

## 1. AQUACULTURE

### **M.F.Sc. Aquaculture**

#### **Core Courses (16 credits)**

FAC-521	Sustainable Aquaculture	2(1-0-1)
FAC-561	Advanced Freshwater Aquaculture	2(1-0-1)
FAC-570	Soil and Water Quality Management in Aquaculture	2(1-0-1)
FAC-571	Seed Production and Hatchery Management of Finfish and Shellfish	3(2-0-1)
FAC-600	Master's Seminar	1
FAC-665	Aquatic Animal Health Management	3(2-0-1)
FAC-670	Advances in Fish Nutrition and Feed Technology	3(2-0-1)

#### **Basic Supporting Courses (5 credits)**

TID-502	Aquaculture Engineering	2(2-0-1)
BPS-561	Statistical Methods	3(2-0-1)

#### **Optional/Minor Courses (8 credits)**

#### **Thesis Research (20 credits)**

FAC-690	Master's Thesis Research	20
		<b>Total</b> <b>50</b>

#### **Compulsory Courses for Minor for Other Disciplines for Master's Programme**

FAC-521	Sustainable Aquaculture	2(1-0-1)
FAC-561	Advanced Freshwater Aquaculture	2(1-0-1)

### **Ph.D. Aquaculture**

#### **Core Courses (11 credits)**

FAC-711	Advances in Aquaculture Production Systems	3(2-0-1)
FAC-721	Aquaculture and Ecosystem Management	3(2-0-1)
FAC-731	Advances in Seed Production and Hatchery Management	3(2-0-1)
FAC-788	Doctoral Seminar I	1(0-0-1)
FAC-789	Doctoral Seminar II	1(0-0-1)

#### **Basic Supporting Courses (4 credits)**

BPS-661	Experimental Statistics	4(3-0-1)
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#### **Optional Courses (5 credits)**

#### **Miner Courses (10 credits)**

#### **Thesis Research (45 credits)**

FAC-790	Ph.D. Thesis Research	45
		<b>Total</b> <b>75</b>

#### **Compulsory Courses for Minor for Other Disciplines for Ph.D. Programme**

1. FAC-711	Advances in Aquaculture Production System	3(2-0-1)
2. FAC-721	Aquaculture and Ecosystem Management	3(2-0-1)

**List of Post Graduate Courses of the department**

FAC-521	Sustainable Aquaculture	2(1-0-1)
FAC-550	Advanced Techniques in Brackish and Marine Aquaculture	2(1-0-1)
FAC-561	Advanced Freshwater Aquaculture	2(1-0-1)
FAC-570	Soil and Water Quality Management in Aquaculture	2(1-0-1)
FAC-571	Seed Production and Hatchery Management of Finfish and Shellfish	3(2-0-1)
FAC-600	Master's Seminar	1
FAC-601	Special Problem	1
FAC-615	Trout and Mahseer Fish Farming Techniques	2(1-0-1)
FAC-620	Larval Nutrition and Culture of Food Organisms	2(1-0-1)
FAC-622	Aquaculture Development Planning and Management	2(1-0-1)
FAC-625	Applied Genetics in Aquaculture	2(1-0-1)
FAC-665	Aquatic Animal Health Management	3(2-0-1)
FAC-670	Advances in Fish Nutrition and Feed Technology	3(2-0-1)
FAC-673	Integrated Fish Farming and Waste Recycling	2(1-0-1)
FAC-681	Intensive Farming Systems for Fresh water Fishes	2(1-0-1)
FAC-690	Master's Thesis Research	20
FAC-711	Advances in Aquaculture Production Systems	3(2-0-1)
FAC-721	Aquaculture and Ecosystem Management	3(2-0-1)
FAC-731	Advances in Seed Production and Hatchery Management	3(2-0-1)
FAC-741	Applied Fish Genetics and Breeding	2(1-0-1)
FAC-745	Applied Aquaculture Biotechnology	2(1-0-1)
FAC-766	Aquatic Animal Health Management and Quarantine	3(2-0-1)
FAC-788	Doctoral Seminar I	1
FAC-789	Doctoral Seminar II	1
FAC-790	Doctoral Thesis Research	45

## 2. FISHERY BIOLOGY

### **M.F.Sc. (Fishery Biology)**

#### **Core Courses (17 credits)**

FFB-600	Master's Seminar	1
FFB-611	Inland Fisheries Resources	3(2-0-1)
FFB-615	Marine Fisheries Resource Management	2(2-0-0)
FFB-621	Ecosystems, Biodiversity and Conservation	3(2-0-1)
FFB-625	Fish Stock Assessment	2(1-0-1)
FFB-631	Feeding and Reproductive Biology of Finfish	3(2-0-1)
FFB-635	Developmental Biology of Finfish and Shellfish	3(2-0-1)

#### **Basic Supporting Courses (3 credits)**

BPS-561	Statistical Methods	3(2-0-1)
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#### **Optional/Minor Courses (10 credits)**

**10**

#### **Thesis Research (20 credits)**

FFB-690	Master's Thesis Research	20
<b>Total</b>		<b>50</b>

### **Ph.D. (Fisheries Resource Management)**

#### **Core Courses (11 credits)**

FFB-711	Assessment of Aquatic Biodiversity	2(1-0-1)
FFB-715	Applications of Fisheries Models in Stock Assessment	2(1-0-1)
FFB-721	Conservation and Management of Exploited Fisheries Resources	2(1-0-1)
FFB-725	Management of Inland Fishery Resources	3(2-0-1)
FFB-788	Doctoral Seminar-I	1
FFB-789	Doctoral Seminar-II	1

