# VEER NARMAD SOUTH GUJARAT UNIVERSITY



# **DEPARTMENT OF AQUATIC BIOLOGY**

# PLACEMENT BROCHURE 2023-2024



#### **CONTACT US:**

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# **INTRODUCTION**

The Department of Aquatic Biology is the only University Department in Gujarat and the second in India to provide a thorough grounding in biological aspects of aquatic environments to students and researchers specializing in basic studies in aquatic resources. The department functions as a bridge between agencies/ industries and students for employment and career opportunities. University's cell and faculty members of the Department guides for training themselves for facing job interviews. In 2014-15 67% of students got recruited through campus. Serving society for more than two decades through research and skilled manpower, the Department of Aquatic Biology is moving ahead with the new mission with the following future plans:

- Exploring and utilizing potential aquatic resources
- Strengthening Department- Industries liaison
- Placement of students
- Establishment of Extension Education & Training Centre
- Revenue generation

## **Vision and Mission**

The department's extensive vision is to improve students' skills and knowledge by educating them in theoretical and practical knowledge. The department aims to develop manpower for serving the Society. The Mission of the Department of Aquatic Biology is to protect, conserve, and vitalize the local, regional, and national aquatic resources for human wealth and health through its various programs and activities

### **Thrust areas**

Aquatic ecology, Hydrobiology and fish biology, Pollution & toxicology Aquaculture and Fish cytogenetics, planktonology and aquatic microbiology

# **Infrastructure and learning resources**

Class rooms

Equipped Laboratories PG Lab Research Lab Water testing Lab Reading room Computer room Seminar hall Aquarium room Ladies room











# **Potency of the Department**

#### **Testing laboratory (Source of revenue generation)**

The Department of Aquatic Biology has developed a testing laboratory accredited by NABL for the measurement of radioactivity in packaged drinking water. VNSGU is the first University in Gujarat and second in India for this innovative accreditation.



# Training

The Department of Aquatic Biology has been rigorously working for the skill and personality development of the students. They are exposed to practical and technical environments through their placement and training. Two trainings sponsored by MPEDA (Marine Product Export Development Board) and NFDB (National Fisheries Development Board) were organized by the Department for M.Sc. students. MPEDA training is mandatory to start shrimp farming. NFDBsponsored training at Udaipur was focused on self-employment in the area of aquarium management. Training on Ornapreneurship was also organized for the skill development of the students in the field of ornamental fisheries.

#### **Curricular aspects**

- The curriculum of Aquatic Biology has been carefully designed to develop skilled and technical post-graduates.
- It is in line with the guidelines of the regulatory authorities of the University Curriculum Development Committee and UGC.
- The Department promotes interdisciplinary programs that develop knowledge in various fields related to aquatic biology.
- Development of communication and writing skills through seminars and report writing.

Programme / Course		Commencement Date	Duration				
1	M.Sc.	1993-2010 2010 onwards	Two years Four semesters				
2	Ph.D.	1993	Minimum three years of research and one semester course work(Theory)				

#### **Programs / Courses**

# **Scope of the Course**

- To exploit the potential in Freshwater Aquaculture, Marine water and Brackish water Aquaculture with utilization of the aquatic resources
- Job opportunities in industries, research institutes and Aquaculture industries for self-employment
- Pursuing research careers in related fields

M. Sc. Sem I								
Theory Paper /Practical	Teaching	Ex	Total	Credit				
	schedule Hrs /week	Duration (Hrs)	Internal marks	External marks	marks			
Theory papers :								
AQB 101: Aquatic resources and management	04	03	30	70	100	04		
AQB 102: Aquatic Pollution and Toxicology	04	03	30	70	100	04		
AQB 103:Fish physiology and Endocrinology	04	03	30	70	100	04		
Elective Paper AQB 104: A-Instrumentation	04	03	30	70	100	04		
AQB:104: B-Computer								
Application								
Practicals :	10	10.15	50	100	150	0(		
AQB 105: Water & Sediment analysis, Instrumentation and Fish physiology	12	10-15	50	100	150	06		
Skill based elective paper AQB 106: Aquarium management for employment	02	00	20	30	50	02		
Total	30	Total	190	410	600	24		

