Curriculum for the Degree of B.Sc. in Fisheries: *Aquaculture*

COURSE CODE	COURSE TITLE	CREDITS
Semester I (fall)		
3710242	Microbiology	2+1
3716101	General Botany	2+1
2110103	General Chemistry	3
1914103	General Mathematics	3
	General Courses	5
	Prerequisites (if any)	
Semester II (spring)		
2010118	General Physics	2
2010119	Physics Lab.	1
3712101	Zoology	2+1
3714102	Introduction to Environment	2+1
3710140	Genetics	2+1
3710243	Computer acquaintance	1+1
2510114	English Language	3
Semester III (fall)		
2112229	Organic Chemistry	3
3716200	Meteorology & Climatology	2+1
3716205	Introduction to Soil Science	2+1
3712200	General Ecology	3
3710246	Statistics & Probability	2+1
General Courses	2	
Semester IV (spring)		
3710241	General Biochemistry	3
3712203	General Ichthyology	2+1
3712202	General Hydrobiology	2+1
3710343	Experimental Design	2+1
3716201	General Hydrology	2+1
	General Courses	2
Semester V (fall)		
3712303	Principles of Aquatic Animals Nutrition	2+1
3710340	Technical Drawings	1+1
3712429	Principles of Fish Breeding and Cultivation	2+1
3714306	Environmental Evaluation	1+1
3712340	Animal Physiology	1+1
3712204	Hydrochemistry	1+1
3710345	Economy of Natural Resources	2
	General Courses	2
Semester VI (spring)		
3712453	Breeding & Cultivation of warm water fish	2+1
3712305	Hydro technique & Pond Design	1+1
3712452	Breeding & Cultivation of Aquatic Animals	2+1
3712450	Limnology	2+1
3712451	Marine Ecology	3
3712449	Fishing Methods	2+1
	General Courses	2
Semester VII (fall)		
3712434	Diet formulation	1+1
3712435	Breeding & Cultivation of Coldwater fish	1+1
3712406	Systematic Ichthyology	2+1

3712431	Hygiene & Diseases of Aquatic Animals	2+1
3712437	Breeding & Cultivation of Aquarium fishes	1+1
3712423	Seminar	1
	Elective Courses*	2

Semester VIII (spring)

3712456	Fisheries Rules & Management	2
3712439	Breed Improvement Principles for Aquatic Animals	2
3712438	Fishery Products Processing	2+1
3712424	Project	3
	General Courses	4
	Elective Courses*	2

Curriculum for the Degree of Bachelor of Sciences in Environmental Sciences

COURSE CODE	COURSE TITLE	UNITS
Semester I (fall)		
3710242	General Microbiology	2+1
3710141	Geology	2+1
3716101	General Botany	2+1
2110103	Chemistry	2+1
1914103	Calculus I	3
Semester II (spring)		
2010118	General Physics	2
2010119	Physics Lab.	1
3712101	Zoology	2+1
3714103	Recognition and Protection of Environment	2+1
3710140	Genetics	2+1
3710243	Computer acquaintance	1+1
Semester III (fall)		
2112229	Organic Chemistry	2+1
3716200	Meteorology and Climatology	2+1
2510114	English	3
3710245	Planimetry and Surveying	2+1
3712200	General Ecology	3
3714237	Biology of wildlife	2+1
Semester IV (spring)		
3716208	Cartography	1+1
3714205	Soil Sciences	2+1
3710246	Probability and Statistics	2+1
3714210	Principle of Remote Sensing	2+1
3714211	Rural Sociology	2
3714427	Range Plants Identification	1+1
3714201	Human and Environment	2
Semester V (fall)		
3714316	Soil and Water Pollutions	1+1
3714311	Geographic Information Systems (GIS)	1+1
371400	Aquatic Plants	1+1
3714312	VertebratesEcology	2
3710344	Natural Resources Economics	2
3716201	General Hydrology	2+1
	Elective Courses*	2-3
Semester VI (spring)		
3714314	Air Pollutions	1+1
3716203	Trees and Shrubs of Iran	1+1
3714402	Fundamentals of Wildlife Management	2
3714306	Environmental Evaluation	1+1
3714313	National Parks and Forest Parks	2
3710340	Industrial Graphics	1+1
	Elective Courses*	2-3

Semester VII (fall)

3716404	Wildlife Management Techniques	1+1
3714400	Conservation Biology	2
3716406	Park Management	2
3714428	Marine& Lake Ecology	2
3714418	Solid Waste Management	2
3714407	Discussion Group	1
	Project	3

Semester VIII (spring)

3714405	Park Designing and Engineering	2
3716330	Soil Conservation	2
3714213	Enviromental Law and Management	2
3714407	Discussion Group	1
3714408	Project	3
	Elective courses*	2-3

Renge and Watershed Management - UNDERGRADUATE COURSES

Curriculum for the Degree of Bachelor of Science in *Range and Watershed Management*:

COURSE CODE	COURSE	TITLE CREDITS
Semester I (fall)		
3710141	Geology	2+1
3716104	Plant Physiology and Anatomy	1+1
1914103	Calculus I	3
2010118	General Physics	2
Semester II (spring)		
1914104	Calculus II	3
2010119	Physics Lab.	1
3716103	Plant Morphology and Systematic	2+1
2110103	Engineering Chemistry	3
3716105	Introduction to Natural Resources	2
3716320	Academic English for Natural Resources	3
Semester III (fall)		
3710245	Planimetry and Surveying	2+1
3716200	Meteorology and Climatology	2+1
3716205	Introduction to Soil Science	2+1
3712200	General Ecology	3
3710246	Probability and Statistics	2+1
3710243	Computer acquaintance	1+1
Semester IV (spring)		
3716203	Range Management	2+1
3716208	Cartography	1+1
3716206	Range Plants Identification I	2
3716207	Soils of Arid and Semi-Arid Regions	2
3716210	Principals of Remote Sensing	2+1
1610216	Strength of Materials	3
Semester V (fall)		
3716310	Range Ecology	2
3716311	Range Development and Improvement	2+1
3716306	Range Plants Identification II	1+1
3716201	General Hydrology	2+1
3714311	Fundamental of Geographic Information Systems	1+1
3716305	Geomorphology I	2+1
3710345	Natural Resources Economy	2
Semester VI (spring)		
3710348	Agricultural Experimental Design I	2+1
3716330	Water and Soil Conservation	2+1
3716336	Land Capability	1+1
3716333	Rangeland Ecosystem Assessment and Monitoring	3
3716329	General Dendrology	1+1
3716436	Geomorphology II	2+1
3716322	Water Resources and problems in Iran	2

Semester VII (fall)

3716432	Restoration in Arid and Semi-Arid Zones	2
3716405	Applied Hydrology	2
3716408	Watershed Management	2+1
3716431	Cultivating and Breeding of Range Plants	1+1
3716433	Executive Practices	1
3716447	Rural and Nomadic Sociology	3
3716449	Water Relation of Plants and Soils	2
3716321	Agroforestry	2

Semester VIII (spring)

3716414	Range and Animal Relationship	2
3716401	Fluid Mechanics	3
3716411	Natural Resources Rules and Policies	2
3716425	Rangeland Secondry products	2+1
3716435	Water Harvesting in Arid and Semi-Arid Zones	2
3716414	Project	3