#### **Basic Supporting Courses (4 credits)**

BPS-661	Experimental Statistics	4(3-0-1)
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#### **Optional Courses (5 credits)**

**5**

#### **Minor Courses (10 credits)**

**10**

#### **Thesis Research (45 credits)**

FFB-790	Ph.D. Thesis Research	45
<b>Total</b>		<b>75</b>

### **List of Post Graduate Courses of the department**

FFB-511	Modern Techniques in Ichthyotoxicology	2(1-0-1)
FFB-515	Fisheries Regulations	2(2-0-0)
FFB-521	Remote Sensing and GIS for Fisheries Management	2(1-0-1)
FFB-600	Master's Seminar	1
FFB-601	Special Problem	1-2
FFB-611	Inland Fisheries Resources	3(2-0-1)
FFB-615	Marine Fisheries Resource Management	2(2-0-0)
FFB-621	Ecosystems, Biodiversity and Conservation	3(2-0-1)

FFB-625	Fish Stock Assessment	2(1-0-1)
FFB-631	Feeding and Reproductive Biology of Finfish	3(2-0-1)
FFB-635	Developmental Biology of Finfish and Shellfish	3(2-0-1)
FFB-641	Advanced Biology of Crustaceans and Molluscs	2(1-0-1)
FFB-645	Fish Genetics, Sex Control and Hybridization	2(1-0-1)
FFB-651	Data Collection and Estimation of Exploited Fisheries Resources	2(0-0-2)
FFB-655	Issues in Capture Fisheries	2(1-0-1)
FFB-661	Fisheries Environmental Assessment	2(1-0-1)
FFB-690	Master's Thesis Research	20
FFB-711	Assessment of Aquatic Biodiversity	2(1-0-1)
FFB-715	Applications of Fisheries Models in Stock Assessment	2(1-0-1)
FFB-721	Conservation and Management of Exploited Fisheries Resources	2(1-0-1)
FFB-725	Management of Inland Fishery Resources	3(2-0-1)
FFB-731	Marine Fishery Resources	2(2-0-0)
FFB-735	Development Biology of Fish	2(1-0-1)
FFB-741	Advances in Feeding, Growth and Reproduction in Finfish	2(1-0-1)
FFB-745	Management and Conservation of Fish Genetic Resources	2(2-0-0)
FFB-788	Doctoral Seminar-I	1
FFB-789	Doctoral Seminar-II	1
FFB-790	Ph.D. Thesis Research	45

### **3. FISHERY HYDROGRAPHY**

#### **M.F.Sc. (Aquatic Environment Management)**

##### **Core Courses (18 Credits)**

FFH-555	Advanced Aquatic Environment and Biodiversity	3(2-0-1)
FFH-560	Chemical Interaction if Aquatic Environment	3(2-0-1)
FFH-565	Ecology and Management of Limnetic Environment	3(2-0-1)
FFH-570	Aquatic Pollution and Wastewater Management	3(2-0-1)
FFH-600	Master's Seminar	1(1-0-1)
FFH-615	Fisheries Oceanography	2(1-0-1)
FFH-631	Integrated Coastal Zone Management	3(2-0-1)

##### **Basic Supporting Courses (03 Credits)**

BPS-561	Statistical Methods	3(2-0-1)
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##### **Optional/Minor Courses (09 Credits)**

FFH-601	Special Problem	1(1-0-1)
FFH-635	Planktonology	2(1-0-1)
FFH-637	Ecology of Benthic Organism	2(1-0-1)
FFH-641	Aquatic Microbiology	3(2-0-1)
FFH-645	Environmental Toxicology	2(1-0-1)
FFH-651	Environmental Biotechnology	2(1-0-1)

##### **Thesis (20 Credits)**

FFH-690	Master's Thesis Research	20
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<b>Total</b>	<b>50</b>
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##### **Check list of Courses of the Department**

FFH-555	Advanced Aquatic Environment and Biodiversity	3(2-0-1)
FFH-560	Chemical Interaction in Aquatic Environment	3(2-0-1)
FFH-565	Ecology and Management of Limnetic Environment	3(2-0-1)
FFH-570	Aquatic Pollution and Wastewater Management	3(2-0-1)
FFH-600	Master's Seminar	1(0-0-1)
FFH-601	Special Problem	1(0-0-1)
FFH-615	Fisheries Oceanography	2(1-0-1)
FFH-631	Integrated Coastal Zone Management	3(2-0-1)
FFH-635	Planktonology	2(1-0-1)
FFH-637	Ecology of Benthic Organism	2(1-0-1)
FFH-641	Aquatic Microbiology	3(2-0-1)
FFH-645	Environmental Toxicology	2(1-0-1)
FFH-651	Environmental Biotechnology	2(1-0-1)
FFH-690	Master's Thesis Research	20

**Minor package for students of other Departments/Major****Compulsory Courses**

FFH-560	Chemical Interaction in Aquatic Environment	3(2-0-1)
FFH-570	Aquatic Pollution and Wastewater Management	3(2-0-1)

**Optional Courses**

FFH-637	Ecology of Benthic organism	2(1-0-1)
FFH-635	Planktonology	2(1-0-1)
FFH-565	Ecology and Management of Limnetic Environment	3(2-0-1)
FFH-641	Aquatic Microbiology	3(2-0-1)
FFH-645	Environmental Toxicology	2(1-0-1)