training, or having less than 80% attendance at any time during the course of training or indulging in acts of indiscipline and misconduct shall be discharged from the institute. If any investigations of allegations against a trainee suspected to be involved in acts of indiscipline or misconduct are pending, the trainee shall be placed under suspension. However, in the institutes where stipend/scholarship is paid to the trainees, no stipend/scholarship will be paid to a trainee who has been suspended for misconduct.

3.5. Identity Card:

Every trainee will be provided with an Identity Card (ID) after seeking admission to the Institute and it is mandatory for every trainee to display the card on person throughout the training period. In the Government ITIs each trainee will have to pay Rs. 100/- towards issue of ID card at the time of admission.

In case of loss of an ID card, a duplicate ID card would be issued on production of (i) An affidavit (ii) F.I.R. copy (iii) Latest photograph and (iv) A fee of Rs.100/-. However, in the private ITIs the charges towards the ID card would be fixed by the respective ITI.

3.6 Discipline:

All the admitted candidates are required to strictly abide by the provisions of rules and regulations prescribed by the Director of Skill Development and Entrepreneurship (DSDE)/Principal of the Institute as regards to their conduct and discipline and strictly follow the training schedule as per the time-table. The trainee is further required to adhere to the following guidelines:

- (a) Trainees are required to wear the institute uniform at all times and the workshop clothing during the practical hours.
- (b) Use of mobile phones in the ITI Complex by trainees is strictly prohibited. Staff maybe permitted to use their mobile phones only during non-working hours.

3.7 Ragging:

Ragging in any form is banned and punishable. In this regards, the Content of the CircularNo.10/SDCT/EST/GPRA/2015/Part/2984 dated 13/07/2015, is brought to the notice of all concerned.

CIRCULAR

The Goa Prohibition of Ragging Act, 2008, has made it mandatory for all education a institutions to compulsory display some of its main contents on the Notice Board which are mentioned as below:

1. Goa Act 9 of 2009 2 (e) “ragging” means any disorderly conduct, whether by words spoken or

Pernem Government Industrial Training Institute Pernem, Goa

Mission

To provide skilled manpower to related Industries and provide quality skill education to youth and assist them in Placements.



Photo



Directorate General of Training

कौशल भारत - कुशल भारत

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ENGINEERING TRADES

1	Electrician	NCVT	2 year	Level 4	Passed 10 th Class examination with Science and Mathematics or its equivalent.
2	Plumber	NCVT	1 year	Level 3	Passed 8th class examination
3	Fitter	SCVT	2 year	Level 4	Passed 10 th class examination with Science and Mathematics or its equivalent.
4	Refrigeration and Air Conditioning Technician	SCVT	2 year	Level 4	Passed 10 th class examination with Science and Mathematics or its equivalent.

NON-ENGINEERING TRADES

1	Computer Operator & Programming Assistant	NCVT	1 year	Level 3	Passed 10 th class examination
2	Food Production (General)	SCVT	1 year	Level 3	Passed 10 th class examination
3	Food & Beverages Service Assistant	SCVT	1 year	Level 3	Passed 10 th class examination or its equivalent.
4	Sewing Technology	NCVT *	1 year	Level 3	Passed 8th class examination

★ Subject to approval and acceptance of the trade under NCVT by DGT, New Delhi while migrating trainees on SID portal, else the trade will be under SCVT.



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written or by an act which has the effect of teasing, treating or handling with rudeness any other student indulging in rowdy or indiscipline activities which causes or is likely to cause annoyance, hardship or psychological harm or to raise fear or apprehension thereof in a fresher or a Junior student or asking the student to do any act or perform something which such student will not do in the ordinary course and which has the effect of causing or generating a sense of shame or embarrassment or adversely affect the physique or psyche of a fresher or a junior student.

2. Goa Act 9 of 2009 3 (iii) the educational institution shall display on the notice board, the name and addresses and contact numbers of the persons, to whom the fresher's in the institution should approach for help and guidance for various purposes keeping in view needs of fresher's in the institution at the time of admission so that the fresher need not look up to the seniors for help in such matters and feel indebted to or obliged by them.

3. Goa Act 9 of 2009 4-Ragging within or outside of any educational institution is prohibited and no person shall commit, abet, propagate or participate in ragging within or outside of any educational institution. During admission process, the prospectus shall clearly mention that ragging is banned in the institution and anyone indulging in ragging is likely to be punished. The application form for admission/enrollment shall have a printed undertaking to be filled up and signed by the student to the effect that he/she is aware of the institution's approach towards ragging and the punishments to which he/she shall be liable if found guilty of ragging. A similar undertaking shall be obtained from the parent/guardian of the student. **[Copies of the Affidavit to be filled by the student and by its Parents/Guardians are enclosed Annexure VI and Annexure VII]**

4. Goa Act 9 of 2009 3 (i) the prospectus, the form for admission and/or any other literature issued to the aspirants for admission shall clearly mention that ragging is banned in the institution and anyone indulging in ragging is likely to be punished. Goa Act 9 of 2009 3 (ii) the application form for admission/enrollment shall have a printed undertaking to be filled up and signed by the student to the effect that he/she is aware of the institution's approach to towards ragging and the punishments to which he/she shall be liable if found guilty of ragging. A similar undertaking shall be obtained from the parent/guardian of the student. Further, every educational institution should have an Anti-Ragging Committee and an Anti-Ragging Squad.

5. Goa Act 9 of 2009 3A (1) Every educational institution shall have an Anti-Ragging Committee and an Anti-Ragging Squad. The Anti-Ragging Committee at the level of the institution shall consist of representatives of civil and police administration, local media, Non-Government Organizations involved in youth activities, representatives of faculty members, and representatives of parents, representatives of fresher's, seniors and non-teaching staff. Such committee shall be headed by the Head of the educational institution.

6. Goa Act 9 of 2009 3A (2) There shall be Anti-Ragging Squad, a body with vigil, oversight and patrolling functions, to be nominated by the head of the educational institutions with such representatives as considered necessary to keep it mobile, alert and active at all time. The Squad may be called upon to make surprise raids on hostels and other hot spots and shall be empowered to inspect places of potential ragging. The Squad shall work and shall be empowered to inspect places of potential ragging. The Squad shall not have any outside representation and shall consist of members belonging to the various sections of the campus community. There shall be diverse mix of membership in terms of levels as well as gender in both the Anti-Ragging Squad and the Anti-Ragging

Committee.

7. Goa Act 9 of 2009 5-Whenever any student or as the case may be complains in writing, of ragging to the Head of the educational institution, the Head of the institution shall, within seven days of the receipt of the complaint, inquire into the complaint and if, prime facie, any complaint is found true, should resort to disciplinary action at his/her level. The candidates seeking admissions to ITIs and their parents/guardians are required to submit the affidavit duly filled up at the time of seeking admission to ITIs.

Apart from the above guidelines each trainee would be required to strictly abide by the rules and regulations issued by the individual Institutes from time-to-time to maintain a disciplined and conducive environment for imparting quality training.

3.8. Transport Facility:

Transport facility is provided by the Government at Government ITIs: Farmagudi, Sattari, Vasco, Cacora, Margao, Pernem, Canacona and Panaji and the trainees are charged @ concessional rate of Rs. 5/- per trip from/to the I.T.I. and to/from the nearest bus stand. A monthly pass will be issued to the trainees to avail this facility at concessional rate of Rs.120/- per month. Transport facility provided is Free for trainees belonging to Scheduled Tribes.

Transport facility is presently not available in any of the Private ITIs.

3.9. Concessions:

a) Trainees will be given the following concessions at the **Government institutes:**

- i) Exemption from payment of tuition fees for candidates belonging to SC /ST /BPL category and for candidates having annual family income of less than Rs.3,00,000/-
- ii) Provision of free uniform and workshop clothing to all the trainees. However, the cost of stitching the uniforms is to be borne by the trainees. The uniforms should be stitched within 15 days of issuing the cloth.
- iii) Free facilities for recreation, library, sports, etc.

b) Trainees would be given concessions at the respective Private ITI s as shown below:

Sesa Private ITI:

- i.) Provision of food at subsidized rates.
- ii.) Provision of assistance for job placement in reputed industry.

Montfort Private ITI:

- (a) Hostel facility is available in the campus to accommodate the trainees who are orphans and

do not have any family support, who are from below poverty line, and from distant places.

- (b) Other concessions as decided by the Institute are given to the trainees depending on their family background and annual income.

4. TRAINING & EXTRA-CURRICULAR ACTIVITIES

- 4.1 Trades offered at the ITIs: For latest syllabus, may visit:
<http://www.cstaricalcutta.gov.in> or <https://dgt.gov.in/>

Craftsmen Training Scheme (CTS) COURSES

SECTOR NAME: AUTOMOTIVE

1. ***Mechanic Motor Vehicle [Duration: 2 years, NSQF level-4]:***

Course Content: During the two-year duration, a candidate is trained on subjects- Professional Skill, Professional Knowledge, Engineering Drawing, Workshop Calculation & Science and Employability Skills related to job role. In addition to this, a candidate is entrusted to make/do project work and Extra Curricular Activities to build up confidence. The practical skills are imparted in simple to complex manner & simultaneously theory subject is taught in the same fashion to apply cognitive knowledge while executing task. The broad components covered under Professional Skill subject are as below:

FIRST YEAR: This year will cover the safety aspect in general and specific to the trade, identification of tools & equipment, raw materials used. The trainee will perform Measuring & marking by using various Measuring & Marking tools. The trainee will be able to plan and perform basic fastening and fitting operations. Familiarize with basics of electricity, test and measure the electrical parameter. Skilling practice on maintenance of batteries being done. He will practice making various welding joints by using Arc and gas welding, trace and identify various hydraulics and pneumatics components and identify components in Air and Hydraulic Brake system.

The candidate will be able to dismantle Diesel Engine of LMV as per given standard procedures. Able to achieve skill on Overhauling of Cylinder Head, valve train, Piston, connecting rod assembly, crankshaft, flywheel and mounting flanges, spigot and bearings, camshaft etc. practice reassembling all parts of engine in correct sequence as per workshop manual. Perform testing on engine. Also the trainee practice on repair and maintenance of Cooling, lubrication, Intake & Exhaust system of Engine. Perform maintenance of diesel fuel system, FIP, Governor and monitor emission of vehicle. Practice on repair, maintenance and overhaul of Starter, alternator and perform Execute troubleshooting in engine of LMV/HMV.

SECOND YEAR: In the second year, the trainee will learn to perform overhauling of light vehicle/Heavy Vehicle transmission units including Gear box, Single plate clutch assembly, Diaphragm clutch assembly, Constant mesh Gear box, synchromesh gear box, gear linkages, Propeller shaft, Universal Slip Joint, Rear axle assembly, Differential assembly. The trainee will perform overhauling of light vehicle Chassis units, adhering to the specifications and tolerances for the vehicle and the manufacturer's approved overhauling methods, Standard repair methods, health and safety requirements etc. the trainee will learn how to overhaul, repair and service Shackle, Leaf spring, Front axle, Front and rear suspension, Steering Gearbox- worm and roller type, Steering Gear box

Reticulating ball type, Master cylinder, Tandem Master cylinder, Front and rear brake, Wheel cylinder, Vacuum booster, Air servo unit, Air tank (reservoir) etc. The trainee will also learn to carry out wheel balancing and Wheel Alignment to within acceptable limits. The trainee will troubleshoot vehicle Engine components and ascertain repair. Plan & service electronic control unit and check functionality. Diagnose & rectify the defects in vehicle to ensure functionality of vehicle. The trainees will carry out overhauling of charging system. Also the trainee will perform overhauling of starting system. Troubleshoot electrical components of vehicle and ascertain repair. Overhaul, service and testing Vehicle Air Conditioning system, its parts and check functionality. The trainee will also learn to drive vehicle following Traffic Regulations and maintenance of good road conduct.

Skills Acquired: Repairs overhauls and services motor vehicles to keep them in good running condition. Examines vehicle to ascertain nature and location of defects either by running engine or driving vehicle on road. Dismantles partially or completely defective unit or parts of vehicle such as engine, gear box, rear axle, front axle, steering assembly, radiator, etc. according to nature of repairs to be done, using hoist, jack, pullers, hand tools and other devices. Measures essential parts like cylinder, bores piston, sizes crank pins etc. using gauges, micrometer and other precision tools and gets cylinders re bored, liners filled, valve seats refaced, bearings replaced etc. as necessary. Repairs or overhauls and assembles engine such as replacing defective parts, scrapping bearings, setting timing, cleaning injectors, tuning carburetor, MPFI and CRDI Engines etc. according to maker's specification. Replaces or repairs defective parts of gear box, rear axle, steering mechanism etc. and sets them right ensuring correct alignment, clearance, meshing of gears, specified movements and operations. Relines and builds brakes, sets wheel alignment, adjust, steering, clutch, hand brakes etc. fits new or repaired accessories and body parts, makes electrical connection, and performs other tasks to effect repairs. Lubricates joints, tightens loose parts, tests performance of vehicle by driving on road and makes necessary adjustments to attain desired standard. Troubleshooting and rectification of engine, chassis, and auxiliary system. State the importance of Motor vehicle act and rules Plan and organize assigned work and detect & resolve issues during execution. Demonstrate possible solutions and agree tasks within the team. Communicate with required clarity and understand technical English. Sensitive to environment, self-learning and productivity.

Options for employment: Work as a Mechanic in reputed workshop/service center.

Options for self-employment / Entrepreneurship Development: Start his own workshop/ Service Station, Spare Parts Shop, Tyre, Tube repair shop, Battery repair shop. Can work as an Auto Electrician.

2. *Mechanic Diesel [Duration: 1 year, NSQF level-3]:*

Course Content : During the one-year duration of Mechanic Diesel trade a candidate is trained on professional skills & knowledge, Engineering Drawing, Workshop Calculation & Science and Employability skill related to job role. In addition to this a candidate is entrusted to undertake project work and extracurricular activities to build up confidence. The Broad components covered during the course are given below: -

The Trainees will cover the safety aspect in general and specific to the trade, identification of tools & equipment, raw materials used. The trainee will perform Measuring & marking by using various Measuring & Marking tools. The trainee will be able to plan and perform basic fastening and fitting operations. Familiarize with basics of electricity, test and measure the electrical parameter. Skilling

practice on maintenance of batteries being done. Practice making various welding joints by using Arc and gas welding. Trace and identify various hydraulics and pneumatics components and identify components in Air and Hydraulic Brake system. Identify various types of vehicle. The candidate will be able to perform practice on dismantling Diesel Engine of LMV as per given standard procedures. Able to achieve skill on Overhauling of Cylinder Head, valve train, Piston, connecting rod assembly, crankshaft, flywheel and mounting flanges, spigot and bearings, camshaft etc. practice reassembling all parts of engine in correct sequence as per workshop manual. Perform testing on engine. Also the trainee practice on repair and maintenance of Cooling, lubrication, Intake & Exhaust system of Engine. Perform maintenance of diesel fuel system, FIP, Governor and monitor emission of vehicle. Practice on repair, maintenance and overhaul of Starter, alternator and perform Execute troubleshooting in engine of LMV/HMV.

Skills acquired: Can learn about diesel engine fundamentals and power generation. The trainees have to participate in hands-on work and begin repairing diesel engine vehicles. Mechanic, Diesel Engine; Oil Engine, Fitter repairs services and overhauls diesel or oil engines for efficient performance as prime mover to drive machinery and equipment. Examine engine to locate defects, using various tools and instruments. Dismantles or partly dismantles it to remove damaged or worn out parts and replaces or repairs them. Grinds valve and assembles parts, doing supplementary tooling and other functions as necessary to ensure accuracy of fit. Installs assembled or repaired engine in position and connects pulley or wheel to propulsion system. Starts engine, tunes it up and observes performance noting different meter readings such as temperature, fuel level, oil pressure, etc. and sets it to specified standard for optimum performance. Checks, adjusts and lubricates engine periodically and performs such other functions to keep engine in good working order. May solder or braze parts and service diesel fuel pumps and injectors. Additionally, since diesel engines are starting to incorporate electronic components, programs usually give students a chance to take courses in electrical systems and computer diagnostic software. Plan and organize assigned work and detect & resolve issues during execution in his own work area within defined limit. Demonstrate possible solutions and agree tasks within the team. Communicate with required clarity and understand technical English. Sensitive to environment, self-learning and productivity.

Options for employment: Work as a Mechanic in reputed workshop/Service Centre.

Options for self-employment / Entrepreneurship Development: Start his own workshop, Service Station, Spare Parts Shop; Tyre, Tube repair shop, Battery repair shop; Can work as an Auto Electrician.

3. ***Mechanic Two & Three Wheeler [Duration: 1Year, NSQF Level - 3]***

Course Content: During the one year course duration the trainees learn about safety aspects in general and those specific to the trade, identification of tools and equipment s, raw materials used, etc. The trainees will do measuring & marking activity by using various Measuring & Marking tools and also be able to plan and perform basic fastening and fitting operations, familiarize him with basics of electricity, test and measure the electrical parameter and practice on maintenance of batteries. He can learn to make various welding joints by using Arc and Gas welding. The candidate will learn to dismantle engine of Two and Three-Wheeler as per given standard procedures and be able to achieve skill on Overhauling of Cylinder Head, valve train, Piston, connecting rod assembly, crankshaft, flywheel and mounting flanges, spigot and bearings, camshaft etc. practice reassembling all parts of engine in correct sequence as per workshop manual, perform troubleshooting of Excessive smoke,

knocking or abnormal noise etc.; practice servicing of Fuel Tank and its components, repair and overhaul Steering and suspension system of three wheelers. He will learn to overhaul brake system, transmission system and LPG/CNG fuel system of Two and three wheelers. Perform servicing and maintenance.

Skills acquired: After successful completion of the above course, the trainee shall be able to perform the following skills with proper sequence: Repair, servicing and overhauling of motor cycles, auto rickshaws, scooters, etc. to keep them roadworthy; Examine motor cycle or scooter to locate faults by running engine in stationary position or by driving it on road; dismantle parts such as engine, ignition system, dynamo forks, shock absorbers, gear box etc. as necessary. Grind valves, set timings, reline brakes, re-bush steering mechanism, replace worn out parts, assemble gear box clutch etc. Perform other tasks to affect repairs, clean and set carburetor, fit driving chain, wheel silencer, kick, gear, clutch and brake levers and other accessories. Adjust control cables for brake, clutch and accelerator, set tappets and wheel alignment, tighten loose parts and make necessary fittings and connections. Change engine and gear box oil, start engine and tune it up. Test performance of vehicle by driving on road and make further adjustments to remove defects noticed if any. Assemble motor cycle or auto-rickshaws from previously dismantled parts.

Auto Service Technician (two and three wheelers) is responsible for the repairing and routine servicing and maintenance (including electrical and mechanical aggregates) of two/three wheeler vehicles. Plan and organize assigned work and detect & resolve issues during execution in his own work area within defined limit. Demonstrate possible solutions and agree tasks within the team. Communicate with required clarity and understand technical English sensitive to environment, self-learning and productivity.

Options for employment: Auto Service Technician (two and three wheelers) is responsible for the repairing and routine servicing and maintenance (including electrical and mechanical aggregates) of two/three wheeler vehicles.

Options for self-employment / Entrepreneurship Development:

Start his own workshop, Service Station, Spare Parts Shop; Tyre, Tube repair shop, Battery repair shop; Can work as an Auto Electrician in case of Two and Three Wheeler.

4. *Mechanic Electric Vehicle [Duration: 2 years ,NSQF level-4]*

Course Content: During the two-year duration, a candidate is trained on subjects- Professional Skill, Professional Knowledge, Engineering Drawing, Workshop Calculation & Science and Employability Skills related to job role. In addition to this, a candidate is entrusted to make/do project work and Extra Curricular Activities to build up confidence. The practical skills are imparted in simple to complex manner & simultaneously theory subject is taught in the same fashion to apply cognitive knowledge while executing task. The content broadly covers various systems and sub systems of vehicle. Repair and Maintenance of various components such as Motors, Motor controller, Battery Pack, Battery Management System, Charging System, Regenerative Braking. The broad components covered under Professional Skill subject are as below: **FIRST YEAR:** In this year, the contents cover from safety aspect related to trade, basic fitting operation viz. assembly and disassembly of major components, their understanding of functions related to operation of EV. It covers various systems and sub-systems such as power train, chassis, body engineering systems, Safety System etc and

operates garage equipment. It also covers repair, and maintenance of automobile electrical components and general vehicle systems and sub systems. Troubleshoot of electrical components of vehicle and ascertain repair. The practical training starts with understanding basic instruments, gauges, components of EV. It also covers various systems and sub systems of vehicle, electrical system, tools, motor calculations, electric transmission and propulsion system along with testing, replacing and diagnosing the components related to EV. **SECOND YEAR:** In this year, Electric Vehicle components, such as Motor, Motor Controller, Battery Pack, Battery Management System, Charging System, regenerative braking etc. In addition to above comparison of performance of EV and IC engine vehicles is included. The practical on electric, electronic and EV systems is covered. DC/DC convertor, regenerative braking, HVAC/FATC etc. In addition, EV symbols, switches, control units and communication protocols are covered. Disassemble and assemble various components of EV along with understanding different fasteners and hand tools. And finally, fault finding & breakdown maintenance of related components and systems is done. Then practical's on total repair, testing and diagnosing the systems and related circuits are done. Followed by preventive and breakdown maintenance of associated components.

Skills acquired: Read & interpret technical parameters/documentation, plan and organize work processes, identify necessary materials and tools; • Perform task with due consideration to safety rules, accident prevention regulations and environmental protection stipulations; • Apply professional knowledge, core skills & employability skills while performing the job and machining work. • Check the job/components as per drawing for functioning identify and rectify errors in job/components. • Document the technical parameters related to the task undertaken.

Options for employment: • Can join industry as EV Technician and will progress further as Senior Technician, Supervisor and can rise up to the level of Manager. • Can become Entrepreneur in the related field. • Can appear in 10+2 examination through National Institute of Open Schooling (NIOS) for acquiring higher secondary certificate and can go further for General/ Technical education. 2. **TRAINING SYSTEM 3 Mechanic Electric Vehicle** • Can take admission in diploma course in notified branches of Engineering by lateral entry. • Can join Apprenticeship programme in different types of industries leading to National Apprenticeship certificate (NAC). • Can join Crafts Instructor Training Scheme (CITS) in the trade for becoming instructor in ITIs. • Can join Advanced Diploma (Vocational) courses under DGT as applicable

SECTOR NAME: CAPITAL GOODS & MANUFACTURING

5. Fitter [Duration: 2 years ,NSQF level-4]

Course Content : **FIRST YEAR:** The practical part starts with basic fitting in the beginning and the candidate also imparted training on allied trades viz., Sheet Metal, Welding (Gas & Arc) which leads to multiskilling .In the basic fitting the skills imparted are sawing, filing, marking, chipping ,measurement, riveting, soldering, brazing, drilling and observation of all safety aspects is mandatory. The accuracy achieved is of ± 0.25 mm. The safety aspects cover components like OSH & E, PPE, Fire extinguisher, First Aid and in addition 5S being taught .Different drilling operations (through, blind, angular), reaming, offhand grinding, tapping, dieing, different fits viz., sliding fit, etc., scraping, fastening (nuts & bolts, riveting, studs, screws, etc.,). The accuracy achieved is of ± 0.04 mm and angular accuracy to 30minutes.Different turning operations on lathe (step, grooving, chamfering, drilling, boring, knurling & threading), simple repair, overhauling and lubrication work on machine are being taught in the

practical. SECOND YEAR: Power tool operation, different complex assembling and fitting, fastening, lapping, making gauges, pipe works and pipe joints, dismantling, overhauling & assembling valves are covered. The accuracy achieved is of an accuracy of ± 0.02 mm & 10 minutes. Making & using drill jigs, making of critical components, repair & maintenance of power transmission system, making of template & complex gauges, identify different Pneumatic & hydraulic components and circuit construction, repair & maintenance of machinery like lathe, drill, grinding, bench drilling, Inspection of Machine tools, Accuracy testing of Machine tools and erection of simple machines are being performed as part of practical training. Professional Knowledge subject is simultaneously taught in the same fashion to apply cognitive knowledge while executing task. In addition components like Physical properties of engineering materials, Interchangeability, Method of expressing tolerance as per BIS Fits, different types of iron, properties and uses, special files, honing, Metallurgical and metalworking processes such as Heat treatment, the various coatings used to protect metals, different bearing, working material with finished surface as aluminum, duralumin and stainless steel, topics related to non-ferrous metals, Method of lubrication are also covered under theory part. Total three projects need to be completed by the candidates in a group. In addition to above components the core skills components viz., Workshop calculation & science, Engineering drawing, employability skills are also covered. These core skills are essential skills which are necessary to perform the job in any given situation.

Skills Acquired: Fitter General Sizes metal parts to close tolerances and fits and assembles them using hand tools for production or repairs of machines, or other metal products. Studies drawings to understand specification of different parts, fittings or assembles to be made and their functions. They select materials, appropriate tool and equipment s to carry out their work. Holds the work in Vice, Cuts and shapes required parts to dimensions and specifications by processes of sawing, chipping, filing, grinding, drilling holes, screw cutting, scrapping etc., using hand tools for making specimens or finished components. Measures object while working using foot rules, calipers, micrometer, gauges etc. and checks for correct filing with square. Gets half-finished object marked or marks it himself using face plate, marking block scribe, vernier, height gauges, vee-blocks, angle plate, sine plate, slip gauges, combination set, etc. depending on accuracies required, to indicate guide lines for finished sizes, holes to be drilled and pitch centers, threads to be cut and other working details as specified in drawing or sample. Clamps object securely in correct position in vice and files it to required dimensions according to punch marks and guide lines frequently measuring it with calipers, micrometer, vernier, gauges etc, makes holes with drill, cuts threads with taps and dies ensuring that they are square or at required angle to base. Measures finished article with dial indicator, micrometer, vernier, height gauges, screw gauges, plug gauges, sine bar, slip gauge, etc. according to prescribed accuracies. May make parts separately and assemble those with screws, rivets, pins, etc. as specified so as to make complete unit according to drawing. Dismantles or removes worn out, broken or defective parts using hand tools or power tools and replaces them by repaired or new ones. Performs repairing and maintenance work (including preventive maintenance) of simple machines, dismantles and replaces different components to construct circuit of Pneumatics and Hydraulics. Tests completed article/ assembly to ensure correct performance. May do simple turning of parts on machines and perform welding, brazing, and like operations. May explain heat treatment processes viz., annealing, hardening, tempering etc. May specialize in particular type of machine or product and be designated accordingly. May suggest alterations. In addition, Fitter have the ability to visualize the job, good coordination, mechanical attitude, manual dexterity and perform work related mathematical calculations. Plan and organize assigned work and detect & resolve issues during execution. Demonstrate possible solutions and agree tasks within the team. Communicate with required clarity

and understand technical English. Sensitive to environment, self-learning and productivity .May be designated as FITTER General according to nature of work done.

Options for employment: Benchfitter in manufacturing industries; maintenance fitter in shipping industries and oil rigs; erection in various industries; fabricator for windows/shutter in small workshops; Stores clerk in an Engineering stores.

Options for self-employment / Entrepreneurship Development: Can set up own workshop for fabrication and structural work such as grills, gates, steel; furniture and shutters; can carry out repairs and maintenance of domestic water pipe line individually; can manufacture cutlery such as chopper, knife, axe and chisel; can manufacture and repair locks and keys; can undertake repairs of machines.

6. **Turner [Duration: 2 years, NSQF level-4]:**

Course Content :FIRST YEAR: The practical part starts with basic fitting & different turning including setting of different shaped job on different chucks. The different turning operations - Plain, Facing, Drilling, Boring (counter and stepped) Grooving, Parallel turning, stepped turning, Parting, Chamfering, U-cut, Reaming, Internal recess & Knurling. The skills on grinding of different cutting tools viz., V tool, side cutting, parting and thread cutting (both LH & RH) are also imparted. During this period the testing alignment of lathe by checking different parameters viz., axial slip of main spindle, true running of head stock, parallelism of main spindle and alignment of both the centers are also covered. The observation of all safety aspects is mandatory during execution any task. The safety aspects cover components like OSH&E, PPE, Fire extinguisher, First Aid and in addition 5S being taught. This section covers setting of different components (Form tool, Compound slide, Tail stock offset, taper turning attachment) & parameters (feed, speed, depth of cut) of lathe for taper/ angular turning of jobs. Different boring operations (plain, stepped and eccentric) are also undertaken to gain the skill in producing components involving such operations. Different thread cutting (BSW, Metric, Square, ACME, Buttress) by setting machining parameters are being taught in the practical. The use different accessories of lathe (Driving Plate, Steady rest, dog carrier and different centres)are also part of the practical training. During this period the basic maintenance and preventive maintenance of lathe and grinding machine are also covered. **SECOND YEAR:** On achieving above mentioned skill sets the candidate is engaged in producing different precision of engineering component with an appropriate accuracy ($\pm 0.02\text{mm}$). The machining of different irregular shaped job using different lathe accessories and also producing different utility items viz., Crank Shaft (single throw), Stub arbor, etc. are covered to enhance their competency and perform the job as per practical requirement. The machining of different components along with assembly of such components (male & female) by performing different turning activities is also covered. The accuracy achieved is of an accuracy of $\pm 0.02\text{ mm}$ outside and $\pm 0.05\text{mm}$ for inside turning. A dedicated time of 13 weeks devoted for CNC operations which involve setting both job and tools and operating the CNC turn centre to produce components as per drawing by preparing part programmes. The candidate gets enough training both on multi-media-based CNC simulated and on actual intermediate production based CNC machine. The candidate is also imparted training on process plan to produce components by performing special operation on lathe viz., worm shaft cutting and also producing different engineering components viz., drill chuck, collet chuck, screw jack, box nut etc., to develop competency in producing components which is tangible and significant in work and industry ready for executing such work as per demand Professional Knowledge subject is simultaneously taught in the same fashion to apply cognitive

knowledge while executing task. In addition, components like cutting tools and its specification, method of brazing and soldering, calculation involving gear ratio and gearing, and tool life, lubrication and functions, jigs and fixtures, interchangeability, quality control procedure and technical English are also covered under theory part. Total three projects need to be completed by the candidates in a group. In addition to above components the core skills components viz., Workshop calculation & science, Engineering drawing, employability skills are also covered. These core skills are essential skills which are necessary to perform the job in any given situation.

Skills Acquired:-Lathe Operator makes metal articles to required specifications using lathe and cutting tools. Studies drawings and other specifications of parts to be made. Selects metal, holds it in chuck, fixture on lathe as required, centres it by manipulating chuck jaws or otherwise using dial indicator or marking block and securely tightens it in position. Selects correct cutting tool, grinds it if necessary and holds it tight in tool post at correct height. Sets feed and speed and starts machine. Manipulates hand wheels or starts automatic controls to guide cutting tool into or along metal. Controls flow of coolant (cutting lubricant) on edge of tool. Arranges gears in machine to obtain required pitch for screw cutting. Calculates tapers and sets machine for taper turning, controls lathe during operation by means of hand wheels and levers and frequently checks progress of cutting with measuring instruments such as calipers and rule, micrometers, etc. Stops machine, removes completed part and checks it further with instruments to ensure accuracy. Repeats operations if necessary. Cleans and oils machine. Demonstrate the setting & operation of CNC turning machine and produce components as per drawing by preparing part programmes. May improvise devices and make simple adjustments to machine. May recondition lathe tools. Plan and organize assigned work and detect & resolve issues during execution. Demonstrate possible solutions and agree tasks within the team. Communicate with required clarity and understand technical English. Sensitive to environment, self-learning and productivity. May be designated as Turner according to nature of work done.

Options for employment :After completion of the trade course, the trainee can be employed as a skilled turner in various industries like MPT, Goa Shipyard, GAAL, ACGL, Chowgule Industries and small scale industries in different industrial estates in the state.

Options for self-employment /Entrepreneurship Development: Trainee can start his own small scale Industry Manufacturing Unit for production of components like nut-bolts, shafts, gears, pins, pulleys, crank shafts of various machine parts, cylinder boring and also undertake repair of all types of machinery.

7. Machinist [Duration: 2 years, NSQF level-4]:

Course Content: FIRST YEAR - In this year, the contents covered are from safety aspect related to the trade, basic fitting operations viz., making, filing, sawing, chiseling, drilling, tapping, grinding to an accuracy of ± 0.25 mm. Making different fits viz., sliding, T-fit and square fit with an accuracy of ± 0.2 mm & angular tolerance of 1° . Lathe operation on different shaped job and produce components by different turning operation including thread cutting. The practical training starts with operation of slotting machine and making different components to accuracy of ± 0.04 mm. Followed by different operation in conventional milling machine with extensive coverage of different operations viz., plain, face, angular, form, gauge, straddle milling with accuracy ± 0.02 mm like square thread cutting. Further advance turning operations with accuracy ± 0.04 mm is covered. Next, the grinding operation (both surface and cylindrical) is executed with accuracy of ± 0.01 mm.

Sattari Government Industrial Training Institute Honda Sattari, Goa

Mission

“To ensure a steady flow of skilled personnel and to reduce unemployment amongst the educated youth by equipping them with required skills, education and discipline for suitable industrial employment as well as for self-employment.”



Directorate General of Training

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ENGINEERING TRADES

SR. NO	NAME OF COURSES	NCVT/ SCVT	DURATION	ENTRY QUALIFICATION
1	Fitter	NCVT	2 years	Passed 10 th class examination with Science and Mathematics or its equivalent.
2	Electrician	NCVT	2 years	Passed 10 th Class examination with Science and Mathematics or its equivalent.
3	Turner	NCVT	2 years	Passed 10 th class examination with Science and Mathematics or its equivalent.
4	Refrigeration and Air Conditioner Technician	NCVT	2 years	Passed 10 th class examination with Science and Mathematics or its equivalent.
5	Mechanic Diesel	NCVT	1 year	Passed 10 th class examination with Science and Mathematics or its equivalent.
6	Plumber	NCVT	1 year	Passed 8 th class examination
7	Welder	NCVT	1 year	Passed 8 th class examination
8	Electronics Mechanic	NCVT	2 years	Passed 10 th class examination with Science and Mathematics or its equivalent.
9	Mechanic Motor Vehicle	SCVT	2 years	Passed 10 th Class examination with Science and Mathematics or its equivalent
10	Wireman	NCVT	2 years	Passed 8 th class examination

NON-ENGINEERING TRADES

1	Desktop Publishing Operator	NCVT	1 year	Passed 10 th class examination
2	Sewing Technology	NCVT	1 year	Passed 8 th class examination
3	Computer Operator & Programming Assistant	NCVT	1 year	Passed 10 th class examination
4	Cosmetology	SCVT	1 year	Passed 10 th class examination
5	Food & Beverages Service Assistant (DST)	SCVT	1 year	Passed 10 th class examination or its equivalent.



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SECOND YEAR -In this year, grinding of different cutting tools are covered in the beginning followed by advance milling operation like boring, gear cutting, spline etc. to accuracy $\pm 0.05\text{mm}$. Basic electrical equipment and sensors are also covered and CNC turning operation which covers starting from setting, operation and programming part covered for producing different components. The CNC milling operation is covered in the beginning which include setting, operation and part programming to producing different component. In addition to this, the components like documentation, technical English, simple repair and maintenance work, machining of some complicated components like bevel gears, plate components, worm wheel, worm thread etc. to an accuracy of $\pm 0.05\text{mm}$. In addition to above components the core skills components viz., Workshop calculation & science, Engineering drawing, employability skills are also covered. These core skills are essential skills which are necessary to perform the job in any given situation.

Skills Acquired: Machinist General operates various types of power driven metal cutting or grinding machines for cutting and grinding metal. Studies drawings or measures out sample with appropriate measuring instruments to note different dimensions and sequence of operations required. Selects metal piece and marks it or gets it marked for machining operations required. Fastens metal in chuck, jig or other fixture and respective tool or cutter, according to sequence of operation, on appropriate machine (lathe, shaper, milling, slotting, drilling, grinding). Checks machine setting or sets it for stipulated machine operations. Selects machine feed and speed and starts machine. Controls flow of coolant (cutting lubricant) and manipulates hand wheels or applies automatic controls to feed tool to metal or metal to tool. Observes cutting or grinding both from marking and machine readings, checks for dimensions as necessary and removes parts when machining is completed, checks completed part with measuring instruments and gauges to ensure prescribed accuracy. Makes adjustments if necessary and repeats operations, as required, on same or other machines. May assist in setting up machine for repetitive work, change tools, make simple adjustments, clean and oil machine. Does process planning, tool and cutting parameters selection, programming, setup and operation for cutting parts on CNC vertical machining center and CNC lathe. Plan and organize assigned work, detect & resolve issues during execution. Demonstrate possible solutions and agree tasks within the team. Communicate with required clarity and understand technical English. Sensitive to environment, self-learning and productivity. May be designated as Machinist according to nature of work done.

Options for employment: There is lot of demand for machinist in major industries like Goa Shipyard, Mormugao Port Trust, A.C.G.L., GAAL and also various small scale industries which exist in various industrial estates.

Options for self-employment / Entrepreneurship Development: Skilled Machinist can start his own workshop and can supply the products of various jobs to the auxiliary units as a sub-contractor.

8. **Refrigeration & Air Conditioning Technician [Duration: 2 years, NSQF level-4]**

Course Content: Refrigeration and Air Conditioning Technician Trade, under CTS, is one of the most popular courses delivered nationwide through a network of ITIs. The course is of two years duration. It mainly consists of Domain and Core areas.

The Domain areas (Trade Theory & Practical) impart professional skill/s and knowledge, while the Core areas (Workshop Calculation science, Engineering Drawing and Employability Skill/s related to the relevant Job-Role/s) impart requisite core skill & knowledge and life skills that are all essential/

necessary to perform the job in any given situation;

In addition to this, a Candidate is entrusted to undertake group-wise project work and extracurricular activities to build up confidence. The broad components covered during the Course, are as detailed here-below:-

In the FIRST year, the trainee learns about personal safety and machinery safety, manipulating tools, instruments and equipment in the refrigeration workshop, while during the SECOND year, the trainee learn about different commercial compressor and its dismantling, assembling, fault finding and rectification - among other relevant subject-topics;

Skills Acquired: Mechanic Refrigeration and Air Conditioner: May work in ice factory, cold storage plants, specialized air conditioning units or domestic refrigerators. Repair and service in refrigerator, water cooler, bottle cooler, deep freezer, Visi Cooler, Walk in Cooler, Ice candy plant, Cold storage, Ice plant, Split Air Conditioner, Package Air Conditioner, Central Air Conditioner, mobile Air Conditioner; **Options for employment work** as Refrigeration and A/C Technician in Industries and factories like - Chemical, Pharmaceuticals and Beverage plants; Manufacturing units - Godrej, L.G., Blue Star, Voltas; Defense services - as Plant Operator/Mechanic.

Options for self-employment / Entrepreneurship Development: The trainee can set up his own: S.S.I. unit - For Deep freezer, Bottle Cooler, Water Cooler; Repairing workshop - Refrigerator and a/c equipment; Ice manufacturing unit, Cold storage on rental basis, Ice-cream/cold drink house, Bottle Filling plant.

9. Draughtsman (Mechanical) [Duration: 2 years ,NSQF level-4]:

Course Contents: FIRST YEAR ;This year includes construction of geometrical figures using drawing instruments, freehand drawing of machine components in correct proportions, procedure to prepare a drawing sheet as per BIS standard. After becoming familiar with basic drafting terminology, students begin to develop multi-view drawings and learning about projection methods, auxiliary views and section views. Lettering, tolerance, metric construction, technical sketching and orthographic projection, isometric drawing, oblique and perspective projection are also covered. Introduction of drawing of different fasteners, welds, and locking devices as per specification mentioned in SP-46:2003 and use of CAD technology in 2D environment. The candidate also imparted training on allied trades viz. Fitter, Turner, Machinist, Sheet Metal Worker, Welder, Foundry man, Electrician and Maintenance Motor Vehicles. The safety aspects covers components like OSH&E, PPE, Fire extinguisher, First Aid and in addition 5S being taught.

SECOND YEAR: To develop skill in CAD application practical assignments are given by using commands in various methods. Detail and assembly drawing of machine parts viz., Pulleys, Pipe fittings, Gears and Cams applying range of cognitive and practical skills .Construct production drawing applying quality concept in CAD. Creation of objects in 3D Modeling Space and generate views ,print preview to plot in drawing and pdf. format. Individual skill is developed by preparing production drawing of machine parts applying conventional sign and symbol by taking measurement. Impart knowledge to draw workshop layout of a production industry considering process path and human ergonomics. In Solid Works/AutoCAD Inventor/ 3D modeling environment the assignment is to create and plot assembly and detailed views of machine parts with dimensions, annotations, title block and bill of materials.

Skill Acquired: Prepares drawings of machines, plants, mechanical components, equipment etc. from sketches, notes, data or sample for purposes of manufacture or repairs. Takes instructions from Mechanical Engineer and calculates dimensions as required, from available materials (notes, data etc.) or sample. Draws to scale detailed drawings, assembly drawings, showing plan, elevations, sectional views etc. according to nature of work and operations required. Prints (writes) dimensions, tolerances, material to be used and other details to give clear picture and facilitate understanding. Maintains copies of drawings and makes prints. They may trace drawings and may design simple mechanical parts. May prepare estimates for materials and labour required. May specialize in making drawings of jigs and tools and be designated accordingly. Create component parts on Drawing Space using toolbars, commands and menus in CAD application software and also creating objects on 3D modeling space in CAD viewing printable drawing and plotting them. Draughtsman Mechanical selects the appropriate equipment and drawing software to use based on the type and complexity of the drawing functions to be carried out and the use of a CAD system linked bills of material, file management and associated customization of installed software including the use of macros, menus and default settings. In addition, Draughtsman Mechanical has the ability to visualize the job, good coordination, mechanical attitude, manual dexterity and perform work related mathematical calculations. Plan and organize assigned work and detect & resolve issues during execution. Demonstrate possible solutions and agree tasks within the team. Communicate with required clarity and understand technical English. Sensitive to environment, self learning and productivity.

Options for employment: The trainees can work as a Draughtsman in almost all mechanical and automobile production industries where the designing and drawing departments are maintained; they can work as tracer in State and Central Govt., departments, supervisor in Small Scale industry. They can also work in Structural fabrication sectors like building bridges, roof structures, building and constructions. They can also work in service industries, road transportation and railways. They can also work in public sector industries like BHEL, BEML, NTPC, etc and private industries in India and abroad. They can work in Ship building and repair and also in defense organizations

Options for self-employment / Entrepreneurship Development: Trainees can take contracts for drawing and tracing work from different industries; Trainee can start an AUTOCAD training center.

10. **Welder [Duration: 1 year, NSQF level-3]:**

Course Contents: Welder Trade, under Craftsmen Training Scheme (CTS), is one of the most popular courses delivered nation-wide, through a network of ITIs. The course is of one-year duration. It mainly consists of Domain and Core areas; The Domain areas (Trade Theory & Practical) impart professional skills and knowledge, while the Core areas (Workshop Calculation & Science, Engg. Drawing and Employability Skill/s related to the relevant Job-Role/s) impart requisite core skills, knowledge and life skills that are all essential/ necessary to perform the job in any given situation ; In addition to this, a Candidate is entrusted to undertake group-wise project-work and extracurricular activities to build up confidence;

Skills Acquired: Welder - Electric; Resistance; Gas Cutting; Brazing; Tungsten Inert Gas (TIG); Gas - Gas Metal Arc/Metal Inert Gas/ Metal Active Gas/Gas Metal (MIG/MAG/GMAW); Iron and Steel Plasma Cutter- Manual.

Options for employment: Electric arc welder; Gas Welder; CO2 MIG Welder; TIG welder; Gas Cutter;

TIG/MIG welder; Pipe welder.

Options for self-employment / Entrepreneurship Development: Can setup own fabrication workshop, Steel furniture workshop.

SECTOR NAME- CHEMICALS & PETROCHEMICALS

11. Attendant Operator- Chemical Plant (AOCP) [Duration: 2 years, NSQF level-4]:

Course Content: During the two-year duration a candidate is trained on subjects Professional Skill, Professional Knowledge, Engineering Drawing, Workshop Science & Calculation and Employability Skills. In addition to this a candidate is entrusted to make/do project work and Extra Curricular Activities to build up confidence. The practical skills are imparted in simple to complex manner & simultaneously theory subject is taught in the same fashion to apply cognitive knowledge while executing task. The practical part starts with allied trade training viz basic fitting and laboratory experiments in basic physics and chemistry. Practical skills related to unit operations comprising of Fluid flow, Heat transfer, and Mass transfer, Mechanical operations are covered in period of two years.

In the first year -The practical part starts with allied trades viz., basic fitting- In the basic fitting the skills imparted are Hack-sawing, marking, punching, Chiseling, Filing, Drilling, countersinking, counter boring, reaming, Taping and observation of all safety aspects is mandatory. Basic physics and chemistry practical covers conducting experiments in laboratory to determine physical constants, verification of laws, to determine concentration of solutions, PH, melting point, boiling point, compare properties of metals & alloys, prepare chemicals. The safety aspect covers components like PPE, Fire extinguisher, First Aid. performing different operations or experiments related to safety and general awareness in chemical industry. Identification, installation /connection of instrument/devices to measure pressure, temperature, flow, level and density are covered. Skills to execute pipe joints, fittings valves on pipes, dismantling, overhauling, cleaning & assembling valves, different machines & components used for fluid transportation such as centrifugal pump, gear pump, metering pump, screw pump, multistage compressor are achieved in this year. Dismantling, repairing and assembling of different damaged mechanical components used for power transmission such as Gearbox, bearings are also covered. In the second year - This Year covers Unit operations i.e. fluid flow, heat transfer and mass transfer operations. Skills to operate different machines/equipment such as Shell and tube Heat exchangers, evaporators, Distillation columns are gained in this section. Study of pressure vessels, petroleum refining is covered in this section. Mass transfer operations such as Solvent extraction, Leaching, Absorption, Crystallization, and Drying are taught. Mechanical operations such as Size reduction, mixing, conveying, and filtration are also covered in this year. Study of chemical reactor, plant utilities like steam, Boilers, cooling towers, chilled water, instrument air are covered in this section. Pollution in chemical industry and manufacturing processes are also taught.

Skills acquired: Laboratory Assistant- Physical/chemical, assists and carries out routine duties in laboratory as directed in conducting experiments. Sets up required apparatus and instruments in position as directed for conducting experiments such as balances, heaters, arrange chemicals such as salts, acids, Makes necessary electrical connection to equipment and instruments as required. Records routine and other observations as indicated by instruments and makes necessary calculations.

Process Operator - Chemical, Process chemical ingredients by mixing in specific proportions, heating, distilling, cooling, filtering, blending, percolating, refining, pulverizing , etc. for causing

chemical reactions for research or production. Regulates feed of gaseous, liquid or solid materials into equipment. Checks progress of process by looking through peep holes, observing temperature readings, pressure gauges and other instruments and making simple chemical tests; regulates material feed, and heating and cooling devices and makes other adjustments necessary to ensure that processes are correctly carried out.

Reactor / Converter Operator , Reactor Operator (Chemical Process, except Petroleum) operates number of pieces of equipment, other than those used for treating petroleum, which perform sequence of complex operations in chemical reaction process. Regulates feed of gaseous, liquid or solid material into equipment.

Pump Operator (Petroleum Refining), controls pumps and manifold systems to circulate crude, semi compressed and finished petroleum products, water and chemical solutions through processing and storage departments of refinery according to schedules or instructions. Synchronizes activities with other pump houses to assure continuous flow of product. Records operating data.

Evaporator Operator: Pan Operator; Vacuum Pan Operator charges and operates evaporating tank, vacuum-pan or similar device to concentrate solutions by driving off excess water contents, regulates flow of steam into heater coils of evaporator; periodically tests concentrations of solution by making simple chemical tests.

Still Operator- Petroleum/chemical, still operator (Distillation operator) operates one or more batch/ continuous stills for distilling or refining Chemicals and crude oil to obtain fuel gas, gasoline, kerosene, diesel oil, lubricating oil, wax, bitumen, etc. Reads processing schedules, writing log books, test results of oil samples, and laboratory recommendations to determine changes in equipment controls required to produce specified quantity and quality of product.

Crusher Operator, Crusher Operator operates power driven crushing machine to break solid lumps of chemicals or other materials into smaller size for further processing. Collects material to be crushed; fills hopper of machine, regulate speed of machine, May weigh the material before and after crushing to know loss in crushing.

Autoclave Operator, Autoclave Operator; Sterilization Attendant charges, operates and unloads an autoclave (high-pressure vessel) for processing chemicals, oils, or sterilizing bottles, ampoules, etc. Checks valves for operation; raises temperature of autoclave by increasing steam pressure.

Ammonia Plant Operator, Ammonia Plant Operator controls converter and auxiliary equipment that combine hydrogen and nitrogen to produce anhydrous ammonia, Lights burner and start pumps, compressors etc. Reads instruments such as temperature indicators, pressure gauges etc.

Acid Plant Operator Acid Plant Operator maintains and operates acid plant for manufacturing sulphuric, hydrochloric, nitric or other acids by treating raw materials (Sulphure, salts, etc.)

Digester Operator, Paper Pulp Digester Operator operates (cooker) to convert raw materials into paper pulp. Supervises charging of cooker with ingredients such as wood chips, rags, straw and waste paper shreds. Directs adding of chemicals and admission of steam to raise temperature.

Mixing Attendant (Chemical) feeds and tends machine to mix and blend different solid or liquid ingredients in required proportions, starts machine agitators to mix materials thoroughly.

Filter Press Operator operates filter press machine to filter impurities or other insoluble materials from slurries, chemical solutions or other liquids. Opens filter press and covers filter plates with canvas or other filtering media; closes press, pumps slurry till specified pressure is reached. Removes impurities and sludge in between plates. Replaces damaged filter media.

Hydro Extractor Operator /Centrifuge operator operates centrifuge machine that separates solids from liquids, Fills drum of machine with liquid material. Starts machine and adjusts drum speed to obtain efficient separation of substances, May clean and fix filtering media.

Drying Chamber Attendant (Drugs)/Dryer Operator dries tablets, wet seeds, wet crystals and powder in drying chamber, loads tablets and powder trays on racks and shelves in drying chamber, loads seeds and crystals in rotary dryers, Closes chamber and applies heat for fixed period of time; checks at frequent intervals to ensure that products are properly dried and test products for moisture content. **Extraction Attendant-Chemical**, Extraction Battery Attendant, Extractor Operator, feeds necessary chemicals and solvents in Mixer settlers, spray towers and regulates flow, pressure etc. as directed by Process man to effect desired chemical separation. Collects Extract, Raffinate separately, and checks their concentration separately.

Options for employment :All Chemical, Fertilizer, Pharmaceutical and Petroleum (Oil and Gas) and Power Plants (Water treatment) will be able to recruit these trainees.

SECTOR NAME: CONSTRUCTION

12. Draughtsman (Civil) [Duration: 2 years, NSQF level-4]:

Course Contents :FIRST YEAR:- The practical part starts with basic drawing (consisting geometrical figure, symbols & representations). Later the drawing skills imparted are drawing of different scales, projections, drawing of shoring, scaffolding, stone and brick masonry, foundation, damp proofing, arches / lintel etc. and observation of all safety aspects is mandatory. The safety aspects covers components like OSH&E, PPE, Fire extinguisher, First Aid and in addition 5S being taught. Different site survey (using Chain & tape, Prismatic compass, Plane table, Levelling instrument, Theodolite), field book entry, plotting, mapping, calculation of area, Drawing of carpentry joints and Electrical wiring, drawing of floors, slabs, vertical movements (viz .stair, lift well, ramp and escalator), drawing of different types of roof truss are being taught in the practical.

SECOND YEAR: - Single storied building plan in traditional drawing. Knowledge and application of Computer Aided Drafting .Workspace creating drawing using toolbars, commands, and menus .Plotting drawing from CAD. 2D drafting of Doors, Windows, hand railing, wash basin, and plumbing joints. Preparing library folders by creating blocks of regularly used items. Preparation of a sanction plan of double storied RCC flat roof residential building using CAD. Preparation of a drawing of public building by framed structure using CAD. Preparation of Bar bending schedule. Drawing of different steel structure joints using CAD. Detail drawing of sanitary fittings and sewerage arrangements using CAD. Detail and sectional drawing of Roads, Bridges, culverts, railway tracks and embankment, Dams, Barrages, Weir and cross drainage works using CAD, schematic diagram of hydroelectric project using CAD, Estimating and Cost analysis of different types of buildings and structures, preparation of map using Total Station and location of station point using GPS are being performed as part of practical training

Skill Acquired: Draughts person, Civil; prepares drawings of buildings, stores, high ways, dams,

Bicholim Government Industrial Training Institute

Valshi, Bicholim, Goa 403504.

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Skill India
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OBJECTIVE

With an objective of ensuring a steady flow of skilled personnel and to reduce unemployment amongst the educated youth by equipping them with required skills, education and discipline for suitable industrial employment as well as self-employment, Industrial Training Institutes have been set up under the Craftsmen Training Scheme in Goa. They are affiliated to National Council for Vocational Training (NCVT), through the Directorate General of Employment and Training (DGET), Government of India in the Ministry of labour, New Delhi. They impart training in engineering and non-engineering trades is as per the syllabus and curriculum approved by Government of India in consultation with the above said Council.



ENGINEERING TRADES

1	Fitter	NCVT	2 year	Level 4	Passed 10 th class examination with Science and Mathematics or its equivalent.
2	Electrician	NCVT	2 year	Level 4	Passed 10 th Class examination with Science and Mathematics or its equivalent.
3	Draughtsman (Civil)	NCVT	2 year	Level 4	Passed 10 th class examination
4	Mechanic Diesel	NCVT	1 year	Level 3	Passed 10 th class examination with Science and Mathematics or its equivalent.
5	Wireman	NCVT	2 year	Level 4	Passed 8 th class examination
6	Electronics Mechanic	SCVT	2 year	Level 4	Passed 10 th class examination with Science and Mathematics or its equivalent.
7	Machinist	SCVT	2 year	Level 4	Passed 10 th class examination with Science and Mathematics or its equivalent.
8	Plumber	SCVT	1 year	Level 3	Passed 8 th class examination
9	Welder	SCVT	1 year	Level 3	Passed 8 th class examination
10	Solar Technician (Electrical)	SCVT	1 year	Level 3	Passed 10 th class examination

NON-ENGINEERING TRADES

1	Computer Operator & Programming Assistant	NCVT	1 year	Level 3	Passed 10 th class examination
2	Stenographer & Secretarial Assistant (English)	NCVT	1 year	Level 3	Passed 10 th class examination
3	Sewing Technology	NCVT	1 year	Level 3	Passed 8 th class examination
4	Cosmetology	SCVT	1 year	Level 3	Passed 10 th class examination
5	Multimedia, animation & special effects	SCVT	1 year	Level 3	Passed 10 th class examination
6	Food production (General)	SCVT	1 year	Level 3	Passed 10 th class examination
7	Fashion Design & Technology	SCVT	1 year	Level 3	Passed 10 th class examination



culverts, etc. from sketches, notes or data for purposes of construction or alternations. Takes instructions from Civil Engineer studies sketches and calculates dimensions from notes or data. Draws to given scale different elevations, plan, sectional views etc. of desired construction using drawing instruments. Draws detailed drawings of specific portions as required. Indicates types of materials to be used, artistic and structural features, etc. in drawing as necessary. May do tracing and blue printing. May reduce or enlarge drawings. May prepare or check estimate schedules for cost of materials and labour. May prepare tender schedules and draft agreements. May work as Draughtsman Architectural. Draught person, Structural; prepares drawings of bridges, steel structures, roof trusses etc. From sketches, designs or data for purposes of construction, alteration or repairs. Studies sketches, data, notes etc. and receives instructions from Structural or Mechanical Engineers regarding details and types of drawings to be made. Calculates dimensions as necessary from available notes, data etc. and by application of standard formulae. Draws to scale detail, assembly and arrangement drawings showing sectional plan and other views as directed and prints (writes) necessary instructions regarding materials to be used, limits, assembly etc. to clearly indicate all aspects of structure to be manufactured. May prepare estimate and operation schedules for labour and material costs. May prepare tender schedule and draft agreements. May prepare tables showing requirements of bars, their numbers, sizes and shapes. May trace and make blue prints. Draughts person, Topographical; Sketches topographical drawings to scale in different colours using blue print prepared from field plane tables. Carries out independently projection of small scale map to predetermined size, incorporating features covered in survey, producing total geographical effect by hill shading, giving contours, profile, cross sections, authorised symbols, etc. Uses grid tables, projection table compasses, pantograph, plan meter, etc.

Options for employment: Employment opportunities for trainee from this trade as Draftsman, Surveyor and Land Surveyor shall be available in Central & State Government Departments, in Railways, C.P.W.D. Military, TCP, P.D.A., P.W.D., HUDA, Housing Board, Land Survey and public health engineering department. Private sector opportunities shall be as Draftsman, Construction Supervisor with Architect, Civil Engineer, and Civil Contractor, Builders.

Options for self-employment / Entrepreneurship Development:

The Trainee shall be able to independently undertake planning, drawing, estimation & costing and supervision of civil construction work. He can set up his own office for above work and also to supply Civil Construction materials

13. Wood Work Technician [Duration: 1 year, NSQF level - 3]:

Course Content: During one-year duration of “Wood Work Technician” trade, a candidate is trained on Professional Skill, Professional Knowledge and Employability Skill related to job role. In addition to this, a candidate is entrusted to undertake project work, extracurricular activities and on-the-job training to build up confidence. The broad components covered under Professional skill subject are as below: - The trainee learns about elementary first aid, firefighting, environment regulation and housekeeping etc. The trainee identifies timber/ wood, apply measuring, marking and testing instrument and other holding and supporting hand tools. He will be able to use various saws and portable power saw machines for Ripping, cross cutting, Oblique sawing and curve cutting etc. He will be able to analyze the surface finish with exact sizing by planning operation and apply various shaving tools or portable power planing machine. The trainee can apply various paring tools and analyze and choose the positioning and employ holding device for chiseling with better finish. He will be able to

identify and classify various types of joints, analyze and prepare correct joint at correct position, related with strength and appearance. He will be able to make small wooden job as per drawing with schedule sizes of timber or alternatives of timber i.e. FRP, MDF, FOAM using various hardware, analyze and use various carving tools and convert a wooden block/ piece into a decorative article. The trainee will be able to preserve wooden item through surface finishing with various processes such as painting, polishing, varnishing etc. The trainee learns ripping, cross cutting, curve cutting etc. on band saw/ circular saw machine and grinding and setting of blade/ cutter. He can perform different operations on planing machine along with sharpening blades. (Range of operations - Surfacing, thickening, chamfering, edge bending etc.). The trainee can work on pedestal grinder (Range of operations - grinding of mushroom head, cutting edge of tools, drills, etc.). He can make holes of different sizes in correct location on woodwork, can perform different operations on wood turning lathe along with sharpening of cutting tools. The trainee can do different operations on Tenon and mortise machine, Sanding machine. He will be able to prepare different types of pattern, core box, core print etc. for moulding application with proper allowances and colour codes. Can produce component involving different operations of fitting and sheet metal work and check for functionality. The trainee will be able to prepare various roof truss, door and windows frame and shutters, assembling & fixing (wooden/ aluminium or PVC), Paint various door, windows frame, stair and furniture (wooden or aluminium), Prepare various type of wooden floor, partition wall etc. He will be able to check, identify, analyze and repair the wooden job. The trainee also undergoes two weeks project work at the end of year which gives them more practical exposure and helps to build up confidence level.

Skills acquired: Carpenter, General makes, assembles, alters and repairs wooden structures and articles according to sample or drawing using hand or power tools or both. Studies drawing on sample to understand type of structure or article to be made and calculates quantity of timber required. Selects timber to suit requirements. Marks them to size using square, scribe etc. Saws, chisels and planes wooden pieces to required sizes and makes necessary joints such as half lap, Tenonmortise, dove-tail etc. using saws, planes, mortising, chisels, drills and other carpentry hand or power tools as required. Checks parts frequently with square, foot rule, measuring tape etc. to ensure correctness. Assembles parts and secures them in position by screwing, nailing or dowsing. Checks assembled structure with drawing or sample; rectifies defects, if any, and finishes it to required specifications. Alters, repairs or replaces components in case of old structures or articles in similar manner. May glue parts together. May smoothen and finish surface with sand paper and polish. May fix metal fittings to structure and polish. May fix metal fittings to structure or article made. May calculate cost of furniture. May sharpen his own tools.

Carpenter, Construction: Carpenter, Construction; Carpenter Building makes, assembles, alters and repairs doors, windows, frames and other wooden fixtures of building using hand or power tools or both. Studies drawings or samples and calculates quantity of timber required. Saws oversize pieces by power or hand tools or collects lumbers for making various components. Plans two sides of above pieces, marks off dimensions using tri-square, scribe, pencil etc., and reduces them to required sizes by adzing, sawing and planing. Marks off different members, cuts them as required and shapes and makes Tenon and mortise, half lap and other joints by sawing, chiselling, drilling and filling. Checks pieces frequently while sizing and shaping to ensure correctness. Assembles framework step by step by gluing, cramping, dowsing, nailing and screwing as required. Examines finished article for accuracy. Fits metal rods, hinges etc., to wood work where necessary and rectifies defects in fittings if any. Sharpens his own tools. May erect scaffoldings if necessary. Plan and organize assigned work and detect & resolve issues during execution in his own work area within defined limit. Demonstrate

possible solutions and agree tasks within the team. Communicate with required clarity and understand technical English. Sensitive to environment, self-learning and productivity.

Options for employment: Wood Craft Technician in any woodwork Industries or in any Government department for one/two years and can get a job in PWD, MPT, Military, Nehru Science Centre, Zuari furniture, Gautier furniture etc.

Options for self-employment / Entrepreneurship Development: They can earn more by starting a small carpentry workshop. It is a highly valuable way of earning by manufacturing different types of furniture and also giving employment to those who are unemployed skilled workers.

SECTOR - ELECTRONICS & HARDWARE

14. Instrument Mechanic [Duration: 2 years, NSQF level-4]:

Course Content : The Instrument Mechanic trade, under CTS, is one of the popular courses delivered nationwide, through a network of ITIs. The course is of two years duration. It mainly consists of Domain and Core areas. The Domain areas (Trade Theory & Practical) impart professional skill/s and knowledge, while the Core areas (Workshop Calculation science, Engineering Drawing and Employability Skill/s related to the relevant Job-Role/s) impart requisite core skill & knowledge and life skills that are all essential/ necessary to perform the job in any given situation; In addition to this, a Candidate is entrusted to undertake group-wise project work and extracurricular activities to build up confidence. The broad components covered during the Course, are as detailed here-below:-

In the FIRST year, a Trainee learns about safety and environment, use of fire extinguishers, artificial respiratory resuscitation, to begin with; While, during the SECOND year, the Trainee will be able to study various types of instruments constructions and identify various parts and section - among other relevant subject-topics;

Skills Acquired: Mechanic Precision Instrument, General; Technician Instrumentation; Mechanic Precision Instrument, Mechanical; Functional Tester.

Trainees broadly would need to learn and demonstrate that they are able to: Read & interpret technical parameters/documentation, plan and organize work processes, identify necessary materials and tools; Perform tasks with due consideration to safety rules, accident prevention regulations and environmental protection stipulations; Apply professional knowledge, core skills & employability skills, while performing the Welding Job/s, as well as, Repair and Maintenance Work; Check the Job/Assembly, as per concerned drawing - for functioning, identify and rectify errors in job/ assembly; Document the technical parameters in tabulation sheet, related to the task/s undertaken.

Options for employment: On completion of course, the trainee shall be able to work as an Instrument Technician in various Industries like petrochemical, fertilizer, chemical, Pharmaceuticals, Power plants, Power stations, Water works, Beverages plants, food Industries, Sugar Industries, Electricity dept., meter mechanic, Defense/Air force, Confectioneries and Shipping etc.

Option for Self-employment / Entrepreneurship Development: The trainee shall be able to setup his own shop to undertake calibration, maintenance and repair of Industrial Instruments. They can also setup laboratories for calibration and validation and provide certification to Industries. Installation and

commissioning of Process control systems/instruments in Industry. They can take Annual maintenance contract for Automation systems such as DAS, SCADA and DCS etc.

15. *Electronics Mechanic [Duration: 2 years, NSQF level-4]:*

Course Content: In the first year the trainee learns about safety and environment, use of fire extinguishers, artificial respiratory resuscitation to begin with. He gets the idea of trade tools & its standardization, Familiarize with basics of electricity, test the cable and measure the electrical parameter. Skilling practice on different types & combination of cells for operation and maintenance of batteries being done. Identify and test passive and active electronic components. Construct and test unregulated and regulated power supplies. Practice soldering and de-soldering of various types of electrical and electronic components on through hole PCBs. Assemble a computer system, install OS ,Practice with MS office. Use the internet, browse, create mail IDs, download desired data from internet using search engines. The candidate will be able to construct and test amplifier, oscillator and wave shaping circuits. Testing of power electronic components. Construct and test power control circuits. Identify and test op to electronic devices. Able to achieve the skill on SMD Soldering and De soldering of discrete SMD components. Verifying the truth tables of various digital ICs by referring Data book. Practice circuit simulation software to simulate and test various circuits. Identify various types of LEDs, LED displays and interface them to a digital counter and test .Construct and test various circuits using linear ICs 741 & 555.

In the second year the trainee will be able to operate DSO and perform various functions. Gaining the skill by practicing SMD Soldering and De-soldering of various types of IC Packages. Able to identify the defects and do rework of PCB. Construct and test simple electrical control circuits and various electrical protective devices. Identify, prepare, terminate and test various types of electronic cables used in various electronic systems. Identify various functional blocks and I/O Ports of a 8051 microcontroller system, Familiarize with the instruction set of 8051 micro controller. Inter face a model application with the Microcontroller kit and run the application. Construct and test various modulation/demodulation circuits. The trainee will identify and test various types of sensors used in electronic industries and construct and test circuits using various sensors system. They can construct and test analog and digital IC based application circuits as a part of project work.

The trainee will work with DPM Modules to measure various electrical parameter, also interface the LCD modules to display a word. They will also skilled with various modulation techniques to acquaint with fiberoptic communication techniques by using trainer kit. Identify various functional blocks/major components/ICs in the given stabilizer, rectify the faults. Identify various Input and output sockets/connectors of the given SMPS and UPS. Install and troubleshoot the given solar panel system. Dismantle and assemble various types of cell / smart phones and trouble shoot the cell/smart phone. Dismantle and assemble the given LED light stack. Design a LED light for the given ratings. Assemble decorative lighting system(serial lights) using LED strips. Dismantle, assemble, trouble shoot and rectify LED and LCD TV sets.

Skills Acquired: Electronics Fitter, General fits, assembles and repairs various kinds of electronic equipment in factory or workshop or at place of use. Examines drawings and wiring diagrams; checks parts for accuracy of fit and minor adjustments; assembles parts or mounts them on chassis or panels with aid of hand tools; installs and connects wiring, soldering joints equipment, diagnoses faults with aid of electronic testing equipment; dismantles equipment if required and replaces faulty parts or wiring. **Electronics Fitter, other** include all other workers engaged in fitting, assembling, repairing

and maintaining electronic equipment, machinery, appliances, etc., not elsewhere classified. **Electronics Mechanic;** Electronic Equipment Mechanic repairs electronic equipment, such as computers, industrial controls, transmitters, and telemetering control systems following blueprints and manufacturer's specifications and using hand tools and test instruments. Tests faulty equipment and applies knowledge of functional operation of electronic units and systems to diagnose cause of malfunction. Tests electronic components and circuits to locate defects, using instruments, such as oscilloscopes, signal generators, ammeters and voltmeters. Replaces defective components and wiring and adjusts mechanical parts, using hand tools and soldering iron. Aligns, adjusts and calibrates testing instruments. Maintains records of repairs, calibrations and test.

Radio Technician (Radio Manufacturing) tests assembled radio sets with testing equipment to ensure that assembly soldering, frequency, performance, etc. are in accordance with prescribed standards. Places assembled radio set in position and visually examines it to ensure that position of components, connections, soldering, wiring, etc. are in order. Switches on and operates different knobs to check calibration, audibility and general performance of set by varying its tone and listening to various stations and frequencies. Tightens loose nuts and screws, locates faults, replaces defective components and conducts necessary changes. Approves correctly assembled sets for further processing and rejects defective ones for rectification. May tests sets at different stages of assembly. May service, repair and overhaul radio sets.

Solar Panel Installation Technician is also known as 'Panel Installer', the Solar Panel Installation Technician is responsible for installing solar panels at the customers' premises. The individual at work checks the installation site, understands the layout requirement as per design, assesses precaution are measures to be taken, installs the solar panel as per customer's requirement and ensures effective functioning of the system post installation.

Optical fibre technician is responsible for maintaining uptime and quality of the network segment(both optical media and equipment) assigned to him by undertaking periodic preventive maintenance activities and ensuring effective fault management in case of fault occurrence. He is also required to coordinate activities for installation and commissioning of Optical Fibre Cable (OF) as per the route plan. **Field Technician: UPS and Inverter** is also called, 'UPS repair Technician', this is an after sales service job for installing and providing support to customers of different types of UPS and inverters. The individual at work installs the newly purchased UPS or inverter. The individual also and interacts with customers to diagnose problems in them, assesses possible causes, rectifies faults or replaces faulty modules or recommends factory repairs for bigger faults as per the route plan. Installation, service, repair and overhaul radio sets service centre. May install television sets.

Television Installation Man installs and adjusts television receivers and antennas, using hand tools. Selects antenna according to type of set and location of transmitting station. Bolts cross arms and dipole elements in position to assemble antenna. Secures antenna in place with bracket and guywires, observing insurance codes and local ordinances to protect installation from lighting and other hazard .Drills and waterproofs holes in building to make passage for transmission line. Connects line between receiver and antenna and fastens it in place. Tunes receiver on all channels and adjusts screws to obtain desired density, linearity, focus and size of picture. Orients antenna and installs reflector to obtain strongest possible reception.

Cable Television Installer installs cable television cables and equipment on customer's premises, using electrician's tools and test equipment: Measures television signal strength at utility pole, using

electronic test equipment. Computes impedance of wire from pole to house to determine additional resistance needed for reducing signal to desired level. Installs terminal boxes and strings lead-in wires, using electrician's tools. Connects television set to cable system and evaluates incoming signal. Adjusts and repairs cable system to ensure optimum reception. May collect installation fees and explain cable service operation to subscriber. May clean and maintain tools, test equipment.

Television Service and Repairman repairs and adjusts radios and television receivers, using hand tools and electronic testing instruments. Tunes receiver on all channels and observes audio and video characteristics to locate source of trouble. Adjusts controls to obtain desired density, linearity, focus and size of picture. Examines chassis for defects. Tests voltages and resistance of circuits to isolate defect following schematic diagram and using voltmeter, oscilloscope, signal generator and other electronic testing instruments. Tests and changes tubes, solders loose connections and repairs or replaces defective parts, using hand tools and soldering iron. Repair radios and other audio equipment. Television **Repair Technician** job role is applicable to both Television manufacturing facilities as well as electronics service centres. This role pertains to rectify faults identified during testing of TV on in manufacturing process and providing after sales assistance and ensuring appropriate functioning of television sets. A TV repair technician identifies the section in the TV that is not functioning. If the problem identified is in the Printed Circuit Board (PCB), the technician identifies the specific fault in the PCB and corrects it. Replaces the dysfunctional PCB with a new one, if the damage identified requires fixing at the service Centre. Plan and organize assigned work and detect & resolve issues during execution. Demonstrate possible solutions and agree tasks within the team. Communicate with required clarity and understand technical English. Sensitive to environment, self-learning and productivity.

16. Mechanic Consumer Electronic Appliances [Duration: 2 years, NSQF Level 4]:

Course Content : During the two years duration of Electronics Mechanic trade, a candidate is trained on Professional Skill, Professional Knowledge and Employability Skill related to job role. In addition to this, a candidate is entrusted to undertake project work and extracurricular activities to build up confidence. The broad components covered under Professional skill subject are as below: - **FIRST YEAR:** In this year, the trainee learns about safety and environment, use of fire extinguishers, artificial respiratory resuscitation to begin with. He gets the idea of trade tools & its standardization, familiarize with basics of electricity, test the cable and measure the electrical parameter. Skilling practice on different types & combination of cells for operation and maintenance of batteries being done. Identify and test passive and active electronic components. Construct and test unregulated and regulated power supplies. Practice soldering and de-soldering of various types of electrical and electronic components on through-hole PCBs. Assemble a computer system, install OS, Practice with MS office. Use the internet, browse, create mail IDs, download desired data from internet using search engines. The candidate will be able to construct and test amplifier, oscillator and wave shaping circuits. Testing of power electronic components. Construct and test power control circuits. Identify and test optoelectronic devices. Verifying the truth tables of various digital ICs by referring Data book. Practice circuit simulation software to simulate and test various circuits. Identify various types of LEDs, LED displays and interface them to a digital counter and test. Construct and test various circuits using linear ICs 741 & 555. **SECOND YEAR:** In this year, the trainee will be able to operate DSO and perform various functions like testing of signal Generator etc. Able to achieve the skill on SMD Soldering and Desoldering of discrete SMD components. Able to identify the defects and do rework of PCB. Construct and test simple electrical control circuits and various electrical protective devices.



Directorate General of Training



Government of Goa



Industrial Training Institute

MAPUSA GOVERNMENT INDUSTRIAL TRAINING INSTITUTE

1st & 2nd floor, BSNL Telephone Exchange Building, P&T Colony, Porvorim, Goa



Mission:

To empower the youth with quality skills, ingrain the spirit of true workmanship and create good workmen and self reliant entrepreneurs.



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MAPUSA GOVERNMENT INDUSTRIAL TRAINING INSTITUTE

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Trade details and eligibility criteria for admissions:

Sr. No.	Trade	NCVT/ SCVT	NSQF Level	Duration	Entry Qualification
Engineering Trades					
1.	Fitter	NCVT	4	2 Years	Passed 10th Class examination with Science and Mathematics or or its equivalent
2.	Electrician	NCVT	4	2 Years	
3.	Electronics Mechanic	NCVT	4	2 Years	
4.	Mechanic Motor Vehicle (DST)	NCVT	4	2 Years	
5.	Mechanic Two and Three Wheeler (DST)	SCVT	3	1 year	
Non-Engineering					
6.	Computer Operator & Programming Assistant	NCVT	3	1 year	Passed 10th class examination
7.	Secretarial Practice (English)	NCVT	3	1 Year	
8.	Marketing Executive	SCVT	3	1 year	
9.	Cosmetology	NCVT	3	1 year	
10.	Food & Beverage Service Assistant (DST)	SCVT	3	1 year	Passed 10th class examination or its equivalent



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Identify, prepare, terminate and test various types of electronic cables used in various electronic systems. Identify various functional blocks and I/O Ports of an 8051-microcontroller system, familiarize with the instruction set of 8051 micro controller. Interface a model application with the Microcontroller kit and run the application. Construct and test various modulation/demodulation circuits. The trainee will identify, and test various types of sensors used in electronic industries and, construct and test circuits using various sensors system. They can construct and test analog and digital IC based application circuits as a part of project work. The candidate will be able to prepare Fiber optic set up and execute transmission and reception. He is also required to coordinate activities for installation and commissioning of Optical fiber cable (OF) as per the route plan. Trainees will be able to identify the defects & faults, and troubleshoot SMPS, UPS & inverter, replace modules of the LCD/LED TV and its remote. The trainee will be identifying the parts, control circuits, sensor of various domestic appliances. Install/ configure various control adjustment of the display, troubleshoot and secure LCD/LED projector, printer. Identify different accessories of DTH, site selection and installation and perform trouble shooting. Trainees will be able to install a CCTV system and configure the system for surveillance function. Identify various controls play switches, troubleshoot and replace faulty board of a home theater. They will plan and carry out the selection of a project, assemble the project and evaluate its performance for domestic/commercial appliances.

SECTOR - ENVIRONMENTAL SCIENCE

17. Solar Technician (Electrical) [Duration: 1 year, NSQF Level 3]:

Course Content : During the one-year duration of Solar Technician (Electrical) trade a candidate is trained on professional Skill, professional Knowledge and Employability Skill. In addition to this a candidate is entrusted to undertake project work and extracurricular activities to build up confidence. The broad components covered related to the trade are categorized in four semesters each of six months duration. The semester wise course coverage is categorized as below:-

During the course the trainee learns about safety and environment, use of fire extinguishers, artificial respiratory resuscitation to begin with. He gets the idea of trade tools & its standardization, identifies different types of conductors, cables & their skinning & joint making. Basic electrical laws and their application in different combinations of electrical circuit are practiced along with laws of magnetism. Performs testing by various Electrical Instruments like Wattmeter, Energy meter, etc. Performs basic Electric energy calculations and understand transmission and distribution of electrical power. The Trainee understands natural planetary movements and sunlight's path. Measures intensity of solar radiation, analyzes shadow effect on incident solar radiation, plots curve of radiation measured and draws a solar map with respect to time for a location. The Trainee learns about characteristics of Photovoltaic cells and modules, Batteries, Charge Controllers and constructs small Solar DC appliances. The Trainee learns to arrange and test solar batteries and their correct disposal. Learns connections and testing of Solar Panel, Charge Controller, Battery Bank and Inverter. Learns types of Inverters used in the Solar system and their application according to the requirements of the project. Prepares bill of material for small, medium and mega solar projects. Plan and prepares reports on building integrated solar mount. Installation and commissioning of Solar PV plant and hybrid plants. The Trainee learns various tests pertaining to PV Modules and their installation as per IEC standards. Understands manufacturing process of solar panels, prepare and commission marketable solar products viz., solar water pump, solar street light, solar fertilizer sprayer etc. The Trainee learns about

electrical maintenance of Inverters/Cables/Junction boxes, inspection of mounting structure of solar modules and replacement of defective fixtures.

Skills Acquired: Solar Panel Installation Technician; is also known as 'Panel Installer', the Solar Panel Installation Technician is responsible for installing solar panels at the customers' premises. The individual at work checks the installation site, understands the layout requirement as per design, assesses precautionary measures to be taken, installs the solar panel as per customer's requirement and ensures effective functioning of the system post installation.

Solar PV System Installation Engineer; is responsible for designing and installing the solar photovoltaic system at the customer's premises to meeting their power requirement. The individual at work evaluates the installation site, designs the installation, plans and arranges for materials, and ensures smooth installation process. The individual also supervises the installation technicians' work.

Solar PV System Maintenance Technician; is responsible for maintenance and effective functioning of the installed solar panels. The individual at work cleans the installed solar modules, checks the photovoltaic system for uninterrupted power output and identifies faults in the PV system.

Module Assembly Technician; is responsible for fixing frames and junction box in the solar module. The individual at work prepares the solar module for final assembly, frames the module and fixes the junction box with cables on the rear side of the module. The individual is also responsible for connecting the tabbing wire from the module to the junction box and soldering them.

Options for employment: Multi-National companies: As Service Engineer, Shop floor technician, and operator in maintenance section; Reputed Government Firms: Telephone Department, Railway Recruitment Board, All India Radio and Doordarshan.

Options for self-employment / Entrepreneurship Development: Can start his own firm, where he can undertake repairs of television, video and audio CD players. Can take dealership of reputed electronic firm and start trading business. Can take Electronic Maintenance of various factories. Can start his/her own business in software such as printing, scanning, Internet etc.

SECTOR - IT & ITES

18. Information & Communication Technology System Maintenance [Duration: 2 years, NSQF level-4] Course Content: During the one-year duration the trainee learn about safety and environment, use of fire extinguishers. They learn to work with various basic Electrical Components, perform all functions of Resistors and Soldering, De-soldering practice, able to recognize different types of Inductors, measure Inductance and uses of Transformer. They know about Capacitor, measure Capacitance and find resonance value of a circuit. Testing and use of Diode to construct basic Electronic components duration Recognize different types of Transistors and use it as Amplifiers in electronic circuit. Construct and test of an application circuit using different types of Semiconductors. Assemble and test various Power Supply circuit. Construct all digital circuit using logic gates and verify truth table. Familiarize charging of acid battery and verify connections. Verify internal parts of CRO and use it to measure voltage, frequency, modulation of modulator/ transmitter. Working with some important Mechanical, Electrical & Electronics Accessories used in information communication system.

The trainee will be able to achieve the skill to work with Word Processing and Spreadsheet Software. Trainees are able to assemble and replace hardware components of Desktop Computer. Installation of Operating System and all other application software. Customization of Operating System and maintenance of system application software. Assemble and replace hardware components of Laptop PC. Replace/ install SMPS and troubleshoot its faults. Familiarize and upgrading various components of Motherboard. Recognize different types of memory devices, chips and its structure.

During the second - year duration, trainee learn about installation and customization of Linux operating system. Installation of Printer, Scanner and troubleshoot their faults. Replace/ install Display Driver Card and servicing, configuration of various display unit. Replace/ install Sound Card and set properties to adjust sound quality. Maintenance and servicing of UPS. Installation and configuration of Modem, System Resources, Add on Cards, Cables & Connectors. Upgrading, maintenance and troubleshooting of PC. Assemble, replace and troubleshooting various parts of Tablet/ Smart Devices. Browsing internet and work with Cloud Computing.

The trainee will be able to set up and configure Networking System using various network devices. Sharing and controlling resource and Internet connection through network. Implement Network Security to protect from various attacks on networking. Installation and basic configuration of Windows Server. Installation, configuration of DNS, Routing and user account customization. Configuration of Server and managing Server Network security and Infrastructure. Installation and basic configuration of Linux server. **Skills Acquired: ICT Engineer;** is responsible for installing and ensuring uptime of the assigned ICT node/network segment, by undertaking preventive maintenance and fault management activities. The ICT Engineer is also responsible for performing upgrades, capacity augmentation, configuration changes and Point Interconnect testing with minimal disruption of services. The ICT or Information and Communication Technology equipment are NodeB/eNodeB, IP and TDM transmission equipment, IP and Packet Core switch, Cloud and Data Centre equipment.

ICT Technician; is responsible to maintain the ICT nodes/installations live on 24x7 basis, observe and repair Level-1 faults/issues in installed ICT equipment at site, carry out specified preventive and corrective maintenance procedures and report relevant network incidents to the supervisor in time for information as well as response. ICT or Information and Communication Technology refers to NodeB/eNodeB, IP and TDM transmission equipment, IP and Packet Core switch, Cloud and Data Centre equipment.

Computer System Hardware Analyst/Hardware Engineer; data processing requirements to plan data processing systems that provide system capabilities required for projected workloads and plans layout and installation of new system or modification of existing system. Confers with Data Processing and Project Managers to obtain information on limitations and capabilities of existing system and capabilities required for data processing projects and projected work load. Evaluates factors such as number of departments serviced by data processing equipment, reporting formats required, volume of transactions, time requirements and cost constraints, and need for security and access restrictions to determine hardware configurations. Analyses information to determine, recommend, and plan layout for type of computers and peripheral equipment, or modifications to existing equipment and system, that will provide capability for proposed project or work load, efficient operation, and effective use of allotted space. May enter data into computer terminal to store, retrieve, and manipulate data for analysis of system capabilities and requirements. May specify power supply requirements and configuration. May recommend purchase of equipment to control dust, temperature, and humidity in area of system installation .May specialize in one area of system application or in one type or make of

equipment. May train users to use new or modified equipment. May monitor functioning of equipment to ensure system operates in conformance with specifications.

System Analysts; analyses user requirements, procedures, and problems to automate processing or to improve existing computer system. Confers with personnel of organizational units involved to analyse current operational procedures, identify problems, and learn specific input and output requirements, such as forms of data input, how data is to be summarized, and formats for reports. Writes detailed description of user needs, programme functions, and steps required to develop or modify computer programme. Reviews computer system capabilities, workflow, and scheduling limitations to determine if requested programme or programme change is possible within existing system. Studies existing information processing systems to evaluate effectiveness and develops new systems to improve production or workflow as required. Prepares workflow charts and diagrams to specify in detail operations to be performed by equipment and computer programmes and operations to be performed by personnel in system. Conducts studies pertaining to development of new information systems to meet current and projected needs. Plans and prepares technical reports, memoranda, and instructional manuals as documentation of programme development. Upgrades system and corrects errors to maintain system after implementation. May assist COMPUTER PROGRAMMER in resolution of work problems related to flow charts, project specifications or programming. May prepare time and cost estimates for completing projects. May direct and coordinate work of others to develop, test, install, and modify programs.

Data Communication Analyst/Network Administrator; researches, tests, evaluates, and recommends data communications hardware and software: Identifies areas of operation which need upgraded equipment, such as modems, fibre optic cables and telephone wires. Conducts survey to determine user needs. Reads technical manuals and brochures to determine equipment which meets establishment requirements. Visits vendors to learn about available products or services. Tests and evaluates hardware and software to determine efficiency, reliability, and compatibility with existing system, using equipment such as computer terminal and modem. Analyses test data and recommends hardware or software for purchase. Develops and writes procedures for installation, use, and solving problems of communications hardware and software. Monitors system performance. Trains users in use of equipment. Assists users to identify and solve data communication problems. May write technical specifications to send to vendors for bid. May oversee or assist in the installation of communications hardware. May perform minor equipment repairs

Options for employment:

Computer System Maintenance Personnel; Supervisor in Electronic Assembly Units; Electronic Technician (Assembly, Test, Maintenance, Troubleshooting & Quality control); Communication & Office Equipment's Maintenance Personnel

Options for self-employment / Entrepreneurship Development

On completion of the course the trainee can undertake repair of Computer Hardware peripherals & maintenance; Electronic & Electrical Maintenance & Repairs (Audio System, TVs, VCDs, Washing Machines, Microwave Ovens etc.); General Office & Communications Maintenance (Telephone, Fax, EPABX etc.); Setup & Maintain Cyber Cafe's Internet, E-mail & Allied Communications & Software Services (Browsing, Scanning, Printing, Computer Typing, Telephone, Fax, Xerox, Leasing of System & Projectors)

SECTOR - PLUMBING

19. Plumber [Duration: 1 year, NSQF level 3]:

Course Content: During the one-year duration a candidate of Plumber trade is trained on subjects Professional Skill, Professional Knowledge, Engineering Drawing, Workshop Science & Calculation and Employability Skills related to job role. In addition to this a candidate is entrusted to make/do project work and Extra Curricular Activities to build up confidence. The practical skills are imparted in simple to complex manner & simultaneously theory subject is taught in the same fashion to apply cognitive knowledge while executing task. The practical part starts with basic pipe work viz. cutting of pipes, threading, joining, etc. and finally to fitting, fixing and laying of hot & cold water pipe line, repairing and reconditioning of waste pipe line at the end of the course. The broad components covered under Professional Skill subject are as below:

The practical part starts with basic fitting in the beginning and the candidate imparted training on allied trades viz., carpenter, Welding (Gas & Arc), Masonry which leads to multi-skilling. In the basic fitting the skills imparted are marking, sawing, chipping, filing, measurement, soldering, brazing, drilling, grinding and observation of all safety aspects is mandatory. The accuracy achieved is of ± 0.25 mm. The safety aspects covers components like OSH&E, PPE, Fire extinguisher, First Aid etc. Cutting Pipes in different angle. Joining of pipes of different diameter and angles by gas welding, thread cutting on different types of pipes & fittings accessories. Making of brick wall and RCC casting. Brick wall cutting for concealing pipe line. Bending of Pipes, Making of pipe line circuit for water distribution, fixing Cocks & valve, Water analysis test, Water Pressure test are being taught. Alignment and laying of humid asbestos pipeline & maintenance of drainage pipe line. Installation and maintenance of Electric pumps, Construction of inspection chamber, manhole, gutter, septic tank, socket etc. Testing of drainage pipe, Removal of leakage pipe line, Installation, fixing & maintenance of valve & cock, water meter, Fixtures, hot & cold water pipe line, Repairing & reconditioning of waste pipe line, Repairing & reconditioning, scraping & painting of sanitary fittings are being taught in the practical. Professional Knowledge subject is simultaneously taught in the same fashion to apply cognitive knowledge while executing task. In addition, components like Physical properties of engineering materials, different types of iron, properties and uses, Heat & Temperature are also covered under theory part. Total three projects need to be completed by the candidates in a group. In addition to above components the core skills components viz., Workshop calculation & science, Engineering drawing, employability skills are also covered. These core skills are essential skills which are necessary to perform the job in any given situation.

Skills acquired: Plumber, General; lays out, assembles, installs and maintains sanitary fittings and fixtures, sewage and drainage systems, heating and sanitary systems, gas and water pipe lines etc. Receives instructions from Sanitary Engineer or Civil Engineer regarding layout of pipes, gas or water mains, position of fixtures and fittings, etc. Examines drawings or other specifications regarding size and dimensions of area where sanitary fittings or pipe are to be fitted or laid. Marks points at places to indicate position for fixing brackets and laying pipes. Drills passage holes in walls or floor of premises and fixes necessary brackets, stands, holders etc. to keep or hold fittings and fixtures in position, using nuts, bolts, clamps etc. and tightens them with hand tools. Cuts reams, threads and bends pipes as appropriate. Ensures that pipe lines are laid properly by Pipe Fitter. Joins pipes with sockets, Tees, elbow etc. or with molten lead or lead wool. Caulks joints (operation of making joint seam tight to withstand pressure) and tests them for leaks with pneumatic or hydraulic pressure. May repair and maintain sewerage and pipe lines by replacing washers on leaky faucets, mending burst pipes,

opening clogged drains, etc. May do lead burning, dressing and bossing of lead pipe and sheet lead, inlaying of wooden tanks, construction of septic tanks etc.

Plumber, Operations; is responsible for operation of plumbing system used in housing, commercial and institutional setups.

Plumber, General-installation and Repair; Plumber (General)-II is responsible for installation and repair plumbing systems including those of advanced sanitary fixtures as per manufacturer's specifications in housing, commercial and institutional setups.

Plumber, General Helper; is responsible for helping Plumber (General) by carrying and handling of tools and materials required in installation, minor repair and maintenance of plumbing systems.

Plumber, General Assistant; is responsible for assistance in, preliminary installation and minor repair work of basic plumbing systems in domestic, commercial and institutional setups.

Plumber, Maintenance and Servicing Assistant; is responsible for assistance in maintenance and servicing of pipes and sanitary fixtures in housing, commercial and institutional setups.

Plumber, Maintenance and Servicing; is responsible for assistance in maintenance and servicing of pipes and sanitary fixtures in housing, commercial and institutional setups.

Pipe Layer/Plumber Pipeline; Sewer Pipe Layer lays concrete, stone ware or clay pipes to form sanitary drains and sewers. Receives instructions regarding size and type of concrete, stone ware or clay pipe to be laid. Digs or gets earth dug along marked lines using spade, picks etc. to make trenches for laying pipes. Levels and smoothens bottom of trenches to proper gradient by scooping with shovels. Receives pipes of required size lowered into trench manually or by pulley and adjusts their position by hand or crow-bar for correct leveling and vertical and horizontal alignment. Joints pipes together using appropriate couplings, joints, rings etc. and closes joints by caulking with fibre and cement to prevent leakage. Tests joints by hydraulic or pneumatic pressure after sealing. Fills trench with earth to cover laid pipe and rams earth to avoid sinking. Is designated as PIPE LAYER WATERMAINS or WATER MAINS FITTER if engaged in laying cast iron or galvanized iron water pipe mains and in caulking their joints with lead to prevent leakage. May lay pipe lines to provide water connection to houses, sanitary sewers etc. May fix meters to stopcocks, remove defects from pipe lines and replace defective ones.

Pipe Fitter; lays, repairs and maintains, pipes for supply of water, gas, oil or steam in buildings, gardens, workshops, stores, ships etc., according to drawings or instructions. Examines drawings and other specifications or receives relevant instructions. Cuts passage holes for laying pipes in walls and floors. Cuts reams, threads and bends pipes according to specifications. Lays pipes in cut passage and assembles pipe sections with couplings, sockets, Tee's elbows etc. Levels position of pipes using spirit level for gravitational flow. Caulks joints, tests them for leakage with pneumatic or hydraulic pressure and secures pipe line to structure with clamps, brackets, and hangers. Fits water meters, taps etc. to pipe where necessary. Repairs and replaces leaky pipe lines, taps and joints and provides connections to overhead water tanks. Helps Plumber, General in fittings sanitary fittings to buildings. May join pipe sections and fittings.

Plumbers and Pipe Fitters, Other; perform number of routine and low skilled tasks such as assisting in laying pipes, making water tight joints, fitting sockets and reducers, threading pipes with taps and

PANAJI GOVERNMENT INDUSTRIAL TRAINING INSTITUTE

Altinho, Panaji, Goa



Mission

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✉ : panaji-iti.goa@nic.in

Trade details and eligibility criteria for admissions:

Sr. No.	Trade	NCVT/ SCVT	NSQF Level	Duration	Entry Qualification
Engineering Trades					
1.	Fitter	NCVT	4	2 Years	Passed 10th Class examination with Science and Mathematics or its equivalent.
2.	Electrician	NCVT	4	2 Years	
3.	Mechanic Motor Vehicle	NCVT	4	2 Years	
4.	Refrigeration and Air Conditioning Technician	NCVT	4	2 Years	
5.	Welder	NCVT	3	1 Year	Passed 8th class Examination
6.	Plumber	NCVT	3	1 Year	
Non-Engineering					
7.	Computer Operator & Programming Assistant	SCVT	3	1 Year	Passed 10th Class examination
8.	House Keeper	SCVT	3	1 Year	
9.	Food Production (General)	NCVT	3	1 Year	
10.	Front Office Assistant	SCVT	3	1 Year	
11.	Food Production (General)	SCVT	3	1 Year	
12.	Food & Beverage Service Assistant	NCVT	3	1 Year	Passed 10th class examination or its equivalent
13.	Food & Beverage Service Assistant	SCVT	3	1 Year	
14.	Multipurpose Health worker (Male) -DST	SCVT	Non NSQF	2 Years	Passed 12th Class examination



dies, removing leakages, etc., and are designated as Plumber Mate or Pipe Fitter Helper according to type of work done.

Plumber (Welder)/Plumbing (Sanitary Fixtures) Fitter Assistant; is responsible for welding activities related to plumbing works in housing, commercial and institutional setups. **Plumber (Welder) Assistant;** is responsible for assistance in welding activities related to plumbing works in housing, commercial and institutional setups.

Plumber (Pumps and E/M Mechanic); is responsible for installation and repair of Pumps and E/M equipment used for different plumbing applications of housing, commercial and institutional Set ups. **Options for employment:** Plumber in Government departments/PWD, Star hotels, Industries, etc.; Pump Operator, Plumbing Supervisor and Pipe Fitter in Ship industries and oil refineries. **Options for Self-Employment / Entrepreneurship Development:** Plumbing contract for domestic and industries; Establish Hardware shop; Maintenance contracts of domestic lines and industrial lines.

SECTOR - POWER

20. *Electrician [Duration: 2 years, NSQF level-4]:*

Course Content: In the first year the trainee learns about safety and environment, use of fire extinguishers, artificial respiratory resuscitation to begin with. He gets the idea of trade tools & its standardization, identifies different types of conductors, cables & their skinning & joint making. Basic electrical laws like Kirchhoff's law, ohm's law, laws of resistances and their application in different combinations of electrical circuit are practiced along with laws of magnetism. The trainee practices on circuit for single phase and poly-phase circuits for 3 wire /4wire balanced & unbalanced loads. Skilling practice on different types & combination of cells for operation and maintenance is being done. Wiring practice with installation of different accessories like ICDP switch, distribution fuse box and mounting energy meters are practiced as per IE rules for hostel/residential building, workshop and its fault detection is done by trainee. The trainee will practice for pipe & plate earthing. Different types of light fitting are to be done like HP/LP mercury vapour and sodium vapour are prominent. The trainee will practice on different types of measuring instruments like multimeter, wattmeter, energy meter, phase sequences meter, frequency meter, for measurement of electrical parameters in single & three phase circuits. He will gain skill on range extension, calibration and testing of meters. Practice for dismantling, assembling and testing of heating element equipment, induction heating equipment, grinding machines and washing machines will be done by trainee. Skill will be gained on transformer for operation, efficiency, series parallel operation, replacement of transformer oil and combination of single phase transformers for 3 phase operation. The trainee will practice on winding of small transformer.

In the second year, the trainee will study the details of rotating machines: DC machines, induction motors, alternators & MG sets and practice on them. The trainee will practice on determining characteristics, their performance analysis, starting, speed control and reversing direction of rotation of machines. He will practice on parallel operation & synchronization of alternators, winding practice and over hauling will be practiced for DC machine and induction motors. Practices on diodes for bridge rectifier, switching devices & amplifiers by electronic components, different wave shape generation and testing by CRO is carried out. Designing control cabinet, assembling control elements

and their wiring are to be practiced. Speed control of AC/DC motors by electronic controller is being practiced. The trainee will practice on testing, analyzing and repairing of voltage stabilizer, emergency light, battery charger, UPS and inverter. He will gain knowledge of thermal, hydel, solar & wind energy systems. The trainee will practice on distribution system, domestic service line and accessories & their protection by practicing on relay and circuit breaker for operation and maintenance.

Skills Acquired: Electrician General: installs, maintains and repairs electrical machinery equipment and fittings in factories, workshops power house, business and residential premises etc. Studies drawings and other specifications to determine electrical circuit, installation details etc. Positions and installs electrical motors, transformers, switchgears. Switchboards and other electrical equipment, fittings and lighting fixtures. Makes connections and solders terminals. Tests electrical installations and equipment and locates faults using megger, test lamps etc. Repairs or replaces defective wiring, burnt out fuses and defective parts and keeps fittings and fixtures in working order. May do armature winding, draw wires and cables and do simple cable jointing. May operate, attend and maintain electrical motors, pumps etc. **Electrical Fitter:** fits and assembles electrical machinery and equipment such as motors, transformers, generators, switchgears, fans etc., Studies drawings and wiring diagrams of fittings, wiring and assemblies to be made. Collects prefabricated electrical and mechanical components according to drawing and wiring diagrams and checks them with gauges, megger etc. to ensure proper function and accuracy. Fits mechanical components, resistance, insulators, etc., as per specifications, doing supplementary tooling where necessary. Follows wiring diagrams, makes electrical connections and solders points as specified. Checks for continuity, resistance, circuit shorting, leakage, earthing, etc. at each stage of assembly using megger, ammeter, voltmeter and other appliances and ensures stipulated performance of both mechanical and electrical components fitted in assembly. Erects various equipment such as bus bars, panel boards, electrical posts, fuse boxes switch gears, meters, relays etc. using nonconductors, insulation hoisting equipment as necessary for receipt and distribution of electrical current to feeder lines. Installs motors, generators, transformer etc. as per drawings using lifting and hoisting equipment as necessary, does prescribed electrical wiring, and connects to supply line. Locates faults in case of breakdown and replaces blown out fuse, burnt coils, switches, conductors etc. as required. Checks, dismantles, repairs and overhauls electrical units periodically or as required according to scheduled procedure. May test coils. May specialize in repairs of particular equipment manufacturing, installation or power house work and be designated accordingly.

Options for employment: Huge job opportunities in electricity department, public sectors, private and Govt. industries in power generation, transmission, distribution stations and abroad job opportunities as electrician, lineman, service technician, lab technician, electrical supervisor, re-winder etc.

Options for self-employment / Entrepreneurship Development: License certificate for self-employment, wiring contractors, own shop for repairs of domestic appliances, motor rewinding, sale of electrical materials and appliances, set up own electrical workshop, undertake contract of installation of machinery, panel boards and bus bars in industries.

21. **Wireman [Duration: 2 years ,NSQF level-4]:**

Course Content: In the first year the trainee learns about safety and environment, use of the fire extinguisher, artificial respiratory resuscitation to begin with. In this year, the trainee learns about safety and environment, use of fire extinguishers, artificial respiratory resuscitation to begin with. He gets the idea of planning & preparing good quality electrical wire joints for single and multi-stand

conductors suitable for applications with soldering and taking suitable care and safety. The trainee will be able to draw and set up DC and AC circuits including R-L-C circuits with accurate measurement of voltage, current, resistance, power, power factor and energy using ammeter, voltmeter, ohm-meter, watt-meter, energy meter, power factor meter and phase sequence tester with proper care and safety, plan, draw, estimate material, wire up and test different type of domestic wiring circuits as per Indian Electricity rules and taking care of quality, Construction and working of MCB & ELCB. Test a domestic wiring installation using Megger. The trainee will identify the type of batteries, construction, working and application of Ni- cadmium, lithium cell, lead acid cell etc. Demonstrate their charging and discharging, choosing appropriate method and carryout the installation and routine maintenance with due care and safety. He will plan & select to carry out basic jobs of marking out the components for filing, drilling, and riveting, fitting and assembled using different components independently, plan and install Pipe & Plate earthing. Measure earth resistance by earth tester, select and perform electrical/electronic measurements with appropriate instrument. He should plan and execute electrical illumination system viz. FL tube, HPMV lamp, HPSV lamp, Halogen & metal halide lamp, CFL, LED lamp etc., plan, draw, estimate material, wire up and test different type of industrial wiring circuits as per Indian Electricity rules and taking care of quality. He will be able to plan, draw, estimate material, wire up and test different type of commercial and computer networking wiring circuits as per Indian Electricity rules and taking care of quality. In the second year, the trainee will learn to construct and test Half-wave, full-wave, and bridge rectifiers with filter & without filter. He will be able to identify the constructional features, working principles of DC machine. Starting with suitable starter, running, forward and reverse operation and speed control of DC motors. Conduct the load performance test of DC machine with due care and safety. Maintain and troubleshoot of DC machines. He will recognise the constructional features, working principles of single phase and 3 phase AC motors. Starting with suitable starter, running, forward and reverse operation and speed control of AC motors with due care and safety. He should be able to identify the constructional 1. COURSE INFORMATION 2 Wireman features, working principles of Alternator set. Test, Wire-up and run alternator. Synchronization of Alternator with due care and safety, identify the types, constructional features, working principles of transformer (single & three phase) Connect and test Transformer. He should be able to prepare single line diagram and layout plan of electrical transmission & distribution systems and power plants with knowledge of principle applied. Make and test power connection to substation equipment s with care and safety. He will select, assemble, test and wire-up control panel, plan, estimate and costing of different types of wiring system as per Indian Electricity rule. **Skill acquired** :Wireman, Light and Power installs various kinds of electrical wiring such as cleat, conduit, casing, concealed etc. in houses, factories, workshops and other establishments for light and power supply. Studies diagram and plan of wiring and marks light, power and other points accordingly. Fixes wooden pegs, sizes tubes, saws casings, etc. by common carpentry fitting and other processes, according to type of wiring needed. Erects switch boards and fixes switch box casings cleats, conduits ceiling roses, switches, meters etc. according to type and plan of wiring. Draws wire in two way or three way wiring system as prescribed and makes electrical connections through plugs and switches to different points exercising great care for safety and avoiding short circuit and earthing at any stage of wiring. Fixes fuses and covers as per diagram and insulates all naked wires at diversions and junctions to eliminate chances of short circuit and earthing. Fits light brackets, holders, shades, tube and mercury lights, fans etc., and makes electrical connection as necessary. Tests checks installed wiring for leakage and continuity using megger, removes faults if any and certifies wiring as correct for connecting mains. Checks existing wiring for defects and restores current supply by replacing defective switches, plug sockets, blown fuse etc. or removing short circuits and faulty wiring as necessary. May repair simple electrical

domestic appliances.

Options for employment: Huge job opportunities in electricity department, public sectors, private and Govt, industries, in power generation, transmission, distribution stations as wireman, lineman, service technician, lab technician, wireman supervisor, etc.

Options for self-employment / Entrepreneurship Development: License certificate for self employment, wiring contractors, own shop for repairs of domestic appliances, sale of electrical materials and appliances, set up own electrical workshop, undertake contract of installation of machinery, panel boards and bus bars in industries.

SECTOR - LOGISTICS

22. In Plant Logistics Assistant [Duration: 1 year, NSQF level-3]:

Course Content: During the one-year duration of In Plant Logistics Assistant trade a candidate is trained on professional skills & knowledge, Engineering Drawing, Workshop Calculation & Science and Employability skill related to job role. In addition to this a candidate is entrusted to undertake project work and extracurricular activities to build up confidence. The Broad components covered during the course are given below: The Broad components covered during the course are given below: During the Course the trainee learns about Safety and Precaution which includes different type of dangerous goods and associated risks and ways of handling, Safety rules and Procedures, SOP and the handling procedure in case of miss-happenings, safety policy inside the company premises, Importance of Proper usage of PPE and consequences of wrong usage, Details OSHA and its application, 5S and its implementation and practice and how to maintain Health, Safety and Security measures during operations etc. The trainee will learn Physical requirements for performing functions (Body Positions).He will learn basics of supply chain logistics and Understand key concepts of Logistics in a manufacturing setup and supply chain logistics .The trainee will practice the key activities of inbound, In plant and outbound activities like Loading, Unloading, Receiving, sorting, Storing, Picking and dispatch activities, basic of inventory & stores management. He will also practice different types of inventory management, the use of Technology and equipment like computer based scanners, RFID scanners, other associated software used in inplant logistics, Inbound process like Identify and classify raw materials / goods into different types, Out-bound process like read and verify dispatch orders and collect acknowledgment and delivery reports and Prepare reports related to inventory change, dispatches, delivery success, inbound receipts.

Options for employment: Can join industry as Technician and will progress further as Senior Technician, Supervisor and can rise up to the level of Manager. • Can become Entrepreneur in the related field. • Can join Apprenticeship program in different types of industries leading to National Apprenticeship certificate (NAC). • Can join Crafts Instructor Training Scheme (CITS) in the trade for becoming instructor in ITIs. • Can join Advanced Diploma (Vocational) courses under DGT as applicable.

NON- ENGINEERING TRADES:

SECTOR – APPAREL

23. Sewing Technology [Duration: 1 year, NSQF level-3]:

Course Content: Recognize & comply safe working practices, environment regulation and housekeeping. Work in a team, understand and practice soft skills, technical English to communicate with required clarity. Understand and explain the concept in quality tools and labour welfare legislation and apply such in day to day work to improve productivity & quality. Explain energy conservation, global warming and pollution and contribute in day to day work by optimally using available resources. Explain entrepreneurship and manage/organize related task in day to day work for personal & societal growth. Understand and apply basic computer working, basic operating system and uses internet services to get accustomed & take benefit of IT developments in the industry .In one year duration trainees are learning to make hand stitches in the given fabric. Stitch the following using the given fabric Seams with seam finishes: Darts ,Pleats, Tucks ,Gathers & Shirring, Frills, Hems, Casing, Edge Finishing ,Neck line, Plackets, Pockets, Collar, Sleeves, Cuff .Fix the fasteners on the given fabric. Mend the given fabric. Draft a pattern for Ladies Suit, Sew a Ladies Suit with the help of the given pattern. Sketch the following garments:-Ladies Tops/Short kurthies, Ladies Suit, Nightwear (one piece/two piece), Sari Blouse, Dresses for New Born, Dresses for Toddler, Dresses for Kids. Construct the following garments with fitting and quality according the sketched designs:-Sari Petticoat, Ladies Top/Short Kurthies, Ladies Suit, Nightwear (One Piece with Yoke),Nightwear (Two Piece - Night suit),Sari Blouse (Simple Model - Plain),Dress for a Newborn (Jhabla),Dress for a Toddler (Sun Suit), Dress for Kids (Frock),Dress for Kids (Frock), Gent's Casual Shirt, Gent's Trousers.

Skills acquired:

This course is meant for the candidates who aspire to become Sewing Machine operator ,Assistant to Designer, Assistant worker in Boutique, Assistant to Garment Designer and Assistant to Garment Coordinator.

Options for employment: The trainee can be employed as an assistant to a designer, an operator or supervisor in garment industry or get employed in tailoring industry / shops, hospitals, jails, defence forces and in the film industry.

Options for self-employment / Entrepreneurship Development: The trainee can set up his / her own tailoring shop for stitching ladies and gents garments. He / She can also setup a manufacturing unit of readymade garments with the help of various Government Schemes.

24. Fashion Design and Technology [Duration: 1 year; NSQF level-3]

Course Content: Basic salesoperations, Billing and record keeping, Management principals, Fashion concepts and Marketing research, Supply chain and logistics, Basic operating and functional behaviour of consumers, Product detailing, Branding and labeling, Thematic window display, Product launching, Folding, casing & presentation of garments, Colour scheme, Colour effects, Knowledge of different varieties of beads, sequins, shells, pearls, and other ornamental materials used in garments and Sarees, Knowledge about importance of Bead work and ornamentation. Understanding of different traditional motifs, fabrics and threads. Different methods of ornamentation. Tie and dye, Basic disciplines in the industry.

Skills Acquired: On completion of the course, the trainee will have skills of fashion concepts,

Marketing research, supply chain and logistics, basic operating and functional behaviour of consumers, product detailing, branding and labeling, creating theme based window display, product launching, folding, casing & presentation of garments, maintaining the records of receipts, productions and deliveries, and also cash transactions in sales, shall have knowledge of beadwork, tie and dye, traditional Indian embroideries, & industrial knowledge.

Options for employment: Work as an Assistant in Sales in any garment show room / Mall etc.

Options for self-employment/Entrepreneurship Development:

Start own business doing bead work using different types of beads, making regional embroideries from all over India, creating tie & dye on fabrics, taking marriage dresses orders.

25. Dress Making [Duration: 1 year; NSQF level-3]

Course Content: During the one-year duration of "Dress Making" trade, a candidate is trained on Professional Skill, Professional Knowledge and Employability Skills related to the job role. In addition to this, a candidate is entrusted to undertake project work, extracurricular activities and on-the-job training to build up confidence. The broad components covered under Professional Skill subject are as below: - The broad professional skills covered as part of the skill training starts with making hand stitches in the given fabric; Stitching the following using the given fabric: Seams with seam finishes, Darts, Pleats, Tucks, Gathers & Shirrs, Frill, Hem, Casing, Edge Finishing, Neck lines, Placket, Pocket, Collar, Sleeves, Cuff.

Then the trainee learns how to fix the fasteners on the given fabric, mend the given fabric as per requirement. He/she is also able to draft a pattern for Ladies Suit & Sew a Ladies' Suit with the help of the given pattern. The trainee starts sketching the following manually by applying suitable fabric designs Indian Dresses & Western Dresses. Then he/she designs the following with suitable fabric design using Corel draw software- Indian Dresses & Western Dresses. The trainee is able to make the following Block Pattern set using different sizes taken from a size chart - Children's Block, Block for Teenager, Ladies Block, Gents Block; makes the patterns for the following using Draping Techniques - Basic Bodice with Darts, Basic Bodice with Princess line, Basic Straight Skirt, Basic Circular Skirt. He/she becomes capable of constructing the following garments with fitting and quality according to the sketched designs and blocks using adaptation/draping and manipulation techniques - Dress for Children (Yoke Frock), Dress for Teenager, Ladies Dress, Ladies Suit, Ladies Night wear, Ladies Blouse, gents' Shirt, gents' trouser. In the later phase of the first year, they are able to make patterns of the following by Pattern Grading techniques to their next higher or lower sizes using the size charts. Also make markers on different width, texture & designs of the following- Frocks, Blouses, Shirts, Trousers

Skills Acquired: Can join industry as Craftsman and will progress further as Senior Craftsman, Supervisor and can rise up to the level of Manager. Can become Entrepreneur in the related field. Can join Apprenticeship programs in different types of industries leading to a National Apprenticeship certificate (NAC). Can join Crafts Instructor Training Scheme (CITS) in the trade for becoming an instructor in ITI s. Can join Advanced Diploma (Vocational) courses under DGT as applicable.

SECTOR :AUTOMOTIVE

26. Driver cum Mechanic [Duration: 6 months, NSQF level-3]:

Course content: During the Six Months duration a candidate of 'Driver cum Mechanic (LMV)' trade is trained on Professional Skill, Professional Knowledge and Employability Skill related to job role. In addition to this a candidate is entrusted to make / do project work and Extra Curricular Activities to build up confidence. The broad components covered under Professional Skill & Professional Knowledge subjects are as below: After completion of this course the trainee will be able to drive Light Motor Vehicle drive safely on the assigned route without Company of a senior driver and will ensure Road worthiness of the vehicle through pre-operational checks also the trainee will drive in conformance to standard driving practices and follow Traffic Regulations and maintenance of good road conduct. Apart from driving the vehicle the trainee will also be able to carry out the Basic Servicing of vehicle, carry out checks of steering and suspension system for its road worthiness, Basic Servicing of front and rear wheels, brake, check ignition circuit for proper functioning. Also the trainee will be able to Communicate with required clarity and understand technical English, environmental issues, self-learning and productivity.

Skills Acquired: To drive Light Motor Vehicle safely & efficiently on public & private roads, following all Rule and regulations in force & giving no room for accidents that causing damage to other road users, public & private properties, passengers and goods being carried. Strictly maintaining scheduled times for passengers embarking/disembarking & goods loading /unloading. To collect passenger or goods as per information received from office. Maintain politeness with passengers and follow all the safety/security measures. Calculate appropriate fares communicating/collecting the same from passengers. Calculate the freight costs based goods weight & volumes and the distance and communicate / collect from the consigner. Proper discharge of passenger or goods at the appropriate place as per instruction and time schedules. Communicate & handover the passenger fare / freight amounts with relevant information to office/owner. Always keep statutory documents / records pertaining to self, the vehicle, passengers & goods & to present when demanded by the concerned authorities. Understand & follow the regulation while transporting the Hazardous goods. To know about the vehicle & various system available and use them judiciously. Maintain the vehicle in good working condition, doing pre-checks before starting the vehicle. Plan & carry out timely recommended services by manufacturers. Maintain operating vehicle economically by achieving good KMPL & better tyre life.

To maintain good relationship with other crew members and be courteous with other road users.

Maintain physical & mental fitness all the times though stress releasing methods.

Options for employment: He can work as a driver in any workshop, factory or in service centre.

Options for self-employment / Entrepreneurship Development: Can start taxi business; giving Vehicle on hire business; Setting up own workshop, private service centre, driving school.

SECTOR - BEAUTY & WELLNESS

27. Cosmetology [Duration: 1 year, NSQF level-3]:

Course Content: Recognize & comply safe working practices, environment regulation and housekeeping. Work in a team, understand and practice soft skills, technical English to communicate

with required clarity. Identify and develop specific area to perform practical operations. Explain energy conservation, global warming and pollution and contribute in day to day work by optimally using available resources. Explain personnel finance, entrepreneurship and manage/organize related task in day to day work for personal & societal growth. Explain and apply basic computer working, basic operating system, simulate preprogrammed using simulation software and uses internet services to get accustomed & take benefit of IT developments in the industry. Understand and explain the concept in productivity, quality tools, and labor welfare legislation and apply such in day to day work to improve productivity & quality. Explain occupational safety and health, hygiene, accident prevention techniques and first aid. Develop good appearance and behavior, practice, tasks as per industry standard and express good communication skill. Prepare and maintain work area and maintain health and safety at the work place. Carry out epilation and depilation services. Illustrate and explain hair structure & hair growth cycle. Carry out manicure and pedicure services. Explain anatomy of nail. Differentiate between and identify nail disease nail disorders. Carry out facial treatments for common skin problems. Illustrate and explain skin structure. Carry out hair treatment for common hair problems. Illustrate and explain structure of hair. Create basic haircuts using special cutting techniques. Demonstrate basic yogic exercises for stamina building and correcting body posture. Demonstrate day, evening, party & bridal makeup and explain effects of light on makeup. Demonstrate basic corrective makeup & explain basic facial shapes. Create traditional hair styles using artificial aids. Create hair designs using thermal gadgets and wet styling techniques. Demonstrate hair coloring, perming, straightening, re bonding & smoothing. Explain the knowledge of bonds. Create bindi, heena & tattoo designing, drape saree in different styles.

Skills acquired: A Cosmetologist job role provides various types of beauty services, aware of the Beauty therapy, Health and hygiene, Safety & needs to be knowledgeable about beauty products. They must able to perform Basic Epilation, Manicure, Pedicure, Facial treatments, Haircuts, Hair Styles, Hair Coloring, Straightening, Re bonding, perming & Hair treatments. They are also able to demonstrate different types of makeup & basic corrective makeup. A cosmetologist must be able to perform and demonstrate basic Yoga asana & Meditation in order to remain fit & active for long working hours as they have to work under pressure, be polite & patient. Demonstrate the operation of Beauty & Hair Equipment's. Plan and organize assigned work and detect & resolve issues during execution. Demonstrate possible solutions and agree tasks within the team. Communicate with required clarity and understand technical English. Sensitive to environment, self-learning and productivity.

Option for employment: Beautician in the Beauty Parlours in India and abroad; Beauticians or Hairdresser in the Film Industry Instructors in the gymnasium and Health fitness center/club; Councilor on Beauty Care. **Options for self-employment / Entrepreneurship Development:** The trainee can set up a Beauty Parlour. Offer Hair & Skin treatment, Bridal makeup and dressing at home, Mehendi designing and preparation of herbal cosmetic products. Organize fashion shows.

SECTOR - FOOD INDUSTRY

28. Food Production (General) (Durations year, NSQF level - 3):

Course Content: In this course the trainee learns about elementary first-aid, fire-fighting, environment

regulation and housekeeping, etc. The trainee identifies trade tools, kitchen equipment and kitchen operation process. He understands the importance of personal hygiene, cleanliness of kitchen/ cooking utensils, food handling and hygiene protective clothing. He practices safe handling of kitchen knives and other hand tools. He identifies basic ingredients, spices, condiments, herbs, pulses, vegetables, fruits, continental vegetables and various meat products, etc. The trainee understands and practices various cuts of vegetables viz. Julienne, jardiniere, bru noise, and passion cuts, etc. The trainee learns preparing mise en place and practices various cooking methods viz. Blanching, sauteing, steaming, stewing, roasting, grilling, braising, baking, etc. He prepares and practices basic Indian foods like dal, vegetables, chutney, raita, Indian bread etc. The trainee learns to prepare ala carte menu for breakfast/ buffet. He also learns to prepare, season and cook soup, meats, vegetable and other food stuff. He learns to make varieties of exotic Indian foods based on regional cuisine/ ethnic royal cuisine and various continental/ Chinese food. The trainee learns to work in the Garde manger and prepares various salads, salad dressings, sandwiches, canapes, fruit juice and other cold foods, etc. The trainee learns to work in a bakery and prepares various desserts and sweet dishes viz. breads/ bread rolls, soup sticks, pastries, jam tort, swiss roll, puff, patties, cookies and cakes, etc. The trainee learns to cook varieties of Indian and continental chicken and meat recipes. It is also demonstrated to the trainee via presentation about the activities which are not feasible to be practiced at the Institute viz. non- seasonal ingredients, various cuts; lamb, beef, mutton, pork and game bird, etc. The trainee also undergoes four weeks on-the- job training in various hotel industries at the end of year which gives them more practical exposure to industrial environment.

Skills acquired: Cook, Institutional; prepares, seasons and cooks soups, meats, vegetables, desserts and other foodstuff for consumption in hotels, restaurants and other establishments. Fries, boils, broils, roasts or steams vegetables, meats, fish and other food to prepare dishes listed on menu and prepare salads, sandwiches, cakes, fruit juices and other cold foods. Supervises dish washing and preparing of vegetables and other foodstuff for cooking. May specialize in preparing a particular cuisine such as Indian/Chinese/Continental or specialize in Garde manger/bakery and be designated accordingly. **Cook, Domestic;** prepares and cooks meals in private households. Plans menu according to own judgment or employer's instructions and prepares soup, salad, breads, lentil, vegetables and meats. Cooks foodstuff according to recipes or own judgment. Cleans or supervises cleaning of kitchen and cooking utensils. May serve meals, perform duties of valet and be designated as COOK-BEARER. **Cook, Ship** Cook, Ship on board ship. Plans menu taking account of foods in season and local availability. Cooks food stuffs in quantities according to menu and number of persons to be served. Cleans, cuts and cooks meat, fish and poultry and bakes breads and pastry. Washes dishes and cleans galley and galley equipment. May order supplies and maintain record and accounts. May supervise activities of one or more workers who assist in preparing and serving, meals.

Cooks, Other; prepare special food or dishes in private households or public eating places and include cooks not elsewhere classified, such as SWEET MASTER plans and prepares general and special sweet dishes, in hotels, restaurants and other such establishments. DIETCOOK prepares special diets for people under medical restriction. Tea and coffee maker brews and prepares beverages like coffee and tea in hotels, clubs or similar establishments and ensures proper cleanliness of stall. **Options for employment:** Hotels, Motels Resorts Airlines Travels Agencies, Catering Companies, Clubs, Cruise Ships, Bars, Fast Food, Casinos, etc.

Options for self-employment / Entrepreneurship Development: They can start their own restaurant and catering establishment.

SECTOR - IT & ITES

29. Computer Operator and Programming Assistant (COPA)[Duration: 1 year, NSQF level-3]:

Course Contents: The trainee learns about safety and environment, use of fire extinguishers. They learn about trade tools, identify computer peripherals, internal components, basic DOS commands, Windows and Linux interface and its related software installation process. Trainees will work with MS Office package to create word document, practice with excel sheet and get idea to create a good power point presentation, maintain database with MySQL. They will set up and configure a network system of an organization. They will use internet to search information using browser along with official/social communication process. Trainees will create basic static webpage using HTML. At the end of this semester trainees can go on industrial visit or projects specified in the syllabus.

The trainee learns scripting language i.e. JavaScript and will develop dynamic webpage and hosting technique in a registered domain. They will use Python/JAVA to learn programming fundamentals and create basic applications. Data manipulation using Power Query and Power BI. Trainees will learn E-commerce system and will be able to browse, select and transact using different E-commerce websites. They will identify different type of cyber crimes now days and will be able to secure information from Internet by using cyber security concept. At the end of this semester trainees can go on industrial visit or projects specified in the syllabus.

Skills acquired: Computer Operator: Computer Operator operates computer and peripheral equipment to process business, scientific, engineering, or other data, according to operating instructions. Enters commands, using keyboard of computer terminal, and presses buttons and flips switches on computer and peripheral equipment, such as tape drive, printer, data communications equipment, and plotter, to integrate and operate equipment, following operating instructions and schedule. Loads peripheral equipment with selected materials, such as tapes and printer paper for operating runs, or oversees loading of peripheral equipment by Peripheral Equipment Operators. Enters commands to clear computer system and start operation, using keyboard of computer terminal. Observes peripheral equipment and error messages displayed on monitor of terminal to detect faulty output or machine stoppage. Enters commands to correct error or stoppage and resume operations. Notifies supervisor of errors or equipment stoppage. Clears equipment at end of operating run and reviews schedule to determine next assignment. Records problems which occurred, such as down time, and actions taken. May answer telephone calls to assist computer users encountering problem. May assist workers in classifying, cataloguing, and maintaining tapes.

Programming Assistant: Programming Assistant installs, maintains and updates computer programs by making minor changes and adjustments to them under the guidance of computing professionals. Maintains and updates documents of computer programs and installations. Applies knowledge of principles and practices in the area of programming and computing in order to identify and solve problems arising in the course of their work. They may receive guidance from managers or professionals. May supervise other workers also.

Options for employment: Assistant programmer in software development firms; Faculty member or Lab Assistant in Computer Institutes or Schools; Internet Operator in Cyber Cafe; Computer operator in office/industry; Assistant to Service Engineers/Network technician; Sales person in Hardware & software firms etc. They also can be employed as Data Entry Operators / Office Assistant / Data Analyst /Network Assistant as well as apprentice in Govt. and Pvt. Sector.

Options for self-employment/Entrepreneurship Development:

Opening a Computer Institute, Cyber cafe & DTP center, Opening a Computer Consumable shop; Taking up data processing jobs.



Government of Goa

FARMAGUDI GOVERNMENT INDUSTRIAL TRAINING INSTITUTE

Farmagudi, Ponda - Goa

Mission: Enhance the quality of Vocational Skills for providing industry relevant skills and Entrepreneurship initiatives.



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FARMAGUDI GOVERNMENT INDUSTRIAL TRAINING INSTITUTE

Farmagudi, Ponda - Goa

Trade details and eligibility criteria for admissions:

Sr. No.	Trade	NCVT/ SCVT	NSQF Level	Duration	Entry Qualification
Engineering Trades					
1.	Fitter	NCVT	4	2 years	Passed 10th Class examination with Science and Mathematics or its equivalent.
2.	Machinist	NCVT	4	2 years	
3.	Electrician	NCVT	4	2 years	
4.	Instrument Mechanic	NCVT	4	2 years	
5.	Refrigeration and Air Conditioner Technician	NCVT	4	2 years	
6.	Mechanic Diesel	NCVT	3	1 year	
7.	Mechanic Motor Vehicle (DST)	NCVT	4	2 year	
8.	In Plant Logistic Assistant	SCVT	3	1 year	
9.	Electronics Mechanic	NCVT	4	2 years	
10.	Draughts man (Mechanical)	NCVT	4	2 years	
11.	Draughtsman (Civil)	NCVT	4	2 years	Passed 10th Class examination
12.	Information & Communication Technology System Maintenance	NCVT	4	2 years	
13.	Welder	NCVT	3	1 year	Passed 8th class examination
14.	Plumber	NCVT	3	1 year	
Non-Engineering					
15.	Computer Operator & Programming Assistant	NCVT	3	1 year	Passed 10th Class examination
16.	Digital Photographer	SCVT	3	1 year	
17.	Dress Making	SCVT	3	1 year	Passed 8th class examination
18.	Food & Beverage Service Assistant (DST)	SCVT	3	1 year	Passed 10th class examination or its equivalent

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30. Desktop Publishing Operator :[Duration: 1 year, NSQF Level-3]:

Course Content: Install and setup operating system and related software in a computer following safety precautions. Create, format, edit text file, document file and BMP file by using different Accessories of Windows. Create, edit, format and enhance document using word processing application software. Introduce the Networking concept including sharing of different resources, use of Internet, accessing/ browsing, downloading and e-mailing. Create, format and edit different publication using publication software Adobe PageMaker. Install and setup scanner and scan the documents and images. Create, format, edit and develop images using Adobe Photoshop software. Draw, edit, format and develop graphics design using Corel draw application software. Create, edit, format and develop page combining text and graphics using page makeup Adobe In Design application software. Create, edit and format different types of publication using bilingual software. Print, bind and publish to form a full-fledged book format.

Skills Acquired: Desktop Publishing Operator lays out pages, selects size and style of type, and enters text and graphics into computer to produce printed materials, such as advertisements, brochures, newsletters, and forms, applying knowledge of graphic art techniques and typesetting and using computer: Reviews layout and customer order. Enters text into computer, using input device such as mouse, keyboard, scanner, or modem. Scans artwork, using optical scanner which changes image into computer-readable form. Enters commands to position text and illustrations on page grid of computer monitor. Creates spaces between letters, columns, and lines, applying knowledge of typesetting, and enters commands, using input device. Arranges page according to aesthetic standards, layout specifications of Graphic Designer, and applying knowledge of layout and computer software. Prints paper or film copies of completed material. May alter illustration to enlarge, reduce, or clarify image. May operate automatic film developer to process photographs. May assemble artwork into paste-up and perform key lining manually.

Options for employment: DTP Artist / Visualiser in Advertising Company; DTP Operator in Newspaper Publishing Industry, Print & Packaging Company; Prepress In-charge in Printing Industry, Service Bureau; Data Entry Operator in Office Administration, as a faculty in Computer Institutes and schools.

Options for self-employment / Entrepreneurship Development: DTP Service Centre: Typesetting of various types of jobs, Photocopying, Lamination & Spiral binding; Commencing a Digital Printing, Offset & Screen Printing venture; Starting an Advertising Agency: undertake Newspaper advertisement & designing of numerous types of advertising materials; Freelancer: Graphic designing of promotional material for events & exhibitions.

31. Multimedia, Animation & Special Effects [Duration: 1 year, NSQF Level-3]:

Course Content: In this course the trainee learns about safety and environment, use of fire extinguishers. They learn about computer peripherals, Windows interface and its related software installation process. Trainees will work with MS Office package for basic knowledge of computer. Trainees will work with Photography like Adobe Photoshop to edit image, retouch and fixing image using color, filter and for digital painting. They also learn and experience with application software with Adobe Photoshop illustrator for advance editing and graphic design. In this semester the trainees also learn Videography to practice the craft of film making, video streaming with advance features of camera. At the end of this semester trainees can go on industrial visit or projects specified in the syllabus.

The trainee also learns to browse internet, load/download video streaming and secure data from different cyber-attack. They will work with Adobe Premier for video editing, mixing audio, text, image and video. Trainees will work with Adobe after effect to add special effect and compositing on video. They will work with Flash to create 2D animation, graphic illustration and compositing sound animation.

. The trainees will learn and experience in 3Ds Max to create 3D architectural Design, 3D modeling and texturing. Finally the trainees will work with Maya to create 3D animation, 3D modeling, Texturing, Rigging, Lighting, Rendering artist. At the end of this semester trainees can go on industrial visit or projects specified in the syllabus.

Skills Acquired: Multi Media Artist and Animator/Animator: Multi-Media Artists and Animators create special effects, animation, or other visual images using film, video, computers, or other electronic tools and media for use in products or creations, such as computer games, movies, music videos, and commercials. Apply story development, directing, cinematography, and editing to animation to create storyboards that show the flow of the animation and map out key scenes and characters. Assemble, typeset, scan and produce digital camera-ready art or film negatives and printer's proofs. Convert real objects to animated objects through modeling, using techniques such as optical scanning. Create and install special effects as required by the script, mixing chemicals and fabricating needed parts from wood, metal, plaster, and clay. Create basic designs, drawings, and illustrations for product labels, cartoons, direct mail, or television. Create pen-and-paper images to be scanned, edited, coloured, textured or animated by computer. Create two dimensional and three-dimensional images depicting objects in motion or illustrating a process, using computer animation or modeling programmes. Design complex graphics and animation, using independent judgment, creativity, and computer equipment. Develop briefings, brochures, multimedia presentations, web pages, promotional products, technical illustrations, and computer artwork for use in products, technical manuals, literature, newsletters and slide shows.

Cameraman, Animation: Cameraman (Animation) operates special camera to make animated cartoon motion picture film. Discusses with Director and Producer, (Film) and renders advice about camera movements and feasibility of variety of shot; envisages in script and chart and suggests alternatives wherever necessary. Receives animation charts and drawings. Sets and adjusts camera and lighting exposure appropriate to type of film used and mood and effect to be emphasized. Installs frame on camera table for exposure and positions overhead camera suspended securely over frame. Shoots frame by frame in a predetermined sequence and regulates exposure and aperture to obtain special effect such as fade out or fade in. Instructs Laboratory Technicians about method of processing of films, which need special treatment for effective development of striking feature of certain shots.

Options for employment: Work with of Newspaper/Advertising agencies and News Channels. Work with Event management companies.

Options for self-employment / Entrepreneurship Development:

Start own business doing News Reporting/Writing and Editing, Operate Lighting and Sound consoles, Operate Digital Still and Movie Cameras, Carry out Audio/Video recording and editing, Make Audio and Video CD's, Films etc.

32. Computer Hardware & Network Maintenance [Duration: 1 year, NSQF level-3]:

Course Content: Basics of electrical and electronic component related to hardware and networking system. Assembly and repair of desktop PC and laptops. Installation of different operating systems and all other application software, customization of OS, updating device driver, setting firewall security, junk file removal, data backup and data recovery techniques. Use of word, excel, power point. Install and work with Linux environment. Install and configure different types of printers, scanners and its troubleshooting. Study of various network devices like router, modems, switches, crimping and punching cables. Setting up and configuring network system, setting IP addressing techniques. Sharing and

control of resources and internet connection over network. Creating Wi-Fi network. Networking security. Install and configure Windows & Linux server and add different roles. Use of Internet, send e-mails, etc.

Skills Acquire Computer System Hardware Analyst/Hardware Engineer: Plan layout and installation of new system or modification of existing system. Recommend and plan layout for type of computers and peripheral equipment, or modifications to existing equipment and system that will provide capability for proposed project or work load, efficient operation, and effective use of allotted space. Data entry into computer terminal to store, retrieve, and manipulate data for analysis of system capabilities and requirements. Specify power supply requirements and configuration. Recommend purchase of equipment to control dust, temperature, and humidity in area of system installation. Maintenance of Servers, desktops, scanners, printers and networking devices. CCTV surveillance system. Monitor functioning of equipment to ensure system operates in conformance with specifications.

Data Communication Analyst/Network Administrator: Research, test, evaluate and recommend data communication hardware and software. Identifies areas of operation which need upgraded equipment, such as modems, fiber optic cables and telephone wires. Conducts survey to determine user needs. Test and evaluate hardware and software to determine efficiency, reliability, and compatibility with existing system, using equipment such as computer terminal and modem. Analyze test data and recommend hardware or software for purchase. Monitors system performance. Train users in use of equipment. Assist users to identify and solve data communication problems. Writing technical specifications to send to vendors for bidding. Oversee or assist in the installation of communications hardware. Designing and creating network layout. Crimping and punching network cables. Installation of network rack. Configuring and installation of network devices like routers, modems, access points, switches, etc. Configuring Servers.

Options for employment: Technician for maintenance & servicing of different hardware and networking equipment's, Assistant to System & Network Engineer, Supervisor in hardware assembly units, Sales person in hardware & networking, Faculty members or Lab Assistant in Computer Institute.

Options for self-employment / Entrepreneurship Development: To start a business in sales, service and maintenance of computer hardware, software and networking. To start a Computer Institute, setup and maintain a cyber cafe.

SECTOR-MEDIA & ENTERTAINMENT

33. Digital Photographer [Duration: 1 year, NSQF level-3]:

Course Content: During the one-year duration, the trainee learns about elementary first-aid, firefighting, environment regulation and housekeeping, etc. The trainee identifies trade tools, digital cameras, compact and SLR. The trainee will be able to do the practical by the use of natural light, tungsten light, fluorescent light, single and multiple electronic flash reflectors, exposure meters, studio flash and its accessories. They will also be able to do the practical on various lighting techniques for different lenses and will do practice on special areas of photography in outdoor and indoor conditions. They will be able to do practical on computer system by digital editing software, printing the photographs taken by digital cameras and will be able to do the image transportation to the storage media, sending photographs through E-mail and to Scan photographs, capture frames and analysis of images. There will be a visit to studio for six weeks where they will be able to handle the digital Video cameras, Tape, DVD, HDD, accessories and exposure to take different common shots, dimension of

images and movements as per requirement.

The trainee will be able to do lighting of different areas of video shooting, practice on three point lighting indoor and outdoor. Taking photographs using different types of lenses using different aperture, shutter speed setting for still, Video camera, CCTV and spy camera. Taking photographs of portrait, studio photography, commercial/Advertisement photography, sports photography, fashion photography, slow and fast moving objects, functions, machines and processes, landscape, architecture, night photography children, animal, birds, shooting spot etc. by digital camera. They will have the concept of audio video recording, mixing, editing, dubbing of sound, using different types of microphones. Shooting of different areas and topics such as sports, wildlife, modeling, drama, documentary, serial, story board making, news, interview, seminar/ workshop, industrial, live broadcasting, musical event, advertisement, etc. The trainee also undergoes two weeks on-the- job training in various studios/labs at the end of the year which gives them more practical exposure to the professional working environment.

Skills Acquired: Digital Photographer General; takes photograph of persons, places, or other subjects, using various kinds of photographic equipment. Measures day light using exposing meter or arranges artificial lighting and holds or places camera at desired angle and distance from subject to be photographed. Focuses lens and adjusts lens opening and exposure time. Loads camera with film or plate. Presses lever to open lens shutter and exposes film or plate by pressing lever, allowing time, if for publication. Supplies series of pictures on selected topics, for writing feature articles in magazines. May develop films and print copies. Photographers and Image and Sound Recording Equipment Operators, Other take photographs of persons, places and objects and record sound for different purposes and include Photographers, Image and Sound Recording Equipment Operators not elsewhere classified. **Photographer News;** or Press Photographer photographs news events, persons or objects for use in news-papers, magazines and other publications. Receives instructions from News Editor or Chief Reporter regarding nature of pictures to be taken. Travels to location; loads camera with film, waits for suitable moment and takes photographs. Attends State functions and parties and takes photographs of important persons arousing special interest of news value for publication. Accompanies important visitors and dignitaries and takes photographs of significant events associating important persons. Removes exposed film for developing and printing. Examines print, gives appropriate title or heading, and hands it over to News Editor.

Photographer, Aerial; photographs objects, places and areas of vital importance from aero planes in flight, for use in surveys, planning, development and other scientific and military purposes. Determines number of exposures and time lapse between them by making necessary calculations. Loads camera, adjusts exposure-time and exposes film by opening shutter at calculated intervals. Operates and maintains automatic camera and photo equipment for aerial photographs. Develops aerial films of various types in automatic, semi-automatic or manual tank developers. Makes prints for photo interpretation.

Digital photographic institutions; it will provide the familiarization with the institution, its importance of trade training & professional use of Digital camera into different types of uses into variety of interests of the Govt, and public sectors. After getting trained, the trainee will be able to do the job for making short documentary, news items, and interviews of great personalities of different areas, music videos and professional photography for wild life, modeling, drama documentary, serial, story board making news, live broadcasting, seminar/workshop industrial, musical event, advertisement as well as domestic purposes etc.

Digital Photographer- Work with of Newspaper/Advertising agencies and news Channels. Work with Event management companies, Photography studios. **Options for self-employment/Entrepreneurship Development:** Start own business doing news reporting/ writing and Editing, Photography for various

occasions like wedding , birthdays, seminars, parties operate Digital Still and Movies cameras, carry out Audio/ video recording and editing, Make audio and video CD'S Films etc. **Options for employment:** Work with of Newspaper/Advertising agencies and News Channels. Work with Event management companies, photography studios,

Options for self-employment / Entrepreneurship Development: Start own business doing News Reporting/Writing and Editing, , photography for various occasions like weddings, birthdays, seminars, parties Operate Digital Still and Movie Cameras, Carry out Audio/Video recording and editing, Make Audio and Video CD's, Films etc.

SECTOR - OFFICE ADMINISTRATION & FACILITY MANAGEMENT

34. Stenographer & Secretarial Assistant (English) [Duration: 1 year, NSQF level-3]:

Course Content: The trainee learns about safety and environment, use of Stenographer Secretarial Assistant English, artificial respiratory resuscitation to begin with. He gets the idea about the computer hardware & its peripherals, CLASSIFY THE CONSONANTS & ITS DIRECTION /JOINING THE CONSONANTS, Distinguish between long & short vowels, Describe Logograms, Gramalogues Contraction & use of 'the' /punctuation mark. Understand Diphthong, Prepare Windows operating system on computer, Compare all types of alternative forms & recognize the finger positioning on the computer keyboard, Compare all types of alternative forms & recognize the finger positioning on the computer keyboard, Recognize the direction of SHR & SHL, Observed curved hooked strokes and compound consonant, Recognize Final Hooks, Recognize Final Hooks, List the prefixes, List the suffixes, Identify the monetary units & use it. This semester also includes shorthand, translation, and note taking techniques and applies on computer for speed typing in MS-Word. The trainee will be able to experiment the MS-Excel, Label the office layout, Name the dispatch and diary register & maintain computer from virus effect, Identify all types of file & prepare MS-Power point, Demonstrate MS-PowerPoint Presentation, Create E-Mail ID, correspondence through mail, filling up online forms and documents for registration etc., booking tickets for rail, bus, air and hotels, Identify all types of official tools & equipment s, Observe all types of postal services, Prepare all types of letters, notice, agenda, minutes, reports, circular & memorandum. Trainees will able to maintain calendar of event and general Banking Correspondence.

Skills Acquired: Stenographer Secretarial Assistant (English) takes dictation in shorthand and reproduces it on paper using computer and performs various other clerical duties to assist superiors. Maintain a good mannerism and professional approach with the boss. Following are the job roles for a Stenographer Secretarial Assistant (English): Correspond through emails, phone and faxes. Maintaining and updating filing systems. Coordinating with department heads to ensure smooth working of the organization. Handling day-to-day administrative duties of the organization. Making arrangement for meetings, conference and seminars. Handling various activities within and outside the organization. Taking dictation in shorthand and operating computer for transcribing dictated materials. Handled and maintained correspondence files and other official documents. Made travel bookings for domestic and international services. Drafted business letters in clear and precise manner for easy understanding. Coordinated business meetings and wrote minutes of meetings in shorthand. Handled confidential information of the organization. Prepared reports and documents for inter-department. Handled day-to-day activities of the organization. Prepared various presentations for the management team.

Options for employment: Work in many settings such as Stenographer Secretary and Administrative Assistant, Except Legal, Medical, and Executive clerical and administrative functions such as drafting correspondence, scheduling appointments, organizing and maintaining paper and electronic files, or

providing information to callers.

Options for self-employment / Entrepreneurship Development: A professional can get self employment by setting up own commercial institution, call centre, contractual worker etc.

35. MARKETING EXECUTIVE [Duration 1 years, NSQF Level 3]:

Course Content: This course for one-year duration primarily deals with management skills. The trainee will learn about basic computer, internet skills and Elementary first aid. The trainee will also get the idea of Communication skills, Functional grammar, Entrepreneurship, Quality concepts, advanced internet applications, Occupational safety & health, and basic concepts of economics. The trainee learns about functional grammar and is capable in improving written skills required to work in any sector as well as the complete knowledge of MS-word, Excel, Power point along with basic and advanced internet application. Trainee will also be able to prepare reports, role-playing, delivering presentations and they undergo training also. The trainee learns to use modern technology for collection of data and input recommendations, The trainee practices on designing different kinds of formats, modules, review and feedback charts. The trainee is aware about the career opportunities available for them at entry level and what different job positions they can hold after joining the particular concern. The trainees appraise with the idea of how to manage the database in the organization, designing the product, pricing and discounts, channel of distribution, promotion mix and relationship building.

Skills Acquired:

Excellent communication skills and the ability to network

Team working skills

Adaptability and the ability to juggle multiple projects.

Good organization and planning skills

Creativity, writing and design skills

Commercial awareness

Options for Employment:

Can be employed in Multinational Company as Marketing Associate

Can be employed with the Marketing agencies

Can work with consulting firms that provide marketing services

Offering marketing services on a free lancing or consulting basis to various clients.

Joining startups in the technology where marketing plays a vital role in building brand awareness and user acquisition.

36. Secretarial Practice(English)[Duration: 1 year, NSQF level-3]:

Course Content: During the one-year duration of “Secretarial Practice (English)” trade, a candidate is trained on Professional Skill, Professional Knowledge and Employability Skill related to job role. In addition to this, a candidate is entrusted to undertake project work, extracurricular activities and on-the-job training to build up confidence. The broad components covered under Professional Skill subject are as below: -

The trainee learns about safety and environment, use of Secretarial Practice English, artificial respiratory resuscitation to begin with. He gets the idea of about the basic computer fundamentals& its peripherals, classify the consonants & its direction / joining the consonants, distinguish between long &

short vowels, Describe Logograms, Grammalogues Contraction & use of 'the' /punctuation mark. Understand Diphthong, Prepare Windows operating system on computer, Compare all types of alternative forms & recognize the finger positioning on the computer keyboard, Compare all types of alternative forms & recognize the finger positioning on the computer keyboard, Recognize the direction of SHR & SHL, Observed curved hooked strokes and compound consonant, Recognize Final Hooks, Recognize Final Hooks, application of the prefixes and suffixes, Identify the monetary units & use it, Identify the monetary units & use it. In this year trainees able to write in shorthand, translation, note taking techniques and apply on computer for speed typing in MS-Word.

The trainee will be able work with MS-Excel by manipulating data, maintain office stationeries, maintain simple accounts with formulas and functions, Label the office layout, Name the dispatch and diary register & maintain computer data safety, Identify all types of file requirements & implement the same on MS-Power point, Demonstrate MS-PowerPoint Presentation, searching of information with internet browser, Create E-Mail ID, correspondence through mail, filling up online forms and documents for registration etc., booking tickets for rail, bus, air and hotels, Identify all types of official tools & equipments, Observe all types of postal services, Prepare all types of letters, notice, agenda, minutes, reports, circular & memorandum. Trainees will able to maintain calendar of event and general Banking Correspondence.

Skills Acquired: Perform routine clerical and administrative functions such as drafting correspondence, scheduling appointments, organizing and maintaining paper and electronic files, or providing information to callers. Following are the job roles for a Secretarial Practice (English):

- Answer telephones and give information to callers, take messages, or transfer calls to appropriate individuals.
- Arrange conferences, meetings, and travel reservations for office personnel.
- Complete forms in accordance with company procedures.
- Compose, type, and distribute meeting notes, routine correspondence, and reports.
- Greet visitors and callers, handle their inquiries, and direct them to the appropriate persons according to their needs.
- Locate and attach appropriate files to incoming correspondence requiring replies.
- Mail newsletters, promotional material, and other information.
- Maintain scheduling and event calendars.
- Make copies of correspondence and other printed material.
- Open, read, route, and distribute incoming mail and other material, and prepare answers to routine letters.
- Schedule and confirm appointments for clients, customers, or supervisors.
- Set up and maintain paper and electronic filing systems for records, correspondence, and other material.
- Take dictation in shorthand or by machine, and transcribe information.
- Keep records of collections and disbursements.
- Conduct searches to find needed information, using such sources as the Internet.
- Coordinate conferences and meetings.
- Learn to operate new office technologies as they are developed and implemented.
- Manage projects, and contribute to committee and team work.
- Operate electronic mail systems and coordinate the flow of information both internally and with other organizations.
- Prepare and mail checks.
- Provide services to customers, such as order placement and account information.
- Review work done by others to check for correct spelling and grammar, ensure that company format policies are followed, and recommend revisions.
- Operate office equipment such as fax machines, copiers, and phone systems, and use computers for spreadsheet, word processing, database management, and other applications.

Options for employment: Trainees who have undergone training under Secretarial Practice trade have multiple job opportunities at par with Stenography trade in the offices of the Government, Judiciary, Legislatures, Public Sector Undertakings, along with trade, commerce and industry. A Matric (10th) or Intermediate (12th) Pass student can become a Stenographer Grade D, Assistant Sub Inspector (Steno) in various Police Departments, a LDC, Jr. Assistant or Head Constable (Ministerial) and Stenographer Grade C, or Personal Assistant (PA); a graduate with a speed of 100-120 w.p.m. can become Executive Assistant, Sr. Personal Assistant, Private Secretary, Vocational Teacher/Instructor,

JTO, Training Officer, Assistant Director (Stenography) in Govt. Departments or a Sr. Stenographer, PS, Judgment Writer/Court Master in judiciary; a graduate with professional competence in Stenography can become Personal or Private Secretary to high executives in Multi-national Corporations, Public Sector Undertakings and Business Organizations with vast promotional avenues; a graduate with a speed of 140 w.p.m. can become Assembly Reporter through direct recruitment in State Legislatures and Parliamentary Reporter (Class I Gazetted) in both Houses of Parliament with a speed of 140-160 w.p.m. in Shorthand with promotional avenues as Dy. Director, Joint Director, Director and Joint Secretary through UPSC Exams.

Options for self-employment / Entrepreneurship Development: A professional can get self-employment by setting up own commercial institution, call centre, contractual worker etc. even in the rural or remote areas.

SECTOR - TOURISM & HOSPITALITY

37. Food and Beverage Service Assistant (Duration: 1 year, NSQF level – 3):

Course Content: The trainee learns about elementary first-aid, firefighting, environment regulation and housekeeping, etc. The trainee identifies trade tools, kitchen equipment and kitchen operation process.

He understands the importance of personal hygiene, cleanliness of kitchen/ cooking utensils, food handling and hygiene protective clothing. He practices safe handling of cutlery/crockery/ glassware. The trainee can Carry and balance food/ beverages/equipments on a tray. Adopt methods and techniques of different styles of service - American/ French/ English/ India. Carry out room service operations. The trainee can Arranges set up tray for room service for American/ English/ Continental/ Indian breakfast and breakfast layout in coffee. He can Arrange S set up cover for a la carte and table d'hote menu. He learns to receive the guest, seating at the table and serving water, present the menu, take order, raise KOT, BOT, food pick up service and service of food.

The trainee learns to serve non-alcoholic Beverages like Tea, Coffee, Aerated Drinks, Milk shakes, Juices, Tisanes etc. Serve Alcoholic Beverages like Red wine, White wine, Sparkling wines etc. Serve fermented beverages, Beer etc. Serve Spirits like Vodka/ Rum/ Whisky/ Brandy/ Tequila etc. Prepare, serve and dispense mock tails, whisky based cocktails, Gin based Cocktails, Vodka based cocktails S Rum based cocktails, serve Cigars, Cigarettes and change the ash tray, Serve cheese, Serve salads, Ice creams and Soups. Design the layout of restaurant. Separate the activities and maintain log books, records ,Proformas .The trainee also undergoes four weeks On Job training in various hotel industries which gives them more practical exposure to industrial environment.

Skills Acquired: Steward, Hotel; supervises work of Dining Room Waiters Pantry Man and Room Service Waiter and ensures that guests are served promptly and courteously in dining room. Receives customers in dining hall and escorts them to tables and obtains orders from customers and ensures that food is served promptly by Waiters. Visits rooms, halls and other areas to ensure that they are kept clean and tidy. Ensures that glass, china and silver wares are in good order. Prepares dining halls for banquets and special occasions by decorating them with flower vases and arranging tables and chairs in pleasing fashions. Keeps record of any breakage of crockery or loss of cutlery. May keep kitchen equipment, crockery, cutlery etc., under his charge and issue them as needed. May purchase food supplies and kitchen equipment and check them for quality and quantity. May supervise storage and issue of supplies.

Waiter, Institutional/Food and Beverage Service-Steward; Bearer (Institutional) serves food, snacks, beverages to customers, guests in hotels, bars, and restaurants. Prepares table with clean

linen, condiments containers, glasses, menu-card and obtains orders from customers. Collects food, beverages, snacks etc., from kitchen according to customers' orders from Pantry Man and serves them. Waits on customers periodically for additional requirements, of food etc. Removes used plates, cups, saucers from table and presents bill to customers and collects cash and hands it to Cashier. Is designated as WAITER (dining room) if employed in serving food in dining rooms and LOUNGE WAITER if engaged for serving beverages and snacks in lounge.

Options for employment: Hotels, Motels Resorts Airlines Travels Agencies, Catering Companies, Clubs, Cruise Ships, Bars, Fast Food, Casinos, Etc.

Options for self-employment / Entrepreneurship Development: They can start their own restaurant, bar and catering establishment.

38. House Keeper [Duration: 1 year, NSQF level – 3]:

Course Content: The trainee learns about elementary first-aid, fire fighting, environment regulation and housekeeping, etc. The trainee understands the importance of personal hygiene, cleanliness and basic principles of sanitation of the environment. He practices basic and special cleaning procedures, maintenance of toilets. He learns the different process of water treatment and purification, removal of bacteria. Trainees gather knowledge of removal and control technique unwanted odours in the premises. He learns the methods of handling and disposal of solid, liquid waste. He knows the methods of extinction of fire by the different fire fighting equipment's and awareness of handling the dangerous situations occurring by natural calamities. He will be able to supervise the precaution, control and eradication of the pest, rodent and animal nuisance.

The trainee learns to maintain the environment pleasant to boarders, staff and visitors. He learns to make aesthetic and suitable arrangement of soft furnishing. The trainee learns quantitative and qualitative requirement of lightings in different areas. The trainee acquires knowledge in linen services, viz. selection, procurement, storing, sterilizing, replacing and accounting. The trainee learns to maintain house-keeping equipment. The trainee also supervises both internal and external environmental hygiene of lodging premises and carries out infection control measures. He monitors and maintains various housekeeping records and documents. He acquires knowledge of basic computer operations to maintain the material and service management data. The trainee also undergoes two weeks on-the-job training in various hotels at the end of the year which gives them more practical exposure to banquet and lodging environment.

Skills Acquired: Housekeeper (Domestic); organizes and supervises work of Domestic Servants for maintaining house in clean and orderly manner. Allots work to various staff under control and supervises their work. Ensures proper maintenance and cleanliness of house. Purchases provisions and other necessities as advised and maintain accounts. Looks after needs and comforts of guests and visitors. May also look after children. May assist in shopping.

Domestic Housekeepers, Others; include housekeepers who organize, supervise and carry out housekeeping functions in out residential building. May collect fruits from the garden and rent and pay taxes. Housekeeper maintains a clean, sanitary, comfortable and tidy environment for either private households or commercial establishments. Housekeeper able to :- Perform a variety of cleaning activities such as sweeping, mopping, dusting and polishing, Sort, wash, load and unload laundry, Iron and press clothing and linen, Ensure all rooms are cared for and inspected according to standards, Operate mechanized cleaning equipment, Maintain all cleaning equipment and materials in a safe and sanitary working condition, Protect equipment and make sure there are no inadequacies, Notify superiors on any damages, deficits and disturbances, Deal with reasonable complaints / requests with

professionalism and patience, Answer over telephone and take messages, Check stocking levels of all consumables and replace when appropriate, Maintain record of related expenditure, Adhere strictly to rules regarding health and safety and be aware of any company related practices, Maintain house keeping control desk, importance, role, Co-ordination, check list, key control, Handling Lost and Found, Handling of Guest queries, problem, request, Being able to use the equipment safely and efficiently, Prepare different flower arrangements for different areas- lobbies, front office, restaurants, guestrooms, banquet halls etc. An awareness of green issue

Options for employment: Hotels, Airlines, Travel Agencies, Catering Companies, Clubs, Cruise Liners, can start own Business/Agency related to Cleanliness and provide services to Restaurant, Bar, Catering Establishments, Offices & Conferences, other domestic ceremonies, etc.

39. Front Office Assistant [Duration: 1 year, NSQF level- 3]:

Course Content: During this course the trainee learns about safety and environment, adheres to all safety procedures and informs management. Confers and cooperates with other departments as needed to ensure coordination of activities. Answering inquiries pertaining to hotel services, registration of guests, shopping, dining, entertainment, and travel directions, carryout responsibility for proper key control and other security measures, keep records of room availability and guests' accounts, operates the front office computer system, familiarization with office machines, networking and internet communication concept. Develops excellent interpersonal communication and customer service skills, accommodates guests of hotel by greeting, performing guest transactions. Learns about up-selling and suggestive selling techniques to increase the revenues of the business, responsibility to maintain guest departure & post departure activities, start-of-shift activities, handling cash and non-cash transaction, bucket check, conflict management, Night Audit for forecasting the previous sales and inventory, performing computation, briefing and debriefing checklist, Use paging system for the most complete and reliable solution to improve your business efficiency and observing the rules and regulations regards to checking in and checking out.

Skills Acquired: Front Office Assistant; receives customers, attends to enquiries, assigns rooms after consulting register for availability of room and looks after requirements of patrons. Settles terms and allots required accommodation if available to customers. Requests customers to fill and sign register to establish identity, time of arrival and expected departure. Gets statutory form filled up by foreign visitors coming to stay. Guides customers to allotted rooms, maintains hotel 'Board' up-to-date showing name of occupants, etc. Maintains Hotel record up-to-date showing total number of rooms already occupied, rooms booked or reserved to show correct position of accommodation. Gives information to House Keepers, dining section and kitchen departments regarding arrival of new-comers and their requirements. Supplies details of services rendered to customers to concerned officer for preparing bills for presentation to customers. Presents bills to customers and releases amount from them prior to their departure. Incoming and outgoing postal dealings, forward messages on behalf of management and delivers it to clients. Attends the customer for other requirements. Trainee may be required to do correspondence.

Options for employment: Excellent opportunities in the Hotel Industry and Tourism, etc.

Options for self-employment / Entrepreneurship Development: To start own business such as restaurant, Bar, Catering Establishment, etc.

SECTOR - SAFETY & SECURITY

40. Fire Technology and Industrial Safety Management (Duration; 1 year, NSQF level -3)

VASCO GOVERNMENT INDUSTRIAL TRAINING INSTITUTE

Bogda, Vasco, Goa



Mission & Objective

Our Focal mission is to ensure in providing a steady flow of skilled/Semi-Skilled personnel to the industrial/Non-Industrial Sector and to ever reduce unemployment amongst the educated youth by equipping them with required skills, education and in various disciplines of their life for suitable industrial future employment and also creating a scope for self-employment as well. Our Focal mission is to ensure in providing a steady flow of skilled/Semi-Skilled personnel to the industrial/Non-Industrial Sector and to ever reduce unemployment amongst the educated youth by equipping them with required skills, education and in various disciplines of their life for suitable industrial future employment and also creating a scope for self-employment as well.

Tel. No. : 0832-2524030
Website : www.itivasco.goa.gov.in
Email ID : vasco-iti.goa@nic.in

VASCO GOVERNMENT INDUSTRIAL TRAINING INSTITUTE

Bogda, Vasco, Goa

Trade details and eligibility criteria for admissions:

Sr. No.	Trade	NCVT/ SCVT	NSQF Level	Duration	Entry Qualification
Engineering Trades					
1.	Fitter	NCVT	4	2 years	Passed 10th Class examination with Science and Mathematics or its equivalent.
2.	Electrician	NCVT	4	2 years	
3.	Refrigeration and Air Conditioner Technician	NCVT	4	2 years	
4.	Electronics Mechanic	NCVT	4	2 years	
5.	Attendant Operator (Chemical Plant)	SCVT	4	2 years	
6.	Mechanic Diesel	NCVT	3	1 year	Passed 8th class examination
7.	Welder	NCVT	3	1 year	
8.	Wireman	NCVT	4	2 years	
9.	Plumber	NCVT	3	1 year	Passed 10th class examination.
10.	Solar Technician (Electrical)	NCVT	3	1 year	
Non-Engineering					
11.	Computer Operator & Programming Assistant	NCVT	3	1 year	Passed 10th class examination.
12.	Desktop Publishing Operator	NCVT	3	1 year	
13.	Cosmetology	SCVT	3	1 year	
14.	Sewing Technology	SCVT	3	1 year	Passed 8th class examination
15.	Food & Beverage Service Assistant (DST)	SCVT	3	1 year	Passed 10th class examination or its equivalent

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Course Content: During the one-year duration of “Fire Technology and Industrial Safety Management” trade a candidate is trained on professional skill, professional knowledge and Employability skill related to job role. In addition to this a candidate is entrusted to undertake project work, extracurricular activities and industrial visit to build up confidence. The broad components covered under Professional Skill subject are as below:- During the one-year duration trainee learns about the following:-

- Chemistry of Combustion- Triangle of fire, Fire tetrahedron, classification of fire, fire behavior, stages of fire, method of fire extinguishment and some important definitions like, flash point, fire point- ignition temperature, Auto-ignition temperature, flammability Range etc.
- Discipline: - introduction, importance of discipline, General principles of discipline, essentials for discipline and outward signs.
- Fire Extinguishers; - Types of fire extinguishers, method of operation and care & maintenance.
- Hose & hose fittings: types of hose-suction hose, delivery hose, and hose reel hoses, decay and prevention method of hoses, care & maintenance. Marking & repairing of hose, standard test of suction hose, types & construction of suction hose. Types of hose fittings and its use. Branches & nozzles, adapters, breaching, couplings, hose ramps, collecting heads and other miscellaneous tools and equipment.
- Hydrant & Fittings: - types of water supply, water distribution system, types of hydrants, hydrant gears, and equipment marking, testing care & maintenance & Operation.
- Pump & Primers:- classification of pump, why centrifugal pump is suitable for firefighting- types of primers, testing, faultfinding, care and maintenance and standard test.
- Foam & Foam Making equipment: - water as an extinguishant -its merits and demerits, introduction to all types of foam concentrations, properties of foams and techniques of extinguishment by foam, types of foams, characteristics of good foam, foam making equipment, mechanical. High expansion and low expansion foam storage of foam compound. Foam compatibility with Dry chemical powder.
- Extension Ladder: - types of ladders, construction features of conventional ladders, operational use, elementary knowledge of TTL. & snorkel.
- Breathing Apparatus set: -introduction of types of BA Sets in use, working principles and care and maintenance.
- Anatomy of Fire: Definition of combustion, elements of combustion, production of combustion, heat of reaction a calorific value.

Option for employments is compulsory to appoint Fire and safety officer in every establishment and this is unique course in the state has wide scope of employment.

SECTOR - ELECTRONICS & HARDWARE

41. SMARTPHONE TECHNICIAN CUM APP TESTER [Duration 6 Months, NSQF Level 3]:

Course Content: During the six months duration of Smartphone Technician cum App Tester trade a candidate is trained on professional skills and professional knowledge related to job role. In addition to this a candidate is entrusted to undertake project work and Extra-Curricular Activities to build up confidence. The broad components covered related to the trade are categorized in six months duration as below:- The trainee begins with learning first aid, firefighting and various safety practices for working in industry environment. Identifies and checks different electronic components used in mobiles phone

and understand their working. He does practicals on soldering/ de-soldering, understands different sections and circuits of mobile phones starting with basic GSM and CDMA sets. Understands various concepts and technologies used in basic mobiles, smartphone and tablets. The Trainee learns to disassemble/ assemble smartphones, identify defects and practices on replacement of different components viz., mic, speaker, connectors, ICs, camera, display, etc. He does practicals on OS installation, reboot procedure, password cracking, Removes virus, perform installation of firmware, encryption/ decryption, use of third party software, flash different android dead phones, etc. The trainee learns to troubleshoot Software problems using internet, backup data, update and provide hard drive solutions. He also learns mobile app testing to verify functionality of mobile applications on Android/ iOS platforms, performs mobile app Security to find and fix mobile app security flaws, ensures prevention of malware and data theft and

Troubleshoot Mobile Applications Performance. Also the trainee will learn to Communicate with required clarity, understand technical English, environment regulation, productivity and enhance self-learning.

Option for employment: Can join industry as Technician and will progress further as Senior Technician, Supervisor and can rise up to the level of Manager. *Can become Entrepreneur in the related field.*Can join Cellphone industry, information technology department, service centre, or a computer sales environment.* Can work in a mobile repairing store or at the authorized service centre or start own repair and servicing shop.

SECTOR – AEROSPACE & AVIATION

42. Drone Pilot (Junior) [Duration 6 Months, NSQF Level 3]:

Course Content: During the six months duration of Drone Pilot (Junior) Trade a candidate is trained on professional skills and professional knowledge related to job role. In addition to this a candidate is entrusted to undertake project work and Extra-Curricular Activities to build up confidence. The broad components covered related to the trade are categorized in six months duration as below: - The trainee begins with learning first aid, firefighting and various safety practices for working in industrial environment. Recognizes DGCA Safety Regulations & develop safety attitude while flying RPA. Identifies & selects different types of RPA & Fundamentals of Flight (Aerodynamics), ATC procedures & Radio Telephony, different regulations of DGCA, Civil Aviation Requirements, Weather and meteorology. Develops & applies knowledge on RPA system and sub systems. Identifies & selects Electronic Speed Controllers (ESC) & flight Controllers for RPAs. Recognizes application of Batteries, Chargers & Connectors, Transmitters & Receivers, Cameras, Gimbals & other payloads. Applies knowledge of Ground Control Stations & FPV. Performs Assembling, MRO & battery care of RPAS. Identifies & selects Basic operating features of a RPA Flight Simulator. Fly a RPA with instructor and then perform solo flight (Virtual reality training & live RPA flying). Carry out entire flying operations from pre-flight checks to after flight checks while flying a RPA in simulator training & live training. Also, the trainee will learn to Communicate with required clarity, understand technical English, environment regulation, productivity and enhance self-learning.

Skills acquired: Read and interpret technical parameters/ documentation, executes work, identify necessary materials and tools. □ Perform tasks with due consideration to safety rules, accident prevention regulations. □ Apply professional knowledge & employability skills while performing the job and maintenance work. □ Check the circuit/ equipment/ panel as per drawing for functioning, identify and rectify faults/defects. □ Document the technical parameters related to the task undertaken.

Options for employment: Can join industry as Drone Pilot and will progress further as Senior Drone

Pilot, Supervisor and can rise up to the level of Manager. □ Can become Entrepreneur in the related field. □ Can join Aviation industry/other sectors as drone Pilot for implementing different applications of Drone. □ Can work in a Drone service center or start own Drone Training Academy. □ Can join Advanced Diploma (Vocational) courses under DGT as applicable.

SECTOR – HEALTH

43. Multipurpose Health Worker (Male) under Dual System of Training [Duration 2 years Non NSQF]:

Course Content: The course is of 2 years duration which includes 18 months instructional theory and practical components and 6 months as internship component to the skills.

The first semester (paper I & II) will include the basics subjects (anatomy/physiology, microbiology, behavioural sciences, healthy living etc.) to acquire knowledge of human health and disease. In this semester trainee will also acquire knowledge of first aid, emergency care and primary medical care. In the second semester (paper III & IV) the trainee will be equipped with the knowledge and skills required for efficient health care delivery to the community in the state.

Third semester (V, VI, VII) will include family welfare services and sanitation in terms of health with regards to food and environment. The trainee will be equipped with the skills required to make public aware and prevent health related problems.

In the last semester the trainee will practice the skills acquired and deliver efficiently quality health care to the community by working under the govt., health centers in the state and assist the health care team members in promotion of health and prevention of diseases.

Skills acquired: Identification of community health problems and referrals to the health care team members, survey and data entry skills, report writing and maintaining records, personal and food hygiene measures, community site and sanitary sites inspections and hygiene related procedures, disinfection of water sources, biomedical waste management, transportation of the casualties, emergencies and disaster management, basic life support and first aid measures. Awareness of national health related programme, schemes available for community services and health education skills to promote health and prevent diseases and also improve family/community health care practices. The trainee has to work to accomplish the national health mission goals by locally adapted guidelines for the improvements in overall health system.

Role: Help the public in promotion of health and prevention disease.

Employment Options,: After completion of the course, the trainee can be employed at the Government Health Centers.

4.2 Subjects to be studied during the Course of Training:

Craftsmen Training Scheme (Annual Pattern)	
Engineering Trades	Non - Engineering Trades

<ol style="list-style-type: none"> 1. Trade Theory 2. Trade Practical 3. Workshop Calculation & Science 4. Engineering Drawing (Except for D' Man Mech. & D'Man Civil trades) 	<ol style="list-style-type: none"> 1. Trade Theory 2. Trade Practical 3. Employability Skills 4. Additional subject related to the trade
*Subject to MSDE Norms	

4.3 Key Skill Development Training Schemes available/offered by ITIs:

4.3.1 Craftsmen Training Scheme: Industrial Training Institutes (ITI) have been set up under the Craftsmen Training Scheme (CTS) with an objective to ensure steady flow of skilled personnel to the public and private sectors, and to reduce unemployment amongst the educated youth by equipping them with required skills, education and discipline.

There are 10 Govt. and 3 Pvt. ITIs in the State of Goa imparting training in various Engineering and Non-engineering trade courses. Most of the trades and units available in these Institutes are affiliated to the National Council for Vocational Training (NCVT), New Delhi through Directorate General of Training (DGT), Ministry of Skill Development and Entrepreneurship (MSDE), Government of India, New Delhi and training is imparted as per the syllabus and curriculum approved by Government of India in consultation with NCVT. However, some of the trades/units in these ITIs are affiliated to State Council for Vocational Training (SCVT), Panaji-Goa.

4.3.2 Scheme of “UPGRADATION OF 1396 GOVERNMENT ITIS THROUGH PPP”: The objective of the Scheme is to improve the quality of vocational training in the country and make it demand driven so as to ensure better employability of the graduates. The Vasco Govt. ITI is being upgraded under this scheme. The Institute Management Committee (IMC), headed by the Industry Partner, constituted and registered as a Society, leads the process of Upgradation.

4.3.3 National Apprenticeship Promotion Scheme (NAPS):

The main objective of the scheme is to promote apprenticeship training and to increase the engagement of apprentices by offering the following incentives under this scheme:

- 1) Sharing of 25% of prescribed stipend subject to a maximum limit of INR Rs. 1,500/- per month per apprentice to all apprentices with the employers.
- 2) Sharing of cost of Basic Training with Basic Training Providers (BTP) up to a maximum of INR 7,500/- per trainee for a maximum of 500 hours calculated @ INR for 500 hours

calculated @ INR 15 per hour.

4.3.4 UPGRADATION OF EXISTING GOVERNMENT ITIs INTO MODEL ITI: The Key objective of this Govt. of India scheme is to develop a benchmark for industry oriented ITI which would serve as a model for other ITIs and would also raise dignity of ITI education. Gol has allocated an amount of Rs. 5.00 crore with 70:30 sharing pattern.

Target Fixed: As per Institute Development Plan under the Scheme, it is proposed to

- 1) Revamp the trade courses offered at the ITI
- 2) Undertake Civil works to accommodate the proposed new courses.
- 3) Strengthening / Establishment of Training cum Placement Centre.

4.3.5 Skill Strengthening for Industrial Value Enhancement (STRIVE) : This project is a World Bank Assisted Government of India program with the objective of improving the relevance and efficiency of skill training provided through ITI's and apprenticeships and is 100% funded Gol Project. STRIVE is five year program implemented by the Ministry of Skill Development & Entrepreneurship from the year 2019 onwards through State Governments, Industrial Training Institute (ITI), Centrally Funded Institutes (CFIs) and industry Clusters (ICs).

4.3.6 Dual System of Training (DST): Objective of DST scheme is to enable industries and establishments to partner with Government and Private ITIs for conducting training programmes under high employability courses so as to fulfill their skilled manpower requirements.

The DST is an amalgamation of theoretical training imparted through ITIs and practical training imparted through the Industry. DST helps enable Industry linkages and provide hands on experience to students on industries latest/ updated technologies. Under the DST scheme, the courses are conducted to meet the skilled workforce requirements of Industry so that after completion of training, the trainee who are awarded National Trade Certificate (NTC) under the scheme have an edge over regular ITI pass outs in terms of employability and employment opportunities in Industry.

With the vision of strengthening Industry linkages and acquainting students in ITIs with latest technologies used in the Industry, the DST program ensures that the ITI trainees are Industry ready.

4.3.7 Pradhan Mantri Kaushal Vikas Yojana (PMKVY)

Pradhan Mantri Kaushal Vikas Yojana (PMKVY) is the flagship scheme of the Ministry of Skill Development & Entrepreneurship (MSDE). The objective of this Skill Certification under Short Term Training (STT) and Recognition of Prior Learning (RPL) Scheme is to enable a large number of Indian youth to take up industry relevant skill training that will help them in securing a better livelihood. All the 10 Government ITIs are registered on Skill India Portal as training Providers under PMKVY Scheme.

The Government of India has also designed Skill Hubs Initiative (SHI) under PMKVY 4.0 for implementation of National Education Policy (NEP), which aims at creating shared infrastructure, aligning with the needs of the local economy and addressing the needs of all target segments for vocational training and developing well-defined pathways for out of Schools & College candidates/Students to continue with their chosen academic-vocational pursuits. A total of 08 Government ITIs / Training Partner (TP's) are implementing the SHI pilot Project in the State.

4.3.8 Chief Minister's Kaushalya Path Scheme (CMKPS)

Chief Minister's Kaushalya Path scheme (CMKPS) is implemented with an intention to equip a large number of Goan youth with industry-relevant skills through skilling, re- skilling, and up-skilling programs for narrowing the gap between demand and supply of skilled workforce in the state of Goa. The scheme focuses on short-term training courses that cater to the specific needs of various sectors like Hospitality, Tourism, Construction, IT, Automotive, Beauty & Wellness, Shipbuilding, Pharmaceutical, etc.

Additionally, it offers Recognition of Prior Learning (RPL) for experienced professionals. This component assesses and certifies the skills of individuals working in various sectors without formal qualifications, acknowledging their expertise and bridging the gap between their practical experience and formal recognition.

By focusing on these diverse skill areas and offering both training and RPL, the Chief Minister's Kaushalya Path scheme (CMKPS) aims to create a readily employable and skilled workforce that meets the demands of industrial sector of Goa.

4.4 All Goa Inter ITI Sports Meet:

All Goa Inter ITI Sports Meet is organized every year in various disciplines such as cricket, football, volleyball, badminton, and athletics (relay, shot put, discus throw) to be participated by the trainees of the Government as well as the private ITIs. All these ITIs are grouped into two zones viz. North and South, and the finals are played between the winners of the two zones on the final day of the meet. Trophies are awarded to the winning team of each event and a 'Certificate of Participation' is awarded to individual participant of the winning teams. Apart from this, 'Director's Trophy' is awarded to the Institute displaying good discipline, sportsmanship, and winning maximum events.

5. EXAMINATIONS:

5.1. Online / Offline Examination System

MSDE has implemented Online Examination System from academic year 2021 onwards. Similarly DSDE is also in a process to implement the same for SCVT exam from the year 2024-25 and 2024-2026. Once the same is finalized, the detailed 'Online Examination' procedure will be informed to the Government / Private ITIs, accordingly.

Note: In case the 'Online Examination' mode is implemented by the State, it shall replace the existing mode of conducting the ITI Examinations i.e. OMR Based

5.2. Annual Exams

Annual exams would be conducted for the trainees under the aegis of NCVT/SCVT for all CTS trades admitted from the Session Year 2024 and their annual exam would be conducted at the end of the same Sessional Year or as declared in due course after completing the training as per syllabus of first year. Similarly, second annual exam would be conducted at the end of that Sessional Year or as declared in due course after completing the training as per syllabus of second year. Trainees of two years duration trades will attempt 02 annual exams. Trainees may be allowed to appear in AITT for total 04 attempts, i.e. 01 attempt as Regular and 03 additional attempts as supplementary to pass the AITT. Supplementary exam will be held every 6 months or even 3 months. If a trainee does not appear in any one or none of the 1+3 additional attempts as supplementary, the trainee will lose that attempt and registration will expire. The registration of trainee will expire after 1+3 additional attempts as supplementary or completion of period of one and half year (1½) after training, whichever is earlier. If a trainee does not successfully pass the AITT in this period, the name of the trainee will be struck-off from portal. For CTS, candidate may apply as a private candidate, after 03 years industrial experience to appear in AITT or may again seek fresh entry as regular.

The All India Trade Test (AITT) examination pattern shall be followed for the trades under SCVT. All the examinations would be conducted as per the norms applicable that may be revised from time-to-time.

5.3 Internal Exams

Internal quarterly exams would be conducted for Annual Pattern for trades under CTS. Marks scored in above exams would be considered as Formative Assessment marks.

5.4 Scholarships:

The trainees of the Government ITIs are awarded the following scholarships:

A. Merit Scholarship at the rate of Rs 250/- per month per trainee is awarded to 40% of actually admitted trainees' strength of each trade irrespective of the intake capacity of the trade on the basis of:

- I) Marks scored at the Merit Scholarship internal test conducted by each ITI.
- II) Assessment of the sessional work, discipline and punctuality for three months after admissions.

B. For the trainees seeking admission in Government I.T.I.s in Goa and residing in the State of Goa for a period not less than 10 years preceding the date of application for admission, following two schemes (a and b) are available as per eligibility:

- a) Financial Assistance Scholarship (FAS)** at the rate of Rs 600/- per month is available for a trainee belonging to either: (i) BPL family **OR** ii) SC category **OR** iii) ST

category **OR** iv) Person with Disability (PwD) **OR** v) Having annual income of family less than Rs 3,00,000/- which is to be proved by submitting valid Income Certificate issued by: (1) Concerned Village Panchayat Secretary under the respective Panchayat area duly attested by the Sarpanch of the concerned Village Panchayat **OR** (2) Chief Officer of the respective Municipal Council **OR** (3) Mamlatdar of the concerned Taluka **OR** (4) District Collector/Magistrate, provided he/she fills up the FAS form and submits it to the ITI office along with supporting documents immediately after joining the respective ITI.

b) Trainee's Tool Kit containing trade related items costing not more than Rs 2500/- collectively can be claimed by a trainee belonging to SC/ST category provided he/she fills up the Trainee's Tool Kit form and submits it to the ITI office along with supporting documents immediately after joining the respective ITI.

RECOVERY OF BENEFITS GRANTED UNDER FINANCIAL ASSISTANCE SCHOLARSHIP AND TRAINEE'S TOOL KIT SCHEME:

(i) FAS and Trainee's Tool Kit granted to a trainee is liable to be cancelled/forfeited in the event of any eligible trainee being found to have committed an act of indiscipline or mis-conduct, unbecoming of an ITI trainee. The Director shall be the deciding authority.

(ii) FAS and Trainee's Tool Kit granted to a trainee is liable to be cancelled/forfeited/recovered in the event of any trainee discontinuing training during the course of the year, for which the benefit was awarded. In case the trainee discontinues the training in the middle of the course duration, the trainee has to pay the actual cost of the Trainee's Tool Kit.

(iii) FAS and Trainee's Tool Kit granted to a trainee is liable to be cancelled/forfeited/recovered/discontinued, if at any stage, the information furnished by the candidate is found to be either incorrect or if the award /benefit has been obtained by suppressing any material facts. The final decision on the recoveries to be made if any shall be at the discretion of the Director.

The trainees belonging to certain categories can also apply and avail the benefits under the scholarships awarded by the Directorate of Social Welfare, Directorate of Tribal Welfare and Directorate of Education or financial assistance granted by any other organization depending on the eligibility criteria and provided the particular Department/Organization permits availing scholarship/assistance from multiple sources.

C. Sesa Private ITI awards Merit Scholarship to deserving trainees based on merit and financial status of their family.

D. Trainees seeking admission in Private ITIs and belonging to certain categories are also eligible to avail benefits awarded by the Directorate of Social Welfare.

5.5 National Trade Certificate (NTC):

5.5.1 CTS Trades:

On completion of the prescribed period of training annually, a trainee would have to undergo trade



Directorate General of Training



Government of Goa



Industrial Training Institute

Cacora Government Industrial Training Institute

Cacora, Curchorem-Goa, 403706





Mission & Objective

Our Focal mission is to ensure in providing a steady flow of skilled/Semi-Skilled personnel to the industrial/Non-Industrial Sector and to ever reduce unemployment amongst the educated youth by equipping them with required skills, education and in various disciplines of their life for suitable industrial future employment and also creating a scope for self-employment as well.



Skill India
कौशल भारत - कुशल भारत

 : 0832-2993200

 : www.iticacora.goa.gov.in

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Cacora Government Industrial Training Institute

Cacora, Curchorem-Goa, 403706

☎ : 0832-2993200

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✉ : cacora-iti.goa@nic.in

Trade details and eligibility criteria for admissions:

Sr. No.	Trade	NCVT/ SCVT	NSQF Level	Duration	Entry Qualification
Engineering Trades					
1.	Fitter	NCVT	4	2 years	Passed 10th class examination with Science and Mathematics or its equivalent.
2.	Electrician	NCVT	4	2 years	
3.	Refrigeration and Air Conditioning Technician	NCVT	4	2 years	
4.	Mechanic Motor Vehicle	NCVT	4	2 years	
5.	Mechanic Diesel	NCVT	3	1 year	
6.	Mechanic Consumer Electronic Appliances	SCVT	4	2 years	
7.	Wireman	NCVT	4	2 years	Passed 8th class examination
8.	Plumber	NCVT	3	1 year	
9.	Welder	NCVT	3	1 year	
10.	Wood Work Technician	NCVT	3	1 year	
11.	Mechanic Electric Vehicle	NCVT	4	2 years	Passed 10th class examination
12.	Solar Technician (Electrical)	NCVT	3	1 year	
Non-Engineering					
13.	Computer Operator & Programming Assistant	NCVT	3	1 year	Passed 10th class examination
14.	Desktop Publishing Operator	NCVT	3	1 year	
15.	Cosmetology	NCVT	3	1 year	
16.	Food Production (General)	SCVT	3	1 year	
17.	Food & Beverages Service Assistant (DST)	SCVT	3	1 year	Passed 10th class examination or its equivalent
18.	Sewing Technology	NCVT	3	1 year	Passed 8th class examination
19.	Fire Technology and Industrial Safety Management	NCVT	3	1 year	(a) Passed class 10th class Examination or its equivalent (b) The minimum physical requirements are i. Height - 165 cm ii. Weight - 52 kg iii. Chest - Normal 81 cm-Expanded 85 cm iv. A registered MBBS doctor must certify that the candidate is medically fit to undertake the course.
20.	Drone Pilot (Junior)	SCVT	3	6 months	Passed 10th class examination with Science and Mathematics or its equivalent and should have completed 18 years of age as on first day of academic session
21.	Driver Cum Mechanic	SCVT	3	6 months	Passed 8th Class Examination and should have completed 18 years of age as on first day of academic session



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testing based on the syllabi of corresponding Annual Pattern. A mark-sheet would be issued on completion of each annual exam to successful trainees and on completion of entire course, successful trainees shall be awarded National Trade Certificate.

The NCVT registered trainees can access their academic progress online on Management Information System (NCVT MIS for annual system) public portal using his/her personal credentials for logging on the MIS portal and can download their mark sheet and trade certificate directly from NCVT MIS portal www.skillindiadigital.gov.in which could also be verified online. The same is authentic document and is valid for submission for employment, admission, Availing loan under MUDRA scheme etc.

5.5.2. SCVT Trades:

A trainee admitted under SCVT would have to undergo examinations under SCVT. For the trades and units run under the SCVT, examinations and certification as per prevailing rules would be applicable. However, the exam will be conducted by the State Board of Examinations and the certificates would be issued by the SCVT.

5.6 World Skill Competition

World Skills Competition is the largest Skill Competition in the world held once every two years in one of the World Skill International (WSI) member countries. India has been member of World Skill since 2007. The competition is equivalent of Olympic Games for Skill amongst youth across world. There are about 56 Skills under six skill categories. Trainees compete over span of four days working on test projects which are based on contemporary Industry Standards and Infrastructure. World Skill India & India Skill is an initiative of the NSDC under MSDE.

MSDE & NSDC hold annual Skill Competition to be known as National Level Skill Competition also known as India Skill Competition. The Participant of India Skill will emerge from winner of State Level Skill Competition and subsequently Regional Level Skill Competition. The Winners of India Skill will, through a process of selection, represent India at World Skill and other international Competitions.

Eligibility Criteria : Any skilled person aged 21 and below could participate in any of the skills mentioned under India skills, with the exception to Aircraft Maintenance, Manufacturing Team Challenge and Mechatronics, where the candidate should be 21 to 23 years of age.

Further, vide letter **No. MSDE-18017/45/2018-TTC(Pt), dated 5th December 2019**, competent authority has decided to discontinue the Regional & All India Skill Competition for apprentices and All India Skill Competition for Craftsmen held by DGT to avoid the duplicity of actions for competitions. The DGT will promote the World Skill Competition of MSDE, Govt, of India so that the trainees of DGT may also get better opportunities at International Level. The Trainees of various institutes of DGT / Govt. & Pvt. ITIs/Apprentices in establishments irrespective of trade/educational qualification etc. may participate in this competition only if they fulfill age criteria as per guidelines. The Trainees of ATS and CTS under state/region to participate in World Skill Competition of MSDE through online application link available at www.bharatskills.gov.in and www.worldskillsindia.co.in

5.7 Private Candidates related Guidelines

5.7.1. Category-wise eligibility-criteria for applicants, who have not received a formal institutionalized skill training under the CTS scheme, to directly enroll in any eligible Government ITI in Goa and to appear as 'Private Candidate in AITT under CTS, for award of NTC, has been listed below:

Category I: Ex-trainees (successful pass-outs) of ITI

A. Ex-trainees of ITI who already possess NTC in one of the trades under CTS, are eligible for applying as Private candidate for an allied trade, provided he/ she fulfills all the conditions regarding educational qualification etc. prescribed for that allied trade.

B. In addition, the applicant should possess minimum of 1 year experience (as on date of submission of application) post the date of AITT result declaration in the desired allied trade in establishments implementing Apprenticeship Training Scheme (ATS)/establishments registered under the Apprenticeship portal or registered MSMEs or Entities registered with any government/ local authorities / shops covered under Factories Act 1948 and Shops and Establishments Act applicable for the concerned State.

Category II: Ex-trainees (successful pass-outs) and current trainees under CoE scheme

A. The applicant should have the minimum prescribed entry qualification and should fulfill eligibility criteria for the desired trade under CTS, in which he/she intends to appear for AITT as Private Candidate. CoE candidates must register as 'Private Candidate' under CTS in the relevant/mapped CTS trade only.

B. There should be a minimum gap of 1 year between successful completion of CoE training i.e. from the date of result declaration to the date of submission of application for 'Private Candidate' certification.

C. During this gap of 1 year, the candidate must have undergone Industry training or gained experience in desired trade in establishments implementing Apprenticeship Training Scheme (ATS)/ establishments registered under the Apprenticeship portal or registered MSMEs or Entities registered with any government/local authorities /shops covered under Factories Act 1948 and Shops and Establishments Act applicable for the concerned State.

Category III: SCVT Candidates (admitted till August 2018 session)

A. No special provisions have been made for SCVT Trainees to enroll as 'Private Candidate'. Going forward, SCVT trainees have been granted equivalence vide G.S.R 186(E) dated 2nd March 2017 for undergoing apprenticeship training under the Apprentices Act 1961 to obtain 'NAC'.

B. Only for SCVT trainees admitted till August 2018 batch, provision has been made for obtaining NTC by appearing in AITT under 'Private Candidate'. Such trainees will continue to be governed by old guidelines for 'Private Candidate'.

Category IV: Other Candidates (candidate not falling in any of the above 3 categories, including SCVT trainees enrolled from admission session 2019 onwards)

A. The applicant should have the minimum prescribed entry qualification and should fulfill eligibility criteria for the relevant trade under CTS, in which he/she desires to appear for AITT as Private Candidate.

B. Applicant should be minimum 21 years of age on the date of submission of application. There is no upper age limit.

C. The applicant should possess minimum of 3 years' experience (on the date of submission of application) in the relevant trade in establishments implementing Apprenticeship Training Scheme (ATS)/ establishments registered under the Apprenticeship portal or registered MSMEs or Entities registered with any government/local authorities / shops covered under Factories Act 1948 and Shops and Establishments Act applicable for the concerned State.

D. SCVT trainees enrolled from admission session 2021 and onwards may appear as 'Private Candidate' under this category, i.e. Category IV, for obtaining NTC.

5.7.2. Eligibility Criteria and instructions for ITIs admitting Private Candidates

- I. Only Government ITIs with grading of 4.0 and above are eligible to admit candidates as 'Private Candidate'.
- II. The ITI should have affiliation in the relevant trade under which it intends to admit Private Candidate for appearing in AITT.
- III. ITIs should have regular CTS trainees admitted in the affiliated trade i.e. the trade in which they intend to admit Private Candidate, for the current as well as previous year (ITI with vacant unit in current or previous batch shall not be considered).
- IV. The ITI can admit Private Candidates in a particular trade in specified proportion to the total number of regular trainees admitted in the concerned trade for the academic session.
- V. The upper limit of candidates to be enrolled by eligible ITIs as 'Private Candidate' under Category I, Category III and Category IV as defined in section 4 will be a maximum of 10% of their total seating capacity. The private candidates admitted under category II, as defined in section 4 shall be exempted from the applicable 10% cap.

For more details, you may kindly visit/download the related guidelines at: <https://ncvtmis.gov.in>

6. POST ITI OPPORTUNITIES

6.1. Direct Admissions to Second Year in Polytechnic Institutes :

Government of Goa has provided vertical mobility to the ITI passed candidates in pursuing their studies in the various fields corresponding to their trades through the seats remaining vacant in the Polytechnics in the state provided the trainees have passed the qualifying examination of two year trade courses i.e. ITI certificate from Industrial Training Institute in Goa after passing S.S.C under the Directorate of Skill Development & Entrepreneurship as per the criteria specified in the Prospectus of Directorate of Technical Education for admission to Polytechnic. The details of seat allotted for ITI trainees are given below which may change at the discretion of Directorate of Technical Education.

List of ITI trades recognized for eligibility to Diploma courses (Direct Second year)

Sr. No.	ITI Courses	Diploma Courses	Total Seats Allotted for ITI trainees
---------	-------------	-----------------	---------------------------------------

1.	Information & Communication Technology System Maintenance, Mechanic R&TV, Medical Electronics, Electronic Mechanic,	Electrical & Electronics Engg.	1
	Instrument Mechanic, Electrician, Course under Centre of Excellence**(2years): Information Technology, Multiskilled Course in Electrical and Electronics***, Electrical Sector	Computer Engineering	3
		Electronics Engineering	2
		Electronics & Communication	3
		Electrical Engineering	2
2.	Fitter, Turner, Machinist, RAC Mechanic, Mechanic (Motor vehicle), Draughtsman (Mechanical)*, Production & Manufacturing (2years) Course under Centre of Excellence*, Diploma in Multi skilled Industrial Technology (Mechanical) under S.C.V.T* Course under Centre of Excellence*(2years): Fabrication Fitting & Welding)*, Automobile Sector	Automobile Engineering	1
		Mechanical Engineering	5
		Shipbuilding Engg.	1
		Fabrication Technology & Erection Engg.	1
3.	Draughtsman Civil	Civil Engineering	5
		Architecture Engg.	1
TOTAL			25

*To be considered only for Diploma in Mechanical Engineering.

** Eligible for Diploma in Electronics & Communication only.

***Eligible for Diploma in Electrical Engineering /Electrical & Electronics Engineering.

The eligible candidates should report to the Directorate of Technical Education, Porvorim and the Principals of the respective Polytechnics in the State for more information.

