

Study Plan of Master's Degree in Zoology by thesis
31 credit hours (12 credit hours: compulsory courses + 12 credit hours: elective courses + 1 credit hour: thesis proposal + 6 credit hours: research)

Level 1 : Compulsory courses (12 credit hours)

Course Code	Course Name	Credit hours
ZOO 500	Experimental Design in Zoology	2 (1 + 1)
ZOO 511	Applied Entomology and Parasitology	2 (1 + 1)
ZOO 521	Aquatic Animals	2 (1 + 1)
ZOO 531	Advanced Animal Physiology	2 (1 + 1)
ZOO 543	Cell and Tissue Biology	2 (1 + 1)
ZOO 571	Animal Ecology and Pollution	2 (1 + 1)
		12 hours

Level 2: Elective Courses (12 credit hours)

Path 1: Entomology and Parasitology

Course Code	Course Name	Credit hours
ZOO 510	Advanced Parasitology	3 (2 + 1)
ZOO 512	Physiology of Parasites	3 (2 + 1)
ZOO 513	Insect Ecology	3 (2 + 1)
ZOO 514	Insect Physiology	3 (2 + 1)
ZOO 515	Ecology of Parasites	3 (2 + 1)
ZOO 516	Acarology	3 (2 + 1)
ZOO 517	Selected Topics in Entomology and Parasitology	2 (2 + 0)
ZOO 518	Advanced Techniques in Entomology or Parasitology	1 (0 + 1)

Path 2: Aquatic Animals

Course Code	Course Name	Credit hours
ZOO 522	Advanced Ichthyology	3 (2 + 1)
ZOO 523	Economic Aquatic Invertebrates	3 (2 + 1)
ZOO 524	Fish Culture and Management	3 (2 + 1)
ZOO 525	Economic Invertebrate culture	3 (2 + 1)
ZOO 526	Selected Topics in Aquatic Animals	2 (2 + 0)
ZOO 527	Water quality for Aquatic animals	1 (0 + 1)
ZOO 528	Fishery Resources	2 (2 + 0)

Path 3: Physiology and Developmental Biology

Course Code	Course Name	Credit hours
ZOO 530	Immunoresponse Mechanisms	2 (1 + 1)
ZOO 532	Advanced Cell Physiology	2 (1 + 1)
ZOO 533	Physiology of Reproduction	3 (2 + 1)
ZOO 534	Physiology of Hormones	2 (1 + 1)
ZOO 536	Invertebrate Physiology	2 (1 + 1)
ZOO 537	Molecular Developmental Biology	3 (2 + 1)
ZOO 538	Advanced Descriptive and Experimental Embryology	3 (2 + 1)
ZOO 539	Selected Topics in Physiology and Development	2 (2 + 0)
ZOO 541	Advanced Histochemistry	3 (2 + 1)
ZOO 575	Ecophysiology	3 (2 + 1)

Path 4: Cell Biology, Genetics and Histology

Course Code	Course Name	Credit hours
ZOO 541	Advanced Histochemistry	3 (2 + 1)
ZOO 542	Advanced Cytology	3 (2 + 1)
ZOO 544	Advanced Histology	3 (2 + 1)
ZOO 546	Advanced Techniques in Histology	1 (0 + 1)
ZOO 551	Advanced Genetics	3 (2 + 1)
ZOO 552	Quantitative and Population Genetics	2 (1 + 1)
ZOO 553	Molecular Biology and Genetic Engineering	2 (2 + 0)
ZOO554	Developmental Genetics	3 (2 + 1)
ZOO 556	Advanced Cytogenetics	2 (1 + 1)
ZOO 558	Selected Topics in Cell Biology, Genetics and Histology	2 (2 + 0)

Path 5: Animal Environment and Pollution

Course Code	Course Name	Credit hours
ZOO 572	Animal Conservation	2 (2 + 0)
ZOO 573	Advanced Animal Ecology	3 (2 + 1)
ZOO 574	Animal Zoogeography	2 (2 + 0)
ZOO 575	Ecophysiology	3 (2 + 1)
ZOO 576	Pollution Measurement Methods.	3 (1 +2)
ZOO 577	Pollution in Animals	3 (2 + 1)
ZOO 578	Geographical Distribution of Pollutants	2 (1 + 1)
ZOO 579	Selected Topics in Ecology and Pollution	2 (2 + 0)

Level 3:

Course Code	Course Name	Credit hours
ZOO 596	Thesis proposal	1 (1 + 0)

Level 4:

Course Code	Course Name	Credit hours
ZOO 600	Thesis	6