

COURSES OFFERED UNDER DIFFERENT PROGRAMMES

(as per IV Dean's committee recommendations of ICAR)

Undergraduate Level	
Course Code and Title	Credit Hours
Aquaculture	
FAC-111 Principles of Aquaculture	2(1-0-1x2)
FAC-121 Freshwater Aquaculture	3(2-0-1x2)
FAC-211 Aquaculture Engineering	3(2-0-1x2)
FAC-212 Finfish Breeding and Hatchery Management	2(1-0-1x2)
FAC-213 Shellfish Breeding and Hatchery Management	2(1-0-1x2)
FAC-221 Ornamental Fish Production and Management	2(1-0-1x2)
FAC-222 Mass Production of Fish Food Organisms	2(1-0-1x2)
FAC-311 Genetics and Breeding	2(1-0-1x2)
FAC-312 Fish Nutrition and Feed Technology	3(2-0-1x2)
FAC-313 Cold water Aquaculture	2(1-0-1x2)
FAC-314 Practical Fish Production	2(1-0-1x2)
FAC-321 Biotechnology and Bioinformatics	2(1-0-1x2)
FAC-322 Coastal Aquaculture and Mariculture	2(1-0-1x2)
FAC-323 Fish Disease and Management	3(2-0-1x2)
Fishery Biology	
FFB-111 Taxonomy of Finfish	3(2-0-1x2)
FFB-112 Taxonomy of Shellfish	2(1-0-1x2)
FFB-121 Anatomy, Biology and Physiology of Shellfish	3(2-0-1x2)
FFB-122 Anatomy and Biology of Finfish	3(2-0-1x2)
FFB-123 Inland Fisheries	3(2-0-1x2)
FFB-211 Fish Physiology	3(2-0-1x2)
FFB-221 Marine Fisheries	3(2-0-1x2)
FFB-222 Fish Genetic Resource Management	2(1-0-1x2)
FFB-311 Fish Population Dynamics and Stock Assessment	2(1-0-1x2)
Fishery Hydrography	
FFH-111 Microbiology	4(2-0-2X2)
FFH-112 Soil and Water Chemistry	3(2-0-1x2)
FFH-113 Meteorology and Geography	2(1-0-1x2)
FFH-121 Limnology	3(2-0-1x2)
FFH-122 Oceanography	3(2-0-1x2)
FFH-211 Disaster Management in Fisheries	2(1-0-1x2)
FFH-212 Marine Biology	3(2-0-1x2)
FFH-221 Aquatic Ecology and Biodiversity	2(1-0-1x2)
FFH-321 Aquatic Pollution	3(2-0-1x2)
Fish Processing Technology	
FPT-211 Fish in Nutrition	2(1-0-1x2)
FPT-212 Refrigeration and Equipment Engineering	2(1-0-1x2)
FPT-221 Fishing Craft Technology	2(1-0-1x2)
FPT-222 Fishing and Gear Technology	4(3-0-1X2)
FPT-311 Freezing Technology	2(1-0-1x2)
FPT-312 Canning and Fish Packing Technology	3(2-0-1x2)

FPT-313 Fish Products and Byproducts Technology	3(2-0-1x2)
FPT-321 Navigation and Seamanship	2(1-0-1x2)
FPT-322 Fish Microbiology and Quality Assurance	3(2-0-1x2)

Fisheries Extension Education

FEX-211 Fisheries Administration and Legislation	2(2-0-0)
FEX-221 Fisheries Extension Education	3(2-0-1x2)
FWE-411 Fisheries Work Experience (Common to all disciplines)	20

Areas of Specialization for Hands-on Training

FAC-421 Aqua-farming

or

20

FPT-421 Fish Post Harvest Technology

Post Graduate Level

M.F.Sc.

Aquaculture

Fac-550 Advanced Techniques in Brackish and Marine Aquaculture	2+0=2
FAC-600 Seminar	0+1=1
FAC-601 Special Problem	0+1=1
FAC-610 Hatchery Design and Management	1+1=2
FAC-615 Trout and Mahseer Fish Farming Techniques	1+1=2
FAC-620 Controlled Culture Techniques of Fish Food Organisms	1+1=2
FAC-631 Ecological Management of Aquatic Ecosystems	1+1=2
FAC-670 Advances in Fish Nutrition	1+1=2
FAC-673 Integrated Fish Farming and Waste Recycling	1+1=2
FAC-611 Advanced Techniques in Freshwater Prawn Farming	1+1=2
FAC-612 Air-breathing Fishes and their Culture	1+1=2
FAC-614 Analytical Aquaculture Techniques	1+1=2
FAC-660 Recent Techniques in Fish Seed Production	0+2=2
FAC-675 Microbial Diseases of Fin-Fish and Shell-Fish	1+1=2
FAC-690 Masters Thesis	0+15=15

Fishery Biology

FFB-505 Bionomics and Behavior of Fishes	1+1=2
FFB-536 Fish Biological Techniques	0+1=1
FFB-555 Breeding and Embryonic Development of Fin-Fish and Shell-Fish	1+1=2
FFB-600 Seminar	0+1=1
FFB-601 Special Problem	0+1=1
FFB-605 Fish Genetics, Sex Control and Hybridization	1+1=2
FFB-608 Advanced Biology of Crustaceans and Molluscs	1+1=2
FFB-615 Advanced Marine Biology and Oceanography	1+1=2
FFB-616 Advanced Fish Population Dynamics	1+1=2

FFB-622 Inland Fisheries Resources and Management	1+1=2
FFB-767 Advanced Fish Physiology	2+1=3
FFB-690 Masters Thesis	0+15=15

Ph.D.	
Fisheries Resource Management	
FFB-600 Seminar	0+1=1
FFB-601 Special Problem	0+12=12
FFB-731 Management of Inland Fishery Resources	2+1=3
FFB-732 Management and Conservation of Fish Genetic Resources	2+0=2
FFB-733 Fish Ecology and Behavior	1+1=2
FFB-734 Neuro-endocrine Regulation of Growth and Reproduction	1+1=2
of Fishes	
FFB-751 Fish Bioenergetics	1+1=2
FFB-752 Gonadal Functions in Fishes	1+1=2
FFB-753 Developmental Biology of Fish	1+1=2
FFB-754 Fisheries Biotechnology	1+1=2
FFB-755 Environmental Biology of Fishes	1+1=2
FFB-756 Marine Fisheries Resources	1+1=2
FFB-790 Thesis/Research	0+30=30

The U.G. and P.G. students are given ample opportunities for practical training on fish culture, fish breeding, fish processing, fishery extension etc. Under fisheries work experience the students get the opportunity for intensive interaction with fish farmers, entrepreneurs and fishery industry, for development of managerial skill. After completing the degree programs the students can independently carry out fish culture, hatchery seed production, management of fish and shell-fish harvest and processing sector.

Hand-on-training pertains to attachment of students to aquafarms or fish processing units for practical training in India and abroad.

RESEARCH PROGRAMMES

- Culture of freshwater fish and shell fish.
- Breeding and hatchery seed production of carps and catfishes.
- Integrated fish-livestock farming
- Nutrition of cultivated fishes
- Fish-health management
- Aquatic environment and its management for sustainable fish production.
- Management of open water fisheries in lake and reservoirs
- Development of post-harvest sector in inland fisheries