#### FRAMEWORK OF M. Sc. COURSE IN AQUATIC BIOLOGY

M. Sc. Sem II									
Theory Paper /Practical	Teaching schedule Hrs /week	Exam Sch Duration (Hrs)	nedule Internal External marks marks		Total marks	Credit			
Theory papers :									
AQB 201: Fisheries Technology	04	03	30	70	100	04			
AQB 202: Fish Nutrition and feed Technology	04	03	30	70	100	04			
AQB 203: Fish Genetics and Biotechnology	04	03	30	70	100	04			
Elective Paper AQB 204: A-Fisheries Legislation AQB:204: B-Biostatistical analysis	04	03	30	70	100	04			
Practicals :									
AQB 205: Biochemistry, Genetics, Fisheries Technology and Biostatistics	12	10-15	50	100	150	06			
Skill based elective paper AQB 206:Fish products and Byproducts technology	02	00	20	30	50	02			
Total	30	Total	190	410	600	24			

M. Sc. Sem III								
Theory Paper /Practical	Teaching	Exam Schedule			Total	Credit		
	schedule Hrs /week	Duration (Hrs)	Internal marks	External marks	marks			
Theory papers :								
AQB 301: Aquatic Microbiology	04	03	30	70	100	04		
&Disease Management								
AQB 302:Aquaculture Practices	04	03	30	70	100	04		
AQB 303:Planktonology	04	03	30	70	100	04		
Elective Paper	04	03	30	70	100	04		
AQB 304: A-Fisheries Extension								
Education								
AQB:304: B-Research								
methodology and Writing skill								
Practicals :								
AQB 305: Aquatic Microbiology,	12	10-15	50	100	150	06		
Aquaculture, Planktonology and								
Extension Education								

Papers				Exam Schedule			Credit
			Inte	ernal	External	marks	
			mai	rks	marks		
AQB: 401 Dissertation				90	210	300	12
AQB:402 Research paper preparation	on and			45	105	150	6
communication							
AQB: 403 Licensing and certification	on of		2	22.5	52.5	75	3
Aquaculture practices							
AQB404: Education tour/Field work/Project			2	22.5	52.5	75	3
submission							
Total			-	180	420	600	24
Skill-based elective paper	02	00		20	30	50	02
AQB 306:Entrepreneurship							
Development in Fisheries							
Total	30	Tota	ıl	190	410	600	24

# **Course content for Ph.D**

Theory

AQB 1001: Research Methodology & Instrumentation AQB 1002: Advances in Fishery science AQB 1003: Aquatic Pollution

Research work minimum for 3 years as per the University guidelines

## **Career opportunities**

**Central and State Government Fisheries Department** 

**Educational institutes** 

University and colleges relevant to the availability of subject requirement

**Research institutes / Laboratories** 

**Extension Educational institutes:** KVK / KGK

NGOs

Self-Employment

Fish farming

Farming input Supplier

Seed producer

Fish / Prawn producer

#### **Aqua-industries**

Farms

Processing plants

Feed industries etc.

# Placement

At the Department of Aquatic Biology, to be successful in work placement we forge on both host recruiters and students

# **Placement profile**

Name :Manish Bakshi Filed Technician Aquatech Aquahealth, Thana Rd,Tarakeswar,West Bengal Salary/month: 30,000/-



Name :Dhali Shabor Project Associate-I ICAR Central institute of Brackishwater Aquaculture, Chennai Salary/month: Rs 39,370



Name :Jana Pratyush kumar Assistant Technician Mr.Suman goel Aqua fauna Exports, Uttarbaluria, Talikhola Barrackpore Road,Kolkata Salary/month: Rs 10,000/-



Name :Mary Anthony Raj Project Associate-I National institute of Oceanography, Lokhandwala road, Andheri west, Mumbai, Maharashtra Salary/month: Rs 25,000/-



Name :Pal Arijit Dr.Keshab C Mondal Department of Microbiology, Vidyasagar University, Midnapore,Paschim Medinipur, West Bengal Salary/month: Rs 20,000/-

Name :Saha Tirthankar Filed Technician Aquatech Aquahealth, Thana Rd,Tarakeswar,West Bengal Salary/month: Rs 29,000/-

Name : Saptaporni Bit Aquatic Educator Dr.Dishant Parasharya, Gujarat Science City, Ahemdabad Salary/month: Rs 24,000/-







# **GLIMPSE OF THE DEPARTMENT**



Student's presentation



Alumini Meet



Tapi cleaning





**Routine Practical's** 



Excursion









**Research** activities