6.2. Training at National Skill Training Institute (Formerly Advanced/Craftsmen Training Institutes):

The candidates can specialize in various advanced industrial skills in NSTI located in the major cities of the country and functioning under Government of India. The Recognition of Prior Learning (RPL) mode is also available for the candidates. For more information in this regard can be obtained from the Training cum Placement section at the Office of Directorate of Skill Development and Entrepreneurship.

6.3. Apprenticeship Training in Specified Industries:

Conduct of Apprenticeship Training Programs in Specified Industries/Establishments, under the Apprentices Act 1961:

Trainees from Industrial Training Institutes, on completion of their respective National/State Council of Vocational Training (NCVT/SCVT) affiliated Trade courses, are eligible to be engaged as Apprentices, to undergo Designated/Optional Apprenticeship Trade-Training, offered by various Establishments covered under the Apprentices Act, 1961 on their shop-floor. Such trainees are eligible to also avail of training-period rebate corresponding to the period spent while training in the Industrial Training Institutes and are required to undergo training, in the Establishments specified, only for the remaining Apprenticeship Training period in the corresponding Trade.

Trainees, so engaged as Apprentices in the Establishments, are eligible to be paid a minimum monthly stipend as per the qualifications stipulated in the curriculum.

Some Private Sector Establishments are paying stipend over and above the minimum rate of stipend payable to apprentices per month.

Further, to attract more number of potential Apprentices to take up industrial shop-floor training on a larger scale, the Government of India has also introduced the National Apprenticeship Promotion Scheme (NAPS), which offers financial benefits to eligible Establishments towards subsidizing stipend paid to their Apprentice/s, as detailed here-below:

- 1) Sharing of 25% of prescribed stipend subject to a maximum limit of INR Rs. 1,500/- per month per apprentice to all apprentices with the employers.
- 2) Sharing of cost of Basic Training with Basic Training Providers (BTP) up to a maximum of INR 7,500/- per trainee for a maximum of 500 hours calculated @ INR 15 per hour.

Eligibility for Apprenticeship training:

Any individual who has completed 14 years of age (18 years in case of Hazardous Industries defined under the Apprenticeship Rules) having minimum educational qualification prescribed for a trade can undergo apprenticeship training.

Eligibility and Requirements for Employers:

1. Employer validation through TIN/TAN and EPFO/ESIC/LIN/ any other identifier decided by the Government;
2. Aadhaar-linked Bank Account.

Eligibility and Requirements for Basic Training Providers (BTPs):

1. Government and Private ITI can act as BTP only for the NCVT affiliated trades/units. ITIs can use only the spare seats (available within overall affiliation)/ units for BTP purpose or can opt for a separate shift in the NCVT affiliation trades for apprentice.
2. Establishments with in-house Basic training facilities.

For more details, interested candidates may also visit the Links <http://www.apprenticeship.gov.in> & <http://www.apprenticeshipindia.org>

6.4 Academic Equivalence to ITI Courses

A. The Goa Board of Secondary & Higher Secondary Education in its meeting held on 23/03/2016 has resolved to grant academic equivalence to ITIs NCVT/SCVT courses subject to the following conditions:

(1) Those students who after passing Std VIII have completed a ITI course of 2 years duration from a recognized center and passed NCVT/SCVT examination with prescribed syllabus and on their own volition have appeared and passed the examination conducted by the Goa Board of Secondary and Higher Secondary education in the subjects: 1) Language -I 2) Language -II/ Language-III prescribed by the Goa Board shall be considered equivalent to have passed SSC Examination. Students who complete a recognized ITI course of one year duration and complete one year apprenticeship training or certified employment will also be extended the same facility.

(2) Those students who after passing Std X have completed a ITI course of two years duration from a recognized center and passed NCVT/SCVT examination will prescribed syllabus and on their own volition, have appeared and passed the examination conducted by the Goa Board of Secondary and Higher Secondary Education in the subjects 1) Language I/ Communication Skill in English 2) Language-II prescribed by the Goa Board shall be considered equivalent to have passed H.S.S.C examination.

For the above purpose the candidates have to register themselves as private candidate offering isolated subjects, who have passed SSC and completed ITI fulfilling other conditions as laid down at(2) above.

(3) After obtaining the State/National Trade Certificate of any one year duration ITI trade-course and on obtaining either a 'NAC' and having one year's certified Work-Experience (after passing out from the ITI), the Candidate can apply/appear for 8+2/10+2 equivalency Examination through the Goa Board of Secondary and Higher Secondary Education (GBSHSE) or even the National Institute of Open Schooling (NIOS), for acquiring 'equivalent' Secondary/Higher Secondary Certificate (SSC[10th]/HSSCE[12th]) and can go on to take up further General/ Technical education.

B. The Goa University grants vertical mobility to the Vocational Students of Goa Board and the same facility is extended to the students of ITIs.

The Academic Council of Goa university at its recent meeting resolved to permit mobility to students who, after passing Std X, having completed the ITI Courses of two years duration which have Std X as the eligibility from recognized centers and pass the National/State Council of Vocational Training (NCVT/SCVT) examinations of prescribed syllabus and on their own volition have appeared and passed the examination conducted by the Goa Board of Secondary and Higher Secondary Examination in the Subjects of English/Communication Skills for Std XII prescribed by the Goa Board.

The Eligibility for joining a particular program however would be decided based on earlier Circulars issued on the subject matter.

For details on Academic Equivalence to ITI courses contact nearest Govt. ITI or the Head Office.

6.5 Availability of 'Entrepreneurship Schemes (MUDRA, NIESBUD, Etc.)

6.5.1 Pradhan Mantri MUDRA Yojana (PMMY) is a scheme launched by the Hon'ble Prime Minister

on April 8, 2015 for providing loans upto 10 lakh to the non-corporate, non-farm small/micro enterprises. These loans are classified as MUDRA loans under PMMY. These loans are given by Commercial Banks, RRBs, Small Finance Banks, Cooperative Banks, MFIs and NBFCs. The borrower can approach any of the lending institutions mentioned above or can apply online through this portal. Under the aegis of PMMY, MUDRA has created three products namely 'Shishu', 'Kishore' and 'Tarun' to signify the stage of growth/development and funding needs of the beneficiary micro unit / entrepreneur and also provide a reference point for the next phase of graduation/growth. The loan limits under the three products are given below:-

SHISHU: Covering loans upto 50,000/-

KISHOR: Covering loans above 50,000/- and upto 5 lakh

TARUN: Covering loans above 5 lakh and upto 10 lakh

6.5.2 The National Institute for Entrepreneurship and Small Business Development (NIESBUD)

is a premier organization of the Ministry of Skill Development and Entrepreneurship (MSDE), Government of India engaged in training, consultancy, research, etc. in order to promote entrepreneurship and Skill Development. The major activities of the Institute include Training of Trainers, Management Development Programmes, Entrepreneurship-cum-Skill Development Programmes, Entrepreneurship Development Programmes and Cluster Intervention. NIESBUD is an apex organisation working under the administrative control of the MSDE.

The major activities of the Institute include Training of Trainers, Management Development Programmes, Entrepreneurship-cum-Skill Development Programmes, Entrepreneurship Development Programmes and Cluster Intervention. The Core Objectives of the Institute are as follows:

- a. To standardize and systemize the processes of selection, training, support and sustenance of potential and existing entrepreneurs. To support and motivate institutions/organizations in carrying out training and other entrepreneurship development related activities. To serve as an apex national level resource institute for accelerating as well as enhancing the process of entrepreneurship development, to measure the impact of the same within different strata of the society.
- b. To provide vital information and support to trainers, promoters and entrepreneurs by organizing research and documentation activities relevant to entrepreneurship and skill development.
- c. To create a holistic environment to train the trainers, promoters and consultants in diverse areas of entrepreneurship and skill Development.
- d. To offer consultancy nationally/internationally for promotion of entrepreneurship and small business development at national and international level.
- e. To provide national/international forums for interaction and exchange of ideas for policy formulation and its refinement at various levels.
- f. To share experience and expertise in entrepreneurship development across national frontiers to create awareness on it at national level.
- g. To interchange international experience and expertise in the field of entrepreneurship development for mapping its development at international levels too.

7. Admission for CTS trades:**7.1. Important Notice issued by the Central Ministry:**

ADMISSION NOTICE
by
DGT, Government of India
Ministry of Skill Development & Entrepreneurship
Directorate General of Training
Shram Shakti Bhavan, Rafi Marg ,New Delhi-110 001.

FOR ATTENTION OF ADMISSION SEEKERS TO NATIONAL COUNCIL FOR VOCATIONAL**TRAINING (NCVT) APPROVED TRADES IN GOVERNMENTS PRIVATE ITIs**

All admission seekers to NCVT approved trades (Engineering/Non-Engineering) are advised in their own interest to confirm and satisfy themselves before seeking admission to any trade that the respective trade/unit in the Government/Private Industrial Training Institute (ITI) is affiliated to NCVT. Only the trainees seeking admission to the trade/unit which is found to be affiliated under NCVT as on the date of admission are eligible to appear for the All India Trade Test under NCVT and to be awarded with National Trade Certificate.

The list of affiliated trades/units in each Institute is available in the respective Institute and the State Directorate. **It is also informed in the interest of general public that NCVT/ Govt., of India does not recognize any Government and Private Industrial Training Institute. NCVT affiliates only the trades and its units run by a particular ITI.**

NO ADMISSION IS ALLOWED IN NCVT TRADES WITHOUT AFFILIATION.

Director of Training/Secretary NCVT

IMPORTANT NOTICE

The candidates, who are desirous to take admission in ITIs may also note that the trades/units shown in Annexures-1,111 and V, currently offered under NCVT are subjected to compliance of revised guidelines received from Directorate General of Training (DGT), New Delhi, inter-alia stipulating that the trades/units whose period of NCVT affiliation has exceeded five years, would need to be re-affiliated to NCVT. While efforts are being made to seek re-affiliation of such trade courses to NCVT, it may take considerable time. **In the event of the NCVT re-affiliation process of such trades/units not being completed in time, the admission to those trades/units would be offered under State**



Directorate General of Training



SKI India
काराण्डा अणुसंधान केंद्र



Government of Goa



Industrial Training Institute

Canacona Government ITI

Mastimol, Canacona - Goa

Ph. No. 0832-2633354

Website: www.iticanacona.goa.gov.in

email id: canacona-iti.goa@nic.in

Mission and Vision

At Our Institute in Canacona, we prepare trainees to understand, contribute to and succeed in a rapidly changing work environment, thus making our state a better place. ITI Canacona ensures that the trainees develop both the skills that we provide and the competencies essential for success in the emerging creative economy.

We also provide the trainees in practical and theoretical knowledge. The institute of Canacona insists on a family based mission to inspire, support and empower the trainees through career development at high standard. We are driven by ethics and integrity. These core values are in our innovations that is a part of our programs. We strive to be a career centric institute offering courses that includes hospitality and technicians in various fields.



Engineering Trades:

Sr. No.	Trade	NCVT/ SCVT	Duration	NSQF Level	Entry Qualification
1	Fitter	NCVT	2 years	Level 4	Passed 10 th class with Science and Mathematics or its equivalent.
2	Mechanic Diesel	NCVT	1 year	Level 3	Passed 10 th class with Science and Mathematics or its equivalent.
3	Electrician	NCVT	2 years	Level 4	Passed 10 th class with Science and Mathematics or its equivalent.
4	Welder	NCVT	1 year	Level 3	Passed 8 th class examination
5	Wireman	NCVT	2 years	Level 3	Passed 8 th class examination
6	Electronics mechanic	NCVT	2 years	Level 4	Passed 10 th class with Science and Mathematics or its equivalent.
7	Plumber	NCVT	1 year	Level 3	Passed 8 th class examination
Non	Engineering Trades:				
1	Computer Operator and Programming assistant (COPA)	NCVT	1 year	Level 3	Passed 10 th class examination
2	Sewing Technology	NCVT	1 year	Level 3	Passed 8 th class examination
3	Food and Beverages Service Assistant (Dual System Training)	NCVT	1 year	Level 3	Passed 10 th Class examination or its equivalent
4	Food Production (General) (Dual System Training)	NCVT	1 year	Level 3	Passed 10 th class examination
5	House Keeper (Dual System Training)	NCVT	1 year	Level 3	Passed 10 th class examination
6	Driver Cum Mechanic (LMV)	SCVT	6 Months	Level 3	Passed 8 th Class examination & should have completed 18 yrs. of age as on first day of the academic session.

AN INSTITUTE WHICH 'CAN' MAKE ENTREPRENEURIAL DREAMS A REALITY.....

कौशल भारत - कुशल भारत

Council for Vocational Training (SCVT) and SCVT would accordingly conduct the Final Trade Test and issue Certificate to all the successful candidates.

7.2 Availability of Seats

The number of seats available and trades offered at various ITIs for the year 2024-25 are shown in Annexure I to VI.

7.3 Trade Details and Eligibility Criteria for Admissions

7.3.1 Engineering Trades:

Sr. No	Sector Name	Name of the Trade	Duration	NSQF level	Entry Qualification
1	Automotive	Mechanic Motor Vehicle	2 years	Level 4	Passed 10th Class examination with Science and Mathematics or its equivalent
2	Automotive	Mechanic Diesel	1 year	Level 3	Passed 10th Class examination with Science and Mathematics or its equivalent
3	Automotive	Mechanic Two and Three Wheeler	1 year	Level 3	Passed 10 th class examination with Science and Mathematics or its equivalent.
4	Automotive	Mechanic Electric Vehicle	2 year	Level 4	Passed 10th class examination
5	Capital Goods & Manufacturing	Fitter	2 years	Level 4	Passed 10th Class examination with Science and Mathematics or its equivalent
6	Capital Goods & Manufacturing	Turner	2 years	Level 4	Passed 10 th class examination with Science and Mathematics or its equivalent.
7	Capital Goods & Manufacturing	Machinist	2 years	Level 4	Passed 10th Class examination with Science and Mathematics or its equivalent
8	Capital Goods & Manufacturing	Refrigeration & Air Conditioning Technician	2 years	Level 4	Passed 10th Class examination with Science and Mathematics or its equivalent
9	Capital Goods & Manufacturing	Draughtsman (Mechanical)	2 years	Level 4	Passed 10th Class examination with Science and Mathematics or its equivalent
10	Capital Goods & Manufacturing	Welder	1 year	Level 3	Passed 8 th class examination

11	Chemical and Petrochemicals	Attendant Operator – Chemical Plant (AOCP)	2 years	Level 4	Passed 10th Class examination with Science and Mathematics or its equivalent
12	Construction	Draughtsman (Civil)	2 years	Level 4	Passed 10 th class examination

13	Construction	Wood Work Technician	1 year	Level 3	Passed 8 th class examination
14	Electronics & HW	Instrument Mechanic	2 years	Level 4	Passed 10th Class examination with Science and Mathematics or its equivalent
15	Electronics & HW	Electronics Mechanic	2 years	Level 4	Passed 10th Class examination with Science and Mathematics or its equivalent
16	Electronics & HW	Mechanic Consumer Electronic Appliances	2 years	Level 4	Passed 10th Class examination with Science and Mathematics or its equivalent
17	Environmental Science	Solar Technician (Electrical)	1 year	Level 3	Passed 10 th class examination
18	IT & ITES	Information & Communication Technology System Maintenance	2 years	Level 4	Passed 10th Class examination
19	Plumbing	Plumber	1 year	Level 3	Passed 8 th class examination
20	Power	Electrician	2 years	Level 4	Passed 10th Class examination with Science and Mathematics or its equivalent
21	Power	Wireman	2 years	Level 4	Passed 8 th class examination
22	Logistics	In Plant Logistics Assistant	1 year	Level 3	Passed 10th Class examination with Science and Mathematics or its equivalent

7.3.2 Non-Engineering Trades:

Sr. No	Sector Name	Name of the Trade	Duration	NSQF level	Entry Qualification
1	Apparel	Sewing Technology	1 year	Level 3	Passed 8 th class examination
2	Apparel	Dress Making	1 year	Level 3	Passed 8 th class examination
3	Apparel	Fashion Design & Technology	1 year	Level 3	Passed 10th class examination

4	Automotive	Driver cum Mechanic (LMV)	6 Months	Level 3	Passed 8th class examinations & should have completed 18 yrs. of age as on first day of academic session.
5	Beauty & Wellness	Cosmetology	1 year	Level 3	Passed 10th class examination
6	Food Industry	Food Production (General)	1 year	Level 3	Passed 10th class examination
7	IT&ITES	Computer Operator & Programming Assistant (COPA)	1 year	Level 3	Passed 10th class examination
8	IT & ITES	Desk Top Publishing Operator	1 year	Level 3	Passed 10th class examination
9	IT & ITES	Multimedia, Animation & Special Effects	1 year	Level 3	Passed 10th class examination
10	IT & ITES	Computer Hardware & Network Maintenance	1 year	Level 3	Passed 10th Class examination with Science and Mathematics or its equivalent
11	Media & Entertainment	Digital Photographer	1 year	Level 3	Passed 10 th class examination
12	Office Administration & Facility Management	Stenographer Secretarial Assistant (English)	1 year	Level 3	Passed 10th class examination
13	Office Administration & Facility Management	Secretarial Practice (English)	1 year	Level 3	Passed 10th class examination
14	Tourism & Hospitality	Food & Beverage Service Assistant	1 year	Level 3	Passed 10th class examination or its equivalent
15	Tourism & Hospitality	Housekeeper	1 year	Level 3	Passed 10 th class examination
16	Tourism & Hospitality	Front Office Assistant	1 year	Level 3	Passed 10 th class examination

17	Safety & Security	Fire Technology and Industrial Safety Management	1 year	Level 3	a).Passed class 10th class Examination or its equivalent (b).The minimum physical requirements are i. Height - 165 cm ii. Weight - 52 kg iii. Chest - Normal 81 cm Expanded 85 cm iv. A registered MBBS doctor must certify that the candidate is medically fit to undertake the course
18	Electronics & HW	Smartphone Technician Cum App	6 Months	Level 3	Passed 10th Class Examination
19	Health Sector	Multipurpose Health Worker	2 years	Non NSQF	Passed 12th Class examination
20	Aerospace & Aviation	Drone Pilot (Junior)	6 Months	Level 3	Passed 10th Class examination with Science and Mathematics or its equivalent and should have completed 18 years of age as on first day of academic session.
21	Office Administration & Facility Management	Marketing Executive	1 year	Level 3	Passed 10th Class Examination

N.B: 1.The entry qualification for all above courses is same for NCVT & SCVT.

2.The candidates having studied subjects such as i. Everyday Mathematics, ii. General Science, iii. Mathematics (CWSN-ENG) and iv. Science (CWSN-ENG) are not eligible for admission in Engineering trades.

7.4 Age:

A candidate having minimum age of 14 years and above as on 1.10.2024 shall be eligible to seek admission in the ITI and candidate having minimum age of 18 years as on 1.10.2024 shall be eligible for admission to short term course of Driver cum mechanic.

7.5 Standard of Physical Fitness:

No rigid standards are laid down but candidates seeking admission should be physically fit for the work for which they are to be trained, and candidates if selected for admission shall produce Medical Certificate to that effect from Registered Medical Practitioner except Fire Technology and Industrial Safety Management trade.

The minimum physical requirements for this trade are:

i. Height - 165 cm, ii. Weight - 52 kg, iii. Chest - Normal 81 cm - Expanded 85 cm and a registered MBBS doctor must certify that the candidate is medically fit to undertake the course.

7.6 Domicile:

A candidate seeking admission in the Government or Private ITI should have been residing in Goa for a period of not less than 10 years preceding the date of the application. A Residence Certificate, issued by the Mamlatdar, indicating the period of continuous residence in Goa for the last ten years preceding the date of application could be enclosed along with the application. However, if the candidates establish that they are continuous residents of the State of Goa for the required years through their academic record, no Residential Certificate issued by the Mamlatdar is required to be produced. He/she would however, have to produce a copy of valid academic record/s and any other document/s to establish their claim of being continuous residents of the State of Goa. In case, there is any major break in the education, even though the residence was continued in the State of Goa, then, candidate would be then required to produce the documentary evidence or certificate from the Mamlatdar that during the said break period, he/she was in Goa and fulfilled requirement of continuous residence in Goa for required period. The aforesaid condition shall not apply to:

- Children of Central/State/Union Territory Government employees and employees of Government of India undertakings who are posted in Goa.
- Children of Freedom Fighters registered as such in the Home Department of Government of Goa.
- Children of parents of Goan origin, who are born in Goa and who are serving in Armed Forces or retired from the Armed Forces provided that such children pass their qualifying examinations under the Central Board of Education or Goa Board of Secondary and Higher Secondary Examinations or Goa Board of Technical Education as the case may be and children of Ex-Servicemen registered with Rajya Sainik Board in Goa who have studied and passed the minimum qualifying examination from the Schools/Polytechnics in Goa. Parents of Goan origin means both father and mother born in Goa.

Relaxation in domicile period will be considered if seats remain vacant even after exhausting above options for SCVT & NCVT trades in all the ITIs, after the completion of the Second Round mentioned in the Schedule of admission process.

Note : Relaxation in 10 years of residence certificate for orphans will be provided based on certificate issued by Govt. recognised Institute/Hostels.

7.7 Reservation of Seats:

The following percentage of reservation of seats would be applicable to the Government and the Private ITIs as applicable to State of Goa:

A. Certain percentage of the total seats at each I.T.I. in the respective trades as indicated below have been reserved for various categories of the candidates:

a) Scheduled Castes (SC)

... 02 per cent

- | | |
|---|-----------------|
| b) Scheduled Tribes | ... 12 percent |
| c) Persons with Disabilities (PwD) | ... 04 per cent |
| (Disabilities/Physical Handicap Subject to limits laid down in
DGET circular No.MSDE-19/02/2018-CD(Pt) dated 05-04-2019) | |
| d) Other Backward Classes (OBC) | ... 27 per cent |
| e) Economically Weaker Section (EWS) | ... 10 per cent |

(Economically Weaker Section(EWS) Subject to limits laid down in

DGT circular No. MSDE-19/02/2018-CD) dated 05-04-2019 and related

Certificate being produced from the concerned authorities.

30% of the seats in each of all the above categories shall be

reserved for women candidates.

B. One seat is reserved at every Government ITI for each of the following categories and the allocation of the trade is at the discretion of the Director of Skill Development and Entrepreneurship.

- a) Children of Freedom Fighters (CFF)
- b) Children of State and Central Government Employees (CGE)
- c) Children of African Repatriates of Goan Origin (CAR)

C. One seat in each of the ITIs are reserved for wards of defence personnel in the following order of priority:

- a) Children of deceased/disabled Ex-Servicemen, including those killed/disabled during peacetime.
- b) Children of Ex-servicemen
- c) Children of serving Jawans
- d) Children of serving officers
- e) Ex-Servicemen

The allocation of trades is at the discretion of Director, Skill Development and Entrepreneurship.

The reservation shall be considered only if specifically indicated in the application form by the candidate.

The Institute Managing Committee (IMC) of Vasco Govt. ITI is permitted to utilize up to 20% of sanctioned seats for admissions to this Institute on merit basis against the payment of fee of Rs.5000/- (Rupees five thousand only) per year as fixed by IMC in addition to the tuition fee and caution money deposit

The unutilized IMC quota seats shall be filled after the second round of admission at the said ITI by admitting general category candidates on merit basis against the payment of fee of Rs 5000/- (five thousand only) per year as fixed by IMC in addition to the tuition fee and caution money deposit.

7.8 Fees

7.8.1 Tuition Fees:

(a) For Government ITIs:

Each trainee shall be required to deposit on admission a non-refundable Tuition Fee towards his/her training in the trade course to which he/she is admitted as indicated below:

Sr.No.	Trade	Tuition Fee
1.	All CTS trades (CTS)	Rs.2500/-

NOTE:

- **Tuition Fee is waived off for candidates belonging to SC /ST/BPL Categories and also for those having annual family income of less than Rs.3,00,000/-.**
- **Tuition Fee is also waived off for Orphans or destitute children seeking admission in ITI.**

(b) For Private ITIs:

Sesa Private ITIs (Sankhali):

Sr. No.	Types of Fees	Trade Course				
		Fitter	Machinist	Electrician	Instrument Mech.	COPA
1	Tuition Fees	Rs. 2500/-	Rs. 2500/-	Rs. 2500/-	Rs. 2500/-	Rs. 2500/-
2	Caution Money (Refundable)	Rs. 500/-	Rs. 500/-	Rs. 500/-	Rs. 500/-	Rs. 500/-
3	Total	Rs. 3000/-	Rs. 3000/-	Rs. 3000/-	Rs. 3000/-	Rs. 3000/-

Montfort Private ITI:

Sr. No.	Type of Fee	Amount		
		One year course	Two year course	
			1 st year	2 nd year
1.	Tuition fee	20130	18300	19000
2.	Caution Money (Refundable)	500	500	-
3.	Internal Exam Fees	1000	1000	1000
4.	Identity card	200	200	-
5.	Total	21830	20000	20000

Indo- German Private Industrial Training Institute, Marna, Siolim

Sr.No	Types of Fees	Trade Course	
		Food Production (General)	Food & Beverages Service Assistant*
1	Tuition Fees	Rs. 12840/-	Rs. 12840/-
2	Caution Money (Refundable)	Rs. 300/-	Rs. 300/-

3	Identity Card	Rs. 40/-	Rs. 40/-
4	TOTAL	Rs. 13180/-	Rs. 13180/-

7.8.2 Examination Fees:

The trainees declared eligible to appear for the yearly/semester pattern trade test of craftsmen under CTS or CoE scheme conducted at the end of each year/semester shall have to pay an examination fee as under :

Exam Pattern/Category	Fees per attempt
Regular trainee-Annual pattern /per year	Rs. 700/-
Repeater- Annual pattern /per year	Rs. 1000/-
Repeater- Semester pattern	Rs. 575/-
Regular trainee of DCM trade (One Semester)	Rs. 275/-
Private candidate	Rs. 2,075/-
CoE BBBT & Advance Modules Repeaters	Rs. 500/-

Note: 1. CBT fees as applicable shall be intimated later as per the DGT guidelines for NCVT Examination
2. CBT fees as applicable shall be intimated later as per the DGT guidelines for SCVT Examination

7.8.3 Caution Money Deposit:

(a) For Government ITIs:

Each trainee will be required to deposit on admission a sum of Rs. 1500/- (Per Trade Course) to guard against loss or damage to equipments or tools entrusted to his/her charge during the course of training. A second deposit may also be asked for if the first one has been exhausted.

The caution money is refundable to a trainee on satisfactory completion of the course or in the event of his/her discharge from the institute on any grounds, after deduction of Government dues, if any Caution money deposits which are not claimed within six months after completion of training, and in the case of trainees who discontinue their training after one month of its commencement shall be forfeited to the Government. Also, caution money will be refunded if he/she withdraws their admission on a genuine ground.

(b) For Private ITIs:

A refundable amount as mentioned in the fee structure of each Private ITI is collected from each candidate as caution money deposit.

7.9 Sale of Prospectus:

A candidate desiring to seek admission in any of the Government or Private ITIs can download the "common" Prospectus from our website <https://dsde.goa.gov.in/> or <https://goaonline.gov.in/> In case of any difficulty they should approach to the nearest Government or Private ITI and Office of



Directorate General of Training



Skill India
कौशल भारत - कुशल भारत



Government of Goa



Industrial Training Institute

Margao Government Industrial Training Institute

Borda, Margao, Salcete - Goa



Our Vision:

Is to become the leading Indian assessor that empowers innovators to become successful Craftsmen for entrepreneurship. We aim to develop world-class solutions for trainees to take up challenges and create growth.



Our Mission:

Is to increase competitiveness of trainees in Margao Gov. ITI; its sustainability for economic growth and

job creation. We intent to promote and strengthen cooperation with leading companies in Goa as well as commercial establishments such as Beauty Parlours and Hospitality Industry among others.



Our Goals:

To enhance skills to trainees to become expert and professionals in their own fields by nurturing Start-Ups to be future entrepreneurs in their own rights.



Tel No.: 0832-2714887/0832-2958001

Website: www.itimargao.goa.gov.in

email: margao-iti.goa@nic.in

AN INSTITUTE WHERE LEARNING IS A JOYFUL EXPERIENCE

ENGINEERING TRADES

SR. NO	NAME OF COURSES	NCVT/SCVT	DURATION	NSQF LEVEL	ENTRY QUALIFICATION
1	Fitter	NCVT	2 year	Level 4	Passed 10 th Class with Science and Mathematics or its equivalent
2	Information & Communication Technology System Maintenance	NCVT	2 year	Level 4	Passed 10th Class examination
3	Electrician	NCVT	2 year	Level 4	Passed 10 th Class with Science and Mathematics or its equivalent
4	Electronics Mechanic	NCVT	2 year	Level 4	Passed 10 th Class with Science and Mathematics or its equivalent
5	Plumber	NCVT	1 year	Level 3	Passed 8 th Class examination
6	Refrigeration & Air Conditioning Technician	SCVT	2 year	Level 4	Passed 10 th Class with Science and Mathematics or its equivalent

NON-ENGINEERING TRADES

1	Computer Operator & Programming Assistant	NCVT	1 year	Level 3	Passed 10th Class examination
2	Desktop Publishing Operator	NCVT	1 year	Level 3	Passed 10th Class examination
3	Sewing Technology	NCVT	1 year	Level 3	Passed 8 th Class examination
4	Cosmetology	NCVT	1 year	Level 3	Passed 10th Class examination
5	Food Production (General)	NCVT	1 year	Level 3	Passed 10th Class examination
6	Food Production (General) Dual System Training	NCVT	1 year	Level 3	Passed 10th Class examination
7	Food and Beverages Service Assistant	NCVT	1 year	Level 3	Passed 10th Class examination or its equivalent
8	Food and Beverages Service Assistant (DST)	NCVT	1 year	Level 3	Passed 10th Class examination or its equivalent
9	Computer Hardware & Network Maintenance	NCVT	1 year	Level 3	Passed 10th Class examination with Science & Mathematics or with Vocational subject in same sector or its equivalent
10	Housekeeper Dual System Training	SCVT	1 year	Level 3	Passed 10th Class examination
11	Smartphone Technician cum App Tester	SCVT	6 Months	Level 3	Passed 10th Class examination

Directorate of Skill Development & Entrepreneurship.

7.10 Instructions For Filling Online Application Form

1. Visit www.dsde.goa.gov.in or www.goaonline.gov.in and click on 'Online Admissions to ITI 2024-25'
2. Go through the procedure to apply, Documents required and Designated Officials.
3. If you are already registered with Goa Online Portal then click on 'Proceed to Apply' enter your login ID and Password ->click login (Continue from the step no. 5)
4. If you are not registered with Goa Online Portal, Register yourself on www.goaonline.gov.in by providing email id, mobile no, aadhaar no., name, address and date of birth along with OTP authentication.

On successful registration, login using credentials and click on Services Menu -> All Services -> Directorate of skill Development and Entrepreneurship -> Application for ITI Admission. (Continue from the step no. 5)

5. You will see 'Application form' page->Click on 'Apply Now'. Then proceed with the filling on the application form.
6. Enter your Personal Information & Educational Details.
7. Upload your passport size photograph in JPEG/PNG format with size less than 80 KB
8. Upload your Self Attested mandatory certificates / documents in JPEG/PNG/PDF format with size less than 2MB and greater than 10KB.
9. In case of more than one Residence proof / Bonafide certificate, multiple documents can be uploaded to prove residence of 10 years in Goa.
10. In case **the no. of attempt is more than one , multiple marksheets need to be uploaded.**
11. Click on the submit application button and proceed towards the payment of:-
 - a) Application processing fee;
 - b) **Prospectus fees (//lease hard copy of prospectus is not purchased).**

Note: Fees once paid will not be refunded.

12. On successful Payment, candidate can download the filled Application Form by clicking download link from the inbox. Candidate can also download the payment receipt from the inbox.
13. Candidate to choose the Trade / ITI preferences by clicking on submit "tradepreferences" from the inbox.
14. Once the application is Verified (approved/rejected), the status will be communicated via SMS/Email.

