

**6 years plan of Bachelor's Degree in Doctor of Veterinary Medicine (DVM.)
(International program, 2018) (minimum requirement is 307 credits)**

1st Year		
1st semester		
CHM60-103	<p>Basic Chemistry Laboratory</p> <p>Experiments related to developing basic skills in chemical laboratory</p>	1(0-3-2)
CHM60-104	<p>Principles of Chemistry</p> <p>Introduction, stoichiometry, electronic structures of atoms, periodic properties, representative elements, transition elements, chemical bonds, properties of gas, liquid, solution, colloid and solid, chemical kinetic, chemical equilibrium and ionic equilibrium</p>	4(4-0-8)
GEN60-111	<p>Thai for Contemporary Communication</p> <p>Prerequisite: GEN60-001 Fundamental Thai</p> <p>Understanding and developing the Thai language skills both in receiving and delivering message--able to use the skills to understand the main idea from the texts read and listened, critically analysing the relationships between secondary issues from the texts to arrive at deep understanding and new knowledge, offering opinions or values on the texts read and listened with reasons and corresponding social norms; able to develop the opinion giving skills through speaking and writing with the support of significant issues and supporting details to highlight clear and systematic thinking; the use of social information to create knowledge or expanded thought; speaking and writing to present a systematic and convincