These are the list of specializations and their pre-requisites.

		Specialization	Number of Hours	Pre-requisite
1.		Animal Production (NC II)	480 hours	
2.		Aquaculture (NC II)	640 hours	
3.	S	Artificial Insemination (Ruminants) (NC II)	160 hours	Animal Production
4.	ARTS	Artificial Insemination (Swine) (NC II)	160 hours	Animal Production
5.		Crop Production (NC I)	320 hours	
6.	<u>8</u>	Fish Wharf Operation (NC I)	160 hours	Fish or Shrimp Grow Out Operation
7.	¥ [	Food (Fish) Processing (NC II)	640 hours	
8.	AGRI-FISHERY	Horticulture (NC II)	640 hours	
9.	1-I	Landscape Installation and Maintenance (NC II)	320 hours	Crop Production
10.	GR	Organic Agriculture (NC II)	320 hours	Crop Production
11.	¥	Pest Management (NC II)	320 hours	Crop Production
12.	_	Rice Machinery Operation (NC II)	320 hours	Crop Production
13.		Slaughtering Operation (NC II)	160 hours	Animal Production
1.		Beauty/Nail Care (NC II)	160 hours	40 hours of the subject during exploratory Grade 7/8
2.		Attractions and Theme Parks (NC II)	160 hours	
3.		Bread and Pastry Production (NC II)	160 hours	
4.		Caregiving (NC II)	640 hours	40 hours of the subject during exploratory Grade 7/8
5.		Cookery (NC II)	320 hours	40 hours of the subject during exploratory Grade 7/8
6.	(0	Dressmaking (NC II)	320 hours	
7.	ິນ	Food and Beverage Services (NC II)	160 hours	
8.	Σ	Front Office Services (NC II)	160 hours	40 hours of the subject during exploratory Grade 7/8
9.	N	Hairdressing (NC II)	320 hours	
10.	ECONOMICS	Handicraft (Basketry, Macrame) (Non-NC)	160 hours	
11.	ш	Handicraft (Fashion Accessories, Paper Craft) (Non-NC)	160 hours	
12.	номе	Handicraft (Needlecraft) (Non-NC)	160 hours	
13.	우	Handicraft (Woodcraft, Leathercraft) (Non-NC)	160 hours	
14.	-	Housekeeping (NC II)	160 hours	
15.		Local Guiding Services (NC II)	160 hours	
16.		Tailoring (NC II)	320 hours	40 hours of the subject during exploratory Grade 7/8
17.		Tourism Promotion Services (NC II)	160 hours	
18.		Travel Services (NC II)	160 hours	
19.		Wellness Massage (NC II)	160 hours	

		Specialization	Number of Hours	Pre-requisite
1.		Computer Hardware Servicing (NC II)	320 hours	
2.		Animation (NC II)	320 hours	
3.	_	Computer Programming (NC IV)	320 hours	
4.	ICT	Contact Center Services (NC II)	320 hours	
5.	_	Illustration (NC II)	320 hours	
6.		Medical Transcription (NC II)	320 hours	
7.		Technical Drafting (NC II)	320 hours	
1.		Automotive Servicing (NC I)	640 hours	
2.	(0	Carpentry (NC II)	640 hours	
3.	ARTS	Consumer Electronics Servicing (NC II)	640 hours	
4.	¥	Domestic Refrigeration and Airconditioning Servicing (NC II)	640 hours	
5.	AL	Electrical Installation and Maintenance (NC II)	640 hours	
6.	Z	Masonry (NC II)	320 hours	
7.	ST	Plumbing (NC I)	320 hours	
8.	2	Plumbing (NC II)	320 hours	Plumbing (NC I)
9.	INDUSTRIAL	Shielded Metal Arc Welding (NC I)	320 hours	
10.		Shielded Metal Arc Welding (NC II)	320 hours	Shielded Metal Arc Welding (NC I)
11.		Tile Setting (NC II)	320 hours	

(160 hours)

#### **Course Description:**

This is a specialization course which leads to a **Fishport/Wharf** National Certificate I (NC I). It covers one core competency that a high school student ought to possess—namely, operating a fishport/wharf. The preliminaries of this specialization course include the following: (1) discussion on the relevance of the course, (2) explanation of key concepts relative to the course, and (3) exploration of career opportunities.

CONTENT	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	CODE
Introduction  1. Basic concepts in aquaculture  2. Relevance of the course  3. Career opportunities	The learner demonstrates an understanding of the basic concepts and underlying theories in Fishport/Wharf operation.	The learner independently demonstrates common competencies in Fishport/Wharf operation as prescribed by TESDA Training Regulations.	<ol> <li>Explain basic concepts in aquaculture</li> <li>Discuss the relevance of the course</li> <li>Explore careeropportunities in Fishport/Wharf operations or as a source of extra income</li> </ol>	
PERSONAL ENTREPRENEURIA	L COMPETENCIES (PECS)			
1. Assessment of learner's Personal Competencies and Skills (PECs) vis-à-vis PeCS of a practicing entrepreneur/employee in a province.  1.1. Characteristics 1.2. Attributes 1.3. Lifestyle 1.4. Skills 1.5. Traits 2. Analysis of learner's 3. Strengthening and further developing one's PeCS	The learner demonstrates understanding of one's Personal Competencies and Skills (PECs) in Fishport/Wharf operations.	The learner independently creates a plan of action that strengthens/ further develops one's PECs in Fishport/Wharf operations.	to 1. Develop and strengthen personal competencies and skills (PECs) needed in aquaculture 1.1. Identify areas for improvement, development and growth 1.2. Align one's PECs according to his/her business/career choice 1.3. Create a plan of action that ensures success of his/her business/career choice	TLE_PECS9-12-00-1
ENVIRONMENT AND MARKET	, ,			
<ol> <li>Product Development</li> <li>Keyconcepts in developing a product</li> </ol>	The learner demonstrates an understanding of <i>environment</i> and <i>market</i> in Fishport/Wharf	The learner independently creates a business vicinity map reflective of the potential	LO 1. Recognize and understand the market for Fishport/Wharf operations	TLE_PECS9-12-00-1

**Prerequisite**: Fish Nursery Operation

	AGRI-I ISHERI ARIS TISHFORI WHARI OF ERAITOR						
	CONTENT	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	CODE		
3.	Finding Value	operations in one's province.	Fishport/Wharf operation market	within the province			
4.	Innovation		within the province.				
	4.1. Unique Selling						
	4.2. Proposition (USP)						
		P FISH AND FISH PRODUCTS (U					
1.	Tools, equipment and	The learner demonstrates an	The learner independently	LO 1. Prepare for loading	TLE_AFFW9-12UL-Ia-e-1		
	materials for fish	understanding of the underlying	performs proper operation of a	and unloading of fish and			
	unloading and loading	concepts and principles in the	fishport/wharf.	fish products.			
2.	Personal safety	operation of a fishport/wharf.		1.1 Prepare tools, equipment			
3.	Personal hygiene and			and materials for fish			
	good grooming			loading and unloading in			
4.	Unloading equipment			accordance with standard			
5.	Safe and efficient			operating procedure			
	unloading fish catch			1.2 Wear personal protective			
6.	Appropriate			equipment (PPE) according			
	characteristics of			to the job requirement			
	loading and unloading			1.3 Practice personal hygiene			
_	procedure			and good grooming in line			
7.	Packing and unpacking			with health and safety			
	fish catch			requirements			
				LO 2. Load and unload fish	TLE_AFFW9-12UL-If-j-2		
8.	Loading, transporting			and fish products			
	piling and weighing by			2.1. Unloading fish catch in			
	fish classification			accordance with			
9.	Proper distribution of			organization's procedures			
	load within its capacity			2.2. Conduct unloading			
10	to ensure safe transport			activities in a safe and			
10.	Load safety requirement			efficient manner taking into account suitable locations,			
11.	Health and Safety Regulations			,			
12.	Proper maintenance of			stowage, safe use of equipment and balance of			
12.	protective personal			the remaining load			
	equipment			2.3. Identifying load			
	equipment			characteristics when			
				determining appropriate			
L				петеплина арргорнате			

CONTENT	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	CODE
			loading and unloading procedures  2.4. Pack and unpack fish catch  2.5. Place in fish trays with safe and effective use of available space in mind  2.6. Load fish in accordance with the appropriate transport method, safe piling, weight loading and by fish classification  LO 3. Secure and protect fish	TLE_AFFW9-12UL-IIa-e-3
			and fish product load 3.1. Check distribution of load to ensure that it is even, legal and within safe carrying capacity for transport 3.2. Secure and use the correct load restraint and protection equipment for different loads and storage conditions 3.3. Protect the load in accordance with load safety requirements	
			LO 4. Implement housekeeping activities 4.1. Clean used equipment, work area and surroundings in accordance with health and safety regulations 4.2. Clean and store PPE in accordance with standard operating procedure	TLE_AFFW9-12UL-IIf-j-4

CONTENT CONTENT STANDARD PERFORMANCE STANDARD LEARNING COMPETENCIES CODE								
CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	CODE					
LECCON 2. CLASCIEV FIGUAND FIGUADD DUCTO (CF)								
LESSON 2. CLASSIFY FISH AND FISH PRODUCTS (CF)  1. Classification of The learner demonstrates an The learner independently LO 1. Prepare for fish TLE AFFW9-12CF-IIIa-d-1								
The learner demonstrates an understanding of underlying concepts and principles in classifying fish and fish products.	The learner independently performs proper classification of fish and fish products.	LO 1. Prepare for fish classification  1.1 Prepare equipment, tools and materials for classifying fish according to standard operation practice  1.2 Clean and prepare the classifying table or conveyor for fish classification in accordance with organization's procedure  1.3 Wear PPE according to HACCP requirement  1.4 Practice personal hygiene and good grooming in line with health and safety requirements	TLE_AFFW9-12CF-IIIa-d-1					
			TLE_AFFW9-12CF-IIIe-h-2					
		2.1. Classify fish following						
	The learner demonstrates an understanding of underlying concepts and principles in classifying fish and fish	The learner demonstrates an understanding of underlying concepts and principles in classifying fish and fish  The learner independently performs proper classification of fish and fish products.	The learner demonstrates an understanding of underlying concepts and principles in classifying fish and fish products.  The learner independently performs proper classification of fish and fish products.  The learner independently performs proper classification of fish and fish products.  LO 1. Prepare for fish classification  1. Prepare equipment, tools and materials for classifying fish according to standard operation practice  1.2 Clean and prepare the classifying table or conveyor for fish classification in accordance with organization's procedure  1.3 Wear PPE according to HACCP requirement  1.4 Practice personal hygiene and good grooming in line with health and safety requirements  LO 2. Classify fish and fish products					

	ACIAL LIGHT	ERI ARIS - FISHFORI/ WHARF			
CONTENT	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	CODE	
			standard operating practice		
			2.3. Pack fish in trays by		
			classification following		
			buyers' specifications		
			LO 3. Weigh fish by	TLE_AFFW9-12CF-IIIi-3	
			classification		
			3.1. Check tray load to ensure		
			that it is even and within		
			safe carrying capacity		
			3.2. Weigh fish by tray load and		
			record according to		
			standard operating practice		
			or organization's procedure		
			LO 4. Segregate, pile and	TLE_AFFW9-12CF-IVa-e-4	
			secure fish loads		
			4.1. Segregate and pile fish		
			trays by orders, following		
			supervisor's instructions		
			4.2. Secure and protect fish		
			loads using appropriate		
			storage conditions and		
			workplace safety		
			requirements		
			LO 5. Implement	TLE_AFFW9-12CF-IVf-i-5	
			housekeeping activities		
			5.1. Clean used equipment,		
			work area and		
			surroundings in accordance		
			with health and safety		
			regulations		
			5.2. Clean and store PPE in		
			Accordance with standard		
			operating procedures		

Sample: TLE\_AFFP9-12CF-IVe-i-5

LEGEN	ND	SAMPLE		
First Entry	Learning Area and Strand/ Subject or Specialization	Technology and Livelihood Education_Agri-Fishery Fishport/Wharf Operation	TLE_AFFW9-12	
	Grade Level	9/10/11/12		
Uppercase Letter/s	Domain/Content/ Component/ Topic	Classify Fish And Fish Products	CF	
			-	
Roman Numeral *Zero if no specific quarter	Quarter	Quarter	IV	
Lowercase Letter/s *Put a hyphen (-) in between letters to indicate more than a specific week	Week	Week five to nine	e-i	
			-	
Arabic Number	Competency	Clean used equipment, work area and surroundings in accordance with health and safety regulations	5	

DOMAIN/ COMPONENT	CODE
Personal Entrepreneurial Competencies	PECS
Environment and Market	EM
Unload And Load Fish And Fish Products	UL
Classify Fish And Fish Products	CF

Technology-Livelihood Education and Technical-Vocational Track specializations may be taken between Grades 9 to 12.

Schools may offer specializations from the four strands as long as the minimum number of hours for each specialization is met.

Please refer to the sample Curriculum Map on the next page for the number of semesters per Agri-Fishery Arts specialization and those that have pre-requisites. Curriculum Maps may be modified according to specializations offered by a school.

#### **K to 12 BASIC EDUCATION CURRICULUM**

#### JUNIOR HIGH SCHOOL TECHNOLOGY AND LIVELIHOOD EDUCATION AND SENIOR HIGH SCHOOL - TECHNICAL-VOCATIONAL-LIVELIHOOD TRACK AGRI-FISHERY ARTS - FISHPORT/WHARF OPERATION

#### SAMPLE AGRICULTURE AND FISHERY ARTS CURRICULUM MAP

No.	Grade 7/8 (Exploratory)	Grade 9		Grade 10		Gra	de 11	Grade :	12
1	!!!	ı				*Landsca	ape Installatio	n and Mainte	nance (NC II)
2		<u> </u>					! !		4 semesters
3		Crop Prod	luction (NC	NC I)		*Pe	st Manageme	nt (NC II)	4 semesters
4			Crop Production (NC I)	1 1 1 1	*Rice M	achinery Oper	ation (NC II)	4 semesters	
5		 		4 semes	sters I	*Organic Agriculture (NC II)			4 semesters
6	1 1 1	ı					I I	*Artificial Inse	emination:
7	EXPLORATORY	Animal Production (NC					Swine (NC II) 2 sems		
8		I I I I I I I I I I I I I I I I I I I	mai Produ	iction (NC	6 semesters		*Artificial Insem Ruminants (N		
9		ļ					1 1	*Slaughtering (NC II	
10	i i i	I			Horti	culture (N	NC II)	8 sei	mesters
11	4 semesters  1	I		F	ood (Fish	) Processi	ing (NC II)	8 se	mesters
12		I		 	Aqua	aculture (	NC II)	8 se	mesters
13		*Fish Wharf Opera	ation (NC I)  2 sems						

<sup>\*</sup>Please note that these subjects have prerequisites mentioned in the CG.