

**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**

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

	<b>Specialization</b>	<b>Number of Hours</b>	<b>Pre-requisite</b>
1.	Animal Production (NC II)	480 hours	
2.	Aquaculture (NC II)	320 hours	
3.	Artificial Insemination (Ruminants) (NC II)	160 hours	Animal Production
4.	Artificial Insemination (Swine) (NC II)	160 hours	Animal Production
5.	Crop Production (NC I)	320 hours	
6.	Fish Nursery Operation (NC II)	160 hours	
7.	Fish or Shrimp Grow Out Operation (Non NC)	160 hours	Aquaculture
8.	Fish Wharf Operation (NC I)	160 hours	Fish or Shrimp Grow Out Operation
9.	Food (Fish) Processing (NC II)	640 hours	
10.	Horticulture (NC II)	640 hours	
11.	Landscape Installation and Maintenance (NC II)	320 hours	Crop Production
12.	Organic Agriculture (NC II)	320 hours	Crop Production
13.	Pest Management (NC II)	320 hours	Crop Production
14.	Rice Machinery Operation (NC II)	320 hours	Crop Production
15.	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.	Dressmaking (NC II)	320 hours	
7.	Food and Beverage Services (NC II)	160 hours	
8.	Front Office Services (NC II)	160 hours	40 hours of the subject during exploratory Grade 7/8
9.	Hairdressing (NC II)	320 hours	
10.	Handicraft (Basketry, Macrame) (Non-NC)	160 hours	
11.	Handicraft (Fashion Accessories, Paper Craft) (Non-NC)	160 hours	
12.	Handicraft (Needlecraft) (Non-NC)	160 hours	
13.	Handicraft (Woodcraft, Leathercraft) (Non-NC)	160 hours	
14.	Household Services (NC II)	320 hours	40 hours of the subject during exploratory Grade 7/8
15.	Housekeeping (NC II)	160 hours	
16.	Tailoring (NC II)	320 hours	40 hours of the subject during exploratory Grade 7/8
17.	Tour Guiding Services (NC II)	160 hours	
18.	Tourism Promotion Services (NC II)	160 hours	
19.	Travel Services (NC II)	160 hours	
20.	Wellness Massage (NC II)	160 hours	

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		<b>Specialization</b>	<b>Number of Hours</b>	<b>Pre-requisite</b>
1.	<b>ICT</b>	Computer Hardware Servicing (NC II)	320 hours	
2.		Animation (NC II)	320 hours	
3.		Computer Programming (NC IV)	320 hours	
4.		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.	<b>INDUSTRIAL ARTS</b>	Automotive Servicing (NC I)	640 hours	
2.		Carpentry (NC II)	640 hours	
3.		Consumer Electronics Servicing (NC II)	640 hours	
4.		Electrical Installation and Maintenance (NC II)	640 hours	
5.		Masonry (NC II)	320 hours	
6.		Plumbing (NC I)	320 hours	
7.		Plumbing (NC II)	320 hours	Plumbing (NC I)
8.		Refrigeration and Airconditioning Servicing (NC II)	640 hours	
9.		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	

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**AGRI-FISHERY ARTS – FISHPORT/WHARF OPERATION**  
(160 hours)

**Course Description:**

**Prerequisite:** Fish Nursery Operation

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
<b>Introduction</b> <ol style="list-style-type: none"> <li>Basic concepts in aquaculture</li> <li>Relevance of the course</li> <li>Career opportunities</li> </ol>	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 style="list-style-type: none"> <li>Explain basic concepts in aquaculture</li> <li>Discuss the relevance of the course</li> <li>Explore career opportunities in Fishport/Wharf operations or as a source of extra income</li> </ol>	
<b>PERSONAL ENTREPRENEURIAL COMPETENCIES (PECS)</b>				
<ol style="list-style-type: none"> <li>Assessment of learner's Personal Competencies and Skills (PECS) vis-à-vis PeCS of a practicing entrepreneur/employee in a province. <ol style="list-style-type: none"> <li>Characteristics</li> <li>Attributes</li> <li>Lifestyle</li> <li>Skills</li> <li>Traits</li> </ol> </li> <li>Analysis of learner's</li> <li>Strengthening and further developing one's PeCS</li> </ol>	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.	<b>LO 1. Develop and strengthen personal competencies and skills (PECs) needed in aquaculture</b> <ol style="list-style-type: none"> <li>Identify areas for improvement, development and growth</li> <li>Align one's PECs according to his/her business/career choice</li> <li>Create a plan of action that ensures success of his/her business/career choice</li> </ol>	<b>TLE_PECs9-12-00-1</b>
<b>ENVIRONMENT AND MARKET (EM)</b>				
<ol style="list-style-type: none"> <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	<b>LO 1. Recognize and understand the market for Fishport/Wharf operations</b>	<b>TLE_PECs9-12-00-1</b>

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**AGRI-FISHERY ARTS – FISHPORT/WHARF OPERATION**

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

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**AGRI-FISHERY ARTS – FISHPORT/WHARF OPERATION**

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	
			<b>LO 3. Secure and protect fish and fish product load</b> 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	<b>TLE_AFFW9-12UL-IIa-e-3</b>
			<b>LO 4. Implement housekeeping activities</b> 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	<b>TLE_AFFW9-12UL-IIf-j-4</b>

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**AGRI-FISHERY ARTS – FISHPORT/WHARF OPERATION**

CONTENT	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	CODE
<b>LESSON 2. CLASSIFY FISH AND FISH PRODUCTS (CF)</b>				
<ol style="list-style-type: none"> <li>1. Classification of equipment/tools and materials</li> <li>2. Prepare conveyor for fish classification</li> <li>3. Personal protective equipment (PPE) according to HACCP requirement</li> <li>4. Fish classifications according to buyers' specifications</li> <li>5. Remove and place fish damage in separate containers</li> <li>6. Packing and classifying fish</li> <li>7. Proper tray loading</li> <li>8. Weighing and recording fish in tray loads</li> <li>9. Appropriate segregation and piling of fish trays</li> <li>10. Appropriate storage conditions of fish loads</li> <li>11. Health and safety regulations on equipment and work area</li> <li>12. Cleaning and storing PPE</li> </ol>	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.	<b>LO 1. Prepare for fish classification</b> <ol style="list-style-type: none"> <li>1.1 Prepare equipment, tools and materials for classifying fish according to standard operation practice</li> <li>1.2 Clean and prepare the classifying table or conveyor for fish classification in accordance with organization's procedure</li> <li>1.3 Wear PPE according to HACCP requirement</li> <li>1.4 Practice personal hygiene and good grooming in line with health and safety requirements</li> </ol>	<b>TLE_AFFW9-12CF-IIIa-d-1</b>
			<b>LO 2. Classify fish and fish products</b> <ol style="list-style-type: none"> <li>2.1. Classify fish following buyers' specifications</li> <li>2.2. Remove damaged fish and place in separate containers following</li> </ol>	<b>TLE_AFFW9-12CF-IIIe-h-2</b>

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CONTENT	CONTENT STANDARD	PERFORMANCE STANDARD	LEARNING COMPETENCIES	CODE
			standard operating practice 2.3. Pack fish in trays by classification following buyers' specifications	
			<b>LO 3. Weigh fish by classification</b> 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	<b>TLE_AFFW9-12CF-IIIi-3</b>
			<b>LO 4. Segregate, pile and secure fish loads</b> 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	<b>TLE_AFFW9-12CF-IVa-e-4</b>
			<b>LO 5. Implement housekeeping activities</b> 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	<b>TLE_AFFW9-12CF-IVf-i-5</b>

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**CODE BOOK LEGEND**

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

LEGEND		SAMPLE		DOMAIN/ COMPONENT	CODE
First Entry	Learning Area and Strand/ Subject or Specialization	Technology and Livelihood Education_Agri-Fishery Fishport/Wharf Operation	TLE_AFFW9-12	Personal Entrepreneurial Competencies	PECS
	Grade Level	9/10/11/12		Environment and Market	EM
Uppercase Letter/s	Domain/Content/ Component/ Topic	Classify Fish And Fish Products	CF	Unload And Load Fish And Fish Products	UL
			-	Classify Fish And Fish Products	CF
Roman Numeral <i>*Zero if no specific quarter</i>	Quarter	Quarter	IV		
Lowercase Letter/s <i>*Put a hyphen (-) in between letters to indicate more than a specific week</i>	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		

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.



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AND LIVELIHOOD EDUCATION AND SENIOR HIGH SCHOOL - TECHNICAL  
AGRI-FISHERY ARTS – FISHPORT/WHARF OPERATION  
SAMPLE AGRICULTURE AND FISHERY ARTS CURRICULUM MAP**

No.	Grade 7/8 (Exploratory)				Grade 9		Grade 10		Grade 11		Grade 12					
1	EXPLORATORY				Crop Production (NC I)				*Landscape Installation and Maintenance (NC II)							
2											4 semesters					
3									*Pest Management (NC II)		4 semesters					
4									*Rice Machinery Operation (NC II)		4 semesters					
5									*Organic Agriculture (NC II)		4 semesters					
6									Animal Production (NC II)			*Artificial Insemination: Swine (NC II) 2 sems				
7												*Artificial Insemination: Ruminants (NC II) 2 sems				
8												*Slaughtering Operation (NC II) 2 sems				
9																
10									Horticulture (NC II)				8 semesters			
11					4 semesters				Food (Fish) Processing (NC II)				8 semesters			
12									Aquaculture (NC II)				Fish Nursery Operation (NC II)		*Fish or Shrimp Grow Out Operation (Non NC) 2 sems	
13											4 semesters				2 sems	
											*Fish Wharf Operation (NC I) 2 sems					

\*Please note that these subjects have prerequisites mentioned in the CG.