Note: For further details like display of Provisional and Final merit list etc. please visit Our website www.dsde.goa.gov.in/www.goaonline.gov.in irregularly.

7.11 Uploading of documents along with online application:

Following Documents to be scanned in JPEG/PNG/PDF format with size less than 2MB and greater than 10KB.

1. a) Leaving Certificate of the last School/ College / Institute attended by the candidate
OR
- b) Bonafide certificate of the last School/ College / Institute attended by the candidate mentioning that the candidate was a student of the particular school / college during the Last academic year

2. Statement of marks obtained in VIII Std / SSC/ XII as applicable
2. a) Residence Certificate from the Mamlatdar proving continuous period of residence of last 10 years in Goa on the date of application
- OR
- b) Residence proof (Other than residence certificate) such as School /Institute /College Leaving Certificate/Bonafide certificate/Transfer certificate etc. proving last 10 years continuous domicile /residence in Goa, preceding the date of the application, (any one) [self attested]
3. Birth Certificate
4. Certificate that the candidate belongs to Scheduled Caste/Scheduled Tribe/ Other Backward Classes issued by competent authority of Govt, of Goa (If applicable)
5. Certificate regarding candidate being Person with Disability (If applicable)
6. Certificate that the candidate belongs to Economically Weaker Section (EWS) (If applicable)
7. Certificate that the candidate's father or mother is an employee of Govt. /Govt., undertaking. (If applicable)
8. Certificate that the candidate's father or mother is a freedom fighter.(If applicable)
9. Certificate that the candidate's father or mother is Defense Personnel or Ex- Servicemen.(If applicable)
1. Children of the African Repatriates (CAR) of Goan origin, a certificate to that effect from the Home Department of Government of Goa. (If applicable)
- 12.a) Income Certificate from competent authority proving that annual family income less than Rs 3,00,000/- p.a (If applicable)OR
- b) BPL /ANTODAY Ration Card (If applicable)
- 13.Aadhaar Card

Note: 1. Document at Sr. No. 12 are required for availing concession in fees at the Government ITIs only.

- 2. Original documents along with the self attested Xerox copies to be submitted at the time of verification**
- 3. The original testimonials submitted by the candidates at ITI shall be returned to the candidates after of 15days from the date of commencement of the training.**

7.12 Completion of Admission Procedure

Procedure of admission shall be notified by DGT from time to time.

7.13 The following Fees to be paid while submitting Online Application Form:

1.	Online Admission Fee (Other than SC/ST category)	Rs. 295/- per student
2.	Online Admission (SC/ST category)	Rs.148/- per student
3.	Prospectus Fee (Online / Offline)	Rs. 100/- per student

Note:-

1. Application/processing fee is waived off for orphans on par with SC/ST Candidates.

8. FREQUENTLY ASKED QUESTIONS (FAQs)

Sr. No	Issue/Questions	Clarifications / Responses
1.	What are the courses offered in the ITIs?	There are altogether 43 Courses offered in various ITIs. The details are given in the Prospectus (May refer page no. 11 to 60).
2.	What is the certification awarded after completion of training?	After successful completion of training, the trainees are awarded National Trade Certificate (NTC), under NCVT, and Trade Certificate under SCVT.
3.	What is the eligible age limit?	Minimum age required is 14 years as on 01.08.2024 for all the courses, except Driver cum Mechanic Course, for which minimum age required is 18 years.
4.	Is ITI Certificate equivalent to Diploma?	Not equivalent, ITI is Skill development and Job oriented training and certification course.
5.	From where can I buy the Prospectus?	Prospectus can be purchased from any nearby Govt./ Private ITIs or from Directorate of Skill Development and Entrepreneurship, Panaji and also available online at DSDE Website : www.dsde.goa.gov.in and on Goa online portal.
6.	Where do I need to submit my application for admission?	The application form for admission is required to be submitted online at Goa Online Portal.
7.	How do I come to know, which Course is available, where?	The details are available in the Prospectus (May refer page no. 85 to 92).
8.	How do I know the Employment opportunities for the selected Course?	The details are available in the Prospectus (May refer page no. 11 to 60).
9.	What are my future prospects after completion of Course?	The details are available in the Prospectus (May refer page no. 11 to 60).
10.	What are the Course Timings?	The course timings are from 8.00am - 3.30pm in the 1 st shift and from 10.00am - 5.30pm in the 2 nd shift (including Lunch break)
11.	Is there any transport facility available at the ITIs?	Yes, transport facility is available for all the Government ITIs, except ITI Bicholim and ITI Mapusa;
12.	ITI courses are affiliated to which Council/s?	Courses offered at ITIs are affiliated to National Council for Vocational Training (NCVT) or State Council for Vocational Training (SCVT) as per the details given in the Prospectus (May refer Annexures at pageno.85 to 92).
13.	How many Government ITIs are there in the State?	There are Ten Government ITIs located in the State. Detailed information available in this Prospectus at page no. 04.
14.	Is there any linkage of the ITIs with the Industry?	All the Government ITIs have Institute Managing Committees, whose Members, including the Chairman, are drawn from reputed local Industries;
15.	Are there any Holidays / Leaves admissible to Trainees?	Trainees are allowed to avail same number of Holidays as declared by the Government of Goa. Further, Casual, Medical and Special Leaves are also applicable as per details available in the Prospectus;

16.	What are the disciplinary measures required to be followed by the trainees?	The Trainees are required to wear the ITI Uniform/Workshop Dress and I-Card at all times. While, Use of Mobiles in the ITI Campus is strictly prohibited, Ragging in any form is also strictly banned and punishable
17.	What are the concessions/facilities offered to the trainees?	Free transport facility for SC, ST & BPL category, Free uniform cloth and workshop cloth to all trainees. However stitching charges are to be borne by the trainees, free facility for recreation , library, sports etc.
18.	Are there any Scholarships available for trainees?	Merit Scholarship & BPL Scholarship are offered. Details are available in the Prospectus.(May refer page no. 63).
19.	Is there any Vertical Mobility possible?	Yes, details are available in the Prospectus. (May refer page no. 67 to 68).
20.	What is the eligibility criteria for each Course?	Details are available in the Prospectus. (May refer page no. 73 to 76)
21.	What is the Reservation/s available?	Details are available in the Prospectus. (May refer page no. 77 to 78)).
22.	What are the Fees charged?	Details are available in the Prospectus. (May refer page no. 78 & 80).
23.	What are the benefits available for SC/ST	SC/ST category trainees are eligible to claim for respective trade related trainees tool kit at a max. cost of Rs.2500/-(Rupees two thousand five hundred only)

ANNEXURE-1**TRADE-WISE INTAKE CAPACITY AT GOVERNMENT ITIs FOR YEAR 2024-25 IN TRADES AND UNITS RUN UNDER CTS SCHEME AND AFFILIATED TO NATIONAL COUNCIL FOR VOCATIONAL TRAINING (NCVT), NEW- DELHI**

Sr. No.	ITI	Computer Operator & Programming Assistant	Information & Communication Technology System Maintenance	Desktop Publishing Operator	Fitter	Turner	Machinist	Electrician	Instrument Mechanic	Refrigeration and Air Conditioner Technician	Electronics Mechanic	Draughtsman (Mechanical)	Draughtsman (Civil)	Fire Technology and Industrial Safety Management	Wood Work Technician	Mechanic Electric Vehicle
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1	Farmagudi	48	24	-	20	-	20	40	24	24	24	20	24	-	-	-
2	Panaji	-	-	-	20	-	-	20	-	-	-	-	-	-	-	-
3	Mapusa	48	-	-	20	-	-	20	-	-	24	-	-	-	-	-
4	Margao/Aquem	48	24	24	20	-	-	20	-	-	24	-	-	-	-	-
5	Cacora	24	-	24	20	-	-	20	-	24	-	-	-	24	24	24
6	Pernem	48	-	-	-	-	-	20	-	-	-	-	-	-	-	-
7	Bicholim	48	-	-	20	-	-	40	-	-	-	-	24	-	-	-
8	Sattari	24	-	24	20	20	-	40	-	24	24	-	-	-	-	-
9	Canacona	24	-	-	20	-	-	20	-	-	24	-	-	-	-	-
10	Vasco	24	-	24	20	-	-	20	-	24	24	-	-	-	-	-
	Total	336	48	96	180	40	20	260	24	96	144	20	48	24	24	24

Note: If the trade is not granted NCVT affiliation, the admission shall be considered under SCVT affiliation.

ANNEXURE -1 (continuation)**TRADE-WISE INTAKE CAPACITY AT GOVERNMENT ITIs FOR YEAR 2024-25 IN TRADES AND UNITS RUN UNDER CTS SCHEME AND AFFILIATED TO NATIONAL COUNCIL FOR VOCATIONAL TRAINING (NCVT), NEW- DELHI**

Sr. No.	ITI	Stenographer & Secretarial Assistant (English)	Secretarial Practice (English)	Mechanic Motor Vehicle	Cosmetology	Food Production (General)	Food & Beverages Service Assistant	Mechanic Diesel	Welder	Wireman	Plumber	Sewing Technology	Solar Technician (Electrical)	Computer hardware & Network Maintenance	Total
1	2	18	19	20	21	22	23	24	25	26	27	28	29	30	31
1	Farmagudi	-	-	-	-	-	-	48	40	-	48	-	-	-	404
2	Panaji	-	-	24	-	24	20	-	20	-	24	-	-	-	152
3	Mapusa	-	24	-	24	-	-	-	-	-	-	-	-	-	180
4	Margao/ Aquem Baixo	-	-	-	48	24	20	-	-	-	48	40	-	24	364
5	Cacora	-	-	24	24	-	-	48	40	20	48	20	20	-	428
6	Pernem	-	-	-	-	-	-	-	-	-	24	20*	-	-	112
7	Bicholim	24	-	-	-	-	-	48	-	20	-	20	-	-	244
8	Sattari	-	-	-	-	-	-	24	20	20	48	20	-	-	308
9	Canacona	-	-	-	-	-	-	24	20	20	24	20	-	-	196
10	Vasco	-	-	-	-	-	-	48	20	20	24	-	20	-	268
	Total	24	24	48	96	48	40	240	160	100	288	140	40	24	2656

Note: If the trade is not granted NCVT affiliation, the admission shall be considered under SCVT affiliation.

**Subject to approval & acceptance of the trade under NCVT by DGT, New Delhi while migrating trainees on SID portal, else the trade will be under SCVT.*

ANNEXURE - II

**TRADE-WISE INTAKE CAPACITY AT GOVERNMENT ITIs FOR 2024-25 IN TRADES AND UNITS RUN UNDER CTS SCHEME
AND AFFILIATED TO STATE COUNCIL FOR VOCATIONAL TRAINING (SCVT), PANAJI-GOA**

Sr. No	ITI	Computer Operator & Programming Assistant	Dress Making	Machinist	Electronics Mechanic	Cosmetology	Welder	In Plant Logistic Assistant	Wireman	Plumber	Sewing Technology	Refrigeration and Air Conditioning Technician
1	2	3	4	5	6	7	8	9	10	11	12	13
1	Farmagudi	-	20	-	-	-	-	20	-	-	-	-
2	Panaji	24	-	-	-	-	-	-	-	-	-	24
3	Mapusa	-	-	-	-	-	-	-	-	-	-	-
4	Margao/ Aquem Baixo	-	-	-	-	-	-	-	-	-	-	24
5	Cacora	-	-	-	-	-	-	-	-	-	-	-
6	Pernem	-	-	-	-	-	-	-	-	-	-	24
7	Bicholim	-	-	20	24	24	40	-	-	48	-	-
8	Sattari	-	-	-	-	24	-	-	-	-	-	-
9	Canacona	-	-	-	-	-	-	-	-	-	-	-
10	Vasco	-	-	-	-	24	-	-	-	-	20	-
	Total	24	20	20	24	72	40	20	00	48	40	72

ANNEXURE - II (Continuation)

**TRADE-WISE INTAKE CAPACITY AT GOVERNMENT ITIs FOR 2024-25 IN TRADES AND UNITS RUN UNDER CTS SCHEME AND
AFFILIATED TO STATE COUNCIL FOR VOCATIONAL TRAINING (SCVT), PANAJI-GOA**

Sr. No	ITI	Computer hardware & Network Maintenance	Attendant Operator (Chemical Plant)	Multimedia, animation & special effects	Fashion Design & Technology	Solar Technician (Electrical)	House Keeper	Front Office Assistant	Food Production (General)	Food & Beverage Service Assistant	Driver Cum Mechanic	Digital Photographer
1	2	14	15	16	17	18	19	20	21	22	23	24
1	Farmagudi	-	-	-	-	-	-	-	-	-	-	24
2	Panaji	-	-	-	-	-	24	24	24	20	-	-
3	Mapusa	-	-	-	-	-	-	-	-	-	-	-
4	Margao/ Aquem Baixo	-	-	-	-	-	-	-	-	-	-	-
5	Cacora	-	-	-	-	-	-	-	24	-	20	-
6	Pernem	-	-	-	-	-	-	-	24	20	-	-
7	Bicholim	-	-	24	20	20	-	-	24	-	-	-
8	Sattari	-	-	-	-	-	-	-	-	-	-	-
9	Canacona	-	-	-	-	-	-	-	-	-	20	-
10	Vasco	-	24	-	-	-	-	-	-	-	-	-
	Total	00	24	24	20	20	24	24	96	40	40	24

ANNEXURE - II (Continuation)

**TRADE-WISE INTAKE CAPACITY AT GOVERNMENT ITIs FOR 2024-25 IN TRADES AND UNITS RUN UNDER CTS SCHEME AND
AFFILIATED TO STATE COUNCIL FOR VOCATIONAL TRAINING (SCVT), PANAJI-GOA**

Sr N o	ITI	Smart Phone Technician cum App Tester	Electrician	Drone Pilot (Junior)	Mechanic Motor Vehicle	Fitter	Mechanic Consumer Electronic Appliances	Marketing Executive	Total
1	2	25	26	27	28	29	30	31	30
1	Farmagudi	-	-	-	-	-	-	-	64
2	Panaji	-	-	-	-	-	-	-	140
3	Mapusa	-	-	-	-	-	-	20	20
4	Margao/Aquem Baixo	24	-	-	-	-	-	-	48
5	Cacora	-	-	24	-	-	24	-	92
6	Pernem	-	-	-	-	20	-	-	88
7	Bicholim	-	-	-	-	-	-	-	244
8	Sattari	-	-	-	24	-	-	-	48
9	Canacona	-	-	-	-	-	-	-	20
10	Vasco	-	-	-	-	-	-	-	68
	Total	24	00	24	24	20	24	20	832

ANNEXURE - III

**TRADE-WISE INTAKE CAPACITY AT GOVERNMENT ITIs FOR YEAR 2024-25 IN TRADES AND UNITS RUN UNDER Dual System of Training (DST) SCHEME
AND AFFILIATED TO NATIONAL COUNCIL FOR VOCATIONAL TRAINING (NCVT), NEW- DELHI**

Sr. No.	ITI	Mechanic Motor Vehicle	Food Production (General)	Food & Beverage Service Assistant	Housekeeper	Total
		1	²		¹	
1	Farmagudi	24*	-	-	-	24
2	Panaji	-	-	-	-	-
3	Mapusa	24	-	-	-	24
4	Margao/ AquemBaixo	-	24	20	-	44
5	Cacora	-	-	-	-	-
6	Pernem	-	-	-	-	-
7	Bicholim	-	-	-	-	-
8	Sattari	-	-	-	-	-
9	Canacona	-	24*	20*	24*	68
10	Vasco	-	-	-	-	-
	Total	48	48	40	24	160

Note : * If the trade is not granted DST-NCVT affiliation, the trainee's admission shall be considered under CTS.

ANNEXURE – IV

**TRADE-WISE INTAKE CAPACITY AT GOVERNMENT ITIs FOR 2024-25 INTRADES AND UNITS RUN UNDER Dual System of Training (DST) SCHEME AND
AFFILIATED TO STATE COUNCIL FOR VOCATIONAL TRAINING (SCVT), PANAJI-GOA**

Sr. No	ITI	Mechanic Two and Three Wheeler	House Keeper	Food Production (General)	Food & Beverage Service Assistant	Multipurpose Health worker (Male)	Total
1	2	3	4	5	6	7	8
1	Farmagudi	-	-	-	20	-	20
2	Panaji	-	-	-	-	20	20
3	Mapusa	40	-	-	20	-	60
4	Margao/ AquemBaixo	-	24	-	-	-	24
5	Cacora	-	-	-	20	-	20
6	Pernem	-	-	-	-	-	-
7	Bicholim	-	-	-	-	-	-
8	Sattari	-	-	-	20	-	20
9	Canacona	-	-	-	-	-	-
10	Vasco	-	-	-	20	-	20
	Total	40	24	00	100	20	184

ANNEXURE-V**TRADE-WISE INTAKE CAPACITY AT PRIVATE ITIs FOR YEAR 2024-25 IN TRADES AND UNITS RUN UNDER CTS SCHEME AND AFFILIATED TO NATIONAL COUNCIL FOR VOCATIONAL TRAINING (NCVT), NEW- DELHI**

Sr No	ITI	Fitter	Machinist	Electrician	Instrument Mechanic	Electronics Mechanics	Total
1	2	3	4	5	6	7	9
1	Sesa, Sankhali	20	20	20	24	-	84
2	Montfort, Corlim	20	-	-	-	24	44
	Total	40	20	20	24	24	128

ANNEXURE-VI**TRADE-WISE INTAKE CAPACITY AT PRIVATE ITIs FOR 2024-25 IN TRADES AND UNITS RUN UNDER CTS SCHEME AND AFFILIATED TO STATE COUNCIL FOR VOCATIONAL TRAINING (SCVT), PANAJI-GOA.**

Sr. No.	ITI	Computer Operator Programming Assistant	Electrician	Food & Beverages Service Assistant	Food Production General	Total
1	2	3	4	5	6	7
1	Montfort, Corlim	24	20	-		44
2	Indo-German, Marna-Siolim	-	-	20	24	44
3	Sesa, Sankhali	24	-	-	-	24
	Total	48	20	20	24	112

DIRECTORATE OF SKILL DEVELOPMENT AND ENTREPRENEURSHIP

Online Admission Schedule for Admission to ITI for Academic Year 2024-25 will be available on www.goaonline.gov.in and also on our website www.dsde.goa.gov.in. This schedule will be made available for information of general public and aspiring candidates in the advertisements to be published by this Directorate in local dailies, time to time. Aspiring candidates are requested to visit website www.goaonline.gov.in and www.dsde.goa.gov.in regularly for schedule of admission 2024 - 25 to Government and Private ITI.



Sesa Private Industrial Training Institute



Sesa Private Industrial Training Institute
Sankhali, Bicholim - Goa. Pin Code - 403505
Ph. 2365509 / 2365123



Sesa Private Industrial Training Institute



Trade details and eligibility criteria for admissions:

Sr. No.	Trade	NCVT/ SCVT	NSQF Level	Duration	Entry Qualification
Engineering Trades					
1.	Fitter	NCVT	4	2 Years	Passed 10th Class examination with Science and Mathematics or its equivalent.
2.	Machinist	NCVT	4	2 Years	
3.	Electrician	NCVT	4	2 Years	
4.	Instrument Mechanic	NCVT	4	2 Years	
Non-Engineering					
5.	Computer Operator & Programming Assistant	SCVT	3	1 year	Passed 10th class examination

ANNEXURE –VII**AFFIDAVIT BY STUDENT**

I.....(Full name of the student with admission / registration / enrolment number) S/O /Mr./Mrs/Ms..... having been admitted to..... (Name of the Institution) have been noted the content of Goa Prohibition of ragging (Amendment) Act. 2010 (ACT 17 of 2010) herewith after the “ACT”). Carefully read understood the provisions in the said Act.

1. I have in particular perused clause 2(e) of the Act and am aware as to what constitutes ragging.
2. I have also in particular pursued clause 5 and clause 6 of the Act and am fully aware of the penal and administrative action that is liable to be taken against me in case i am found guilty of or abetting ragging, actively or passively, or being part of a conspiracy to promote ragging.
3. I hereby solemnly aver and undertake that.
 - A. I will not indulge in any behavior or act that may be constituted as ragging under clause 2 (e) of the Act.
 - B. I will not participate in or abet or abet or propagate through any act of commission or mission that may be constituted as ragging under the clause 2(e) of the Act.
4. I hereby affirm that if found guilty of ragging. I am liable for punishment according to clause 6 of the Act without prejudice to any criminal action that may be taken against me under any penal law for time being in force.
5. I hereby declare that i have not been expelled or debarred from admission in any institution in the country on account of being found quality of, abetting or being part of a conspiracy to promote ragging: and further affirm that, in case the declaration is found to be untrue. I am aware that my admission is liable to be cancelled.

Declared this..... day of month of year.

Signature of Deponent

Name:

VERIFICATION

Verified that the contents of this affidavit are true to the best of my Knowledge and no part of the affidavit is false and nothing has been concealed of misstated therein.

Verified at..... (Place) on this the..... (day) of..... Month..... (Year)Solemnly affirmed and signed in my presence on this the..... (day) of..... Month..... (Year)..... after reading the contents of this affidavit.

PrincipalGovt/Pvt ITI

ANNEXURE –VIII**AFFIDAVIT BY THE PARENT / GUARDIAN**

I Mr./Mrs./Ms (fullname of Parent/guardian father/Mother/Guardian of.....)(Full name of student with admission/registration/enrolment number..... with admission/registration enrolment number) having been admitted to..... (Name of the institution) have noted the content of Prohibition of Ragging Act, 2008(Act No.9 of 2009) and Goa Prohibition of Ragging (Amendment) Act. 2010(Act 17 of 2010) (herein after called the "Act"). Carefully read and fully understood the provisions contained in the said Act.

I have in particular. perused clause 2(e) or the Act and am aware as to what constitutes Ragging

1. I have also in particular. perused clause 5 and clause 6 or the Act and am fully aware or the penal and administrative action that is liable to be taken against my ward in case he/she is found guilty of or abetting ragging. actively or passively, or being part of a conspiracy to promote ragging.
2. I hereby solemnly aver and undertake that
 - a) My ward will not indulge in any behavior or act that may be constituted as ragging under clause 2(e) of the Act.
 - b) My ward will not participate in or abet or propagate through any act of commission or omission that may be constituted as ragging under clause 2(e) of the Act.
4. I hereby affirm that. if found guilty of ragging, my ward is liable for punishment according to clause the Act. without prejudice to any other criminal action that may be taken against my ward under any penal law or any law for the time being in force.
5. I hereby declare that my ward have not been expelled or debarred from admission in any institution in country on account of being found guilty of. abetting or being part of conspiracy to promote ragging and further affirm that. in case the declaration is found to be untrue. the admission of my ward is liable to be cancelled

Declared thisday of month of year.

Signature of Deponent

Name:

Address:

Telephone/Mobile No.

Verification

Verified that the contents of this affidavit are true to the best of my Knowledge and no part of the affidavit is false and nothing has been concealed or misstated therein. Verified at..... (Place) on this the..... (day) of..... month..... (year)

Signature of Deponent

Solemnly affirmed and signed in my presence on this the..... (Day) of..... month..... (year)..... After reading the contents of this affidavit.

Principal Govt. /Pvt. ITI

ANNEXURE -IX**SELF DECLARATION OF ORPHAN**

I _____, son/daughter of _____ hereby declare that I/my ward/child under my Institution has lost both my/his/her parents and is an orphan.

This declaration is for the purpose of availing concession in domicile/residence criteria and admission fees for admission in ITIs under Directorate of Skill Development and Entrepreneurship, Panaji – Goa.

If any information declared herein is found to be incorrect/ false, I shall bear the consequences deemed fit.

Dated:- _____

Signature of applicant (if
major)/ legal guardian or
Incharge of *CCI (in case
of minor applicant)

Witness Name:- _____

Witness Signature:- _____

*CCI – Child Care Institute



"Work Conquers All"



Montfort
Private
Industrial Training Institute



Montfort Private Industrial Training Institute is situated in Goa and offering Technical (formal and non-formal training in NCVT and SCVT trades) and Academics for the last 21 years. We are the members of the SKIP (An All India private ITI's organization) for the last one and half decade. Our institute's motto is to uplift the youth to have a sustainable livelihood through the carrier oriented programmes.

Right from the inception of the institution, hundreds of students have qualified from Montfort and moved into the mainstream of society with pride and self-confidence. Most of the students are doing well in their respective field of jobs in India and abroad. The students are provided an opportunity for internship in the top MNCs and industries. The passed out trainees are facilitated to do their apprenticeship in reputed companies.

Montfort Pvt. ITI is in collaboration with the following esteemed institutions and organisations to enhance the quality of training and certification in the field of Technology and Academics.

1. **TATA Motors for Automobile sector**
2. **Godrej for Refrigeration and AC mechanic**
3. **Confederation of Indian Industry(CII)**
4. **SES (Senior Expert Service) Indo-German collaboration for ToT .**
5. **Quest Alliance for ToT .**
6. **ASDC (Automotive Skill Development Council)**



Corlim, Ilhas, Tiswadi, Goa - 403 110.

(O): 0832-2285524 / 2285544 | (O): 9545004320 (P): 7799038566

montfortacademygoa@gmail.com | montfortitigoa@gmail.com www.montfortitigoa.com



Montfort

Private

Industrial Training Institute



Trade details and eligibility criteria for admissions:

Sr. No.	Trade	NCVT/ SCVT	NSQF Level	Duration	Entry Qualification
Engineering Trades					
1.	Fitter	NCVT	4	2 Years	Passed 10th Class examination with Science and Mathematics or its equivalent.
2.	Electrician	SCVT	4	2 Years	
3.	Electronics Mechanic	NCVT	4	2 Years	
Non-Engineering					
4.	Computer Operator & Programming Assistant	SCVT	3	1 year	Passed 10th class examination

Corlim, Ilhas, Tiswadi, Goa - 403 110.

(O): 0832-2285524 / 2285544 | (O): 9545004320 (P): 7799038566

montfortacademygoa@gmail.com | montfortitigoa@gmail.com www.montfortitigoa.com



GOVERNMENT OF GOA

DIRECTORATE OF SKILL DEVELOPMENT & ENTREPRENEURSHIP

Shram Shakti Bhavan, Patto, Panaji Goa -403001.

APPLICATION FORM FOR ADMISSION TO INDUSTRIAL TRAINING INSTITUTE
FOR THE YEAR 2024-25**FOR OFFICIAL USE ONLY**

Prospectus No. :

Application No.:

(to be issued by ITI)

Date:/...../2024

N.B. To be filled in by the candidates in his/her own hand writing using BALL PEN only.

Affix latest
photograph
here

(1) Name of the candidate Shri. / Kum. / Smt. (As per
SSC/last qualifying
Examination in capital
letters only)

First Name _____

Middle Name _____

Last Name _____

(2) Name of Father/ Guardian: _____

(3) Name of Mother: _____

(4) Date of Birth: _____

(5) Permanent Address: _____ (6) Address for Correspondence: _____

H. No. : _____

Ward : _____

Village/Town : _____

Taluka : _____

District: _____

Pin Code : _____

(7) Candidate's Tel. No./ Mobile*: _____

E-mail address*: _____

Aadhaar Card No. *: _____

(8) Parent's Contact Details: _____

Office Address: _____

Mobile No. : _____

Office Ph No.: _____

(9) Tick in the appropriate category in the corresponding boxes. **(Applicable to only those ITIs where there is provision for reservation of seats):**

I belong to General ☐ Scheduled Caste ☐ Scheduled Tribe ☐ Person with Disability ☐ Other
Backward Classes ☐ Women and Girls ☐ Children of Ex-Servicemen ☐ Defense Personnel ☐
Children of Freedom Fighters ☐ Children of Government Employees ☐ Children of African
Repatriates ☐ EWS ☐

EDUCATIONAL QUALIFICATIONS (Minimum Qualifying

Name of Exam	Total Marks Obtained	Maximum Marks	% of Marks Obtained	Marks Obtained in			No. of Attempts
				Maths	Science	English	
STD 8 TH PASS							
S.S.C.E. PASS							
Diploma in Engineering							
Qualifications Other than above							

(10) Name & Address of School

(11) Name & Address of Higher Secondary School

(12) Name & Address of Polytechnic last attended

(13) List of SELF ATTESTED COPIES OF CERTIFICATES to be attached to this application.

- School/Institute/College Leaving Certificate/Bonafide certificate/Transfer certificate.
 - Statement of marks obtained in VIII Std./ SSC/ Diploma in Engg. as applicable.
 - Certificate of passing VIII std/SSC/Diploma in Engg. as applicable.
 - Certificate regarding residence of 10 years preceding the date of this application or in lieu of this Certificate, documentary evidence highlighted at Clause No. 7.6 of the prospectus would have to be produced.
 - Birth Certificate.
 - Certificate that the candidate's father or mother is an employee of Govt. /Govt. undertaking.(If Applicable)
 - Certificate that the candidate's father or mother is a freedom fighter. (If Applicable)
 - Certificate that the candidate's father or mother is Defense Personnel or Ex-Servicemen. (If Applicable)
 - Certificate that the candidate belongs to Scheduled Caste/ Other Backward Classes. (If Applicable)
 - Certificate regarding candidate being Person with Disability. (If Applicable)
 - NAC/NTC/course completion certificate of BBT (Applicable for candidates applying for Advanced Modules)
- (14) 2 passport size latest photographs(Affix 01 photograph for Application Form & other for Acknowledgement card of the candidate).
- (15) Candidates selected for admission will have to submit a photograph of their Parents, duly attested by a Gazetted Officer.

UNDERTAKING

I hereby confirm that the information provided above is true. If admitted, I shall deposit the requisite fee and caution money amount as mentioned in this Prospectus to the respective ITI. I shall take proper care of the tools and equipments entrusted to me.

I agree to confirm to the Rules and Regulations presently in force at the Institute or that may be made hereafter for the administration of the Institute. I also undertake that as long as I continue to be a trainee of the Institute, I shall do nothing unworthy of a trainee of the Institute or do anything that will interfere with its orderly working and discipline.

Place:

Signature of Candidate

Date:

Signature of Parent/ Guardian

N.B.: Application with incomplete information and without self-attested copies of necessary certificates will lead to disqualification and may not be considered.

** The mobile number and E-mail address has to be mandatory retained by admitted trainees till the completion of course for examination verification and placement tracking purpose for minimum 3 years.*

Indo German Private Industrial Training Institute



कौशल भारत - कुशल भारत



Contact:
INDO-GERMAN PRIVATE INDUSTRIAL TRAINING INSTITUTE
Marna,siolim Goa; Pin Code- 403517
Email id: iseafhigt@gmail.com
Contact No: 7522939960 / 7741840535



Indo German Private Industrial Training Institute



Trade details and eligibility criteria for admissions:

Sr. No.	Trade	NCVT/ SCVT	NSQF Level	Duration	Entry Qualification
Non-Engineering					
1.	Food & Beverage Service Assistant	SCVT	3	1 year	Passed 10th class examination or its equivalent
2.	Food Production General	SCVT	3	1 year	Passed 10th class examination.

Contact No:
7522939960 / 7741840535



Directorate General of Training

कौशल भारत - कुशल भारत



Skill India
कौशल भारत - कुशल भारत

Vision:

- ✓ Create an end-to-end implementation framework for skill development, which provides opportunities for life-long learning. This includes: incorporation of skilling in the school curriculum, providing opportunities for quality long and short-term skill training, by providing gainful employment and ensuring career progression that meets the aspirations of trainees.
- ✓ Align employer/industry demand and workforce productivity with trainees' aspirations for sustainable livelihoods, by creating a framework for outcome focused training.
- ✓ Support weaker and disadvantaged sections of society through focused outreach programmes and targeted skill development activities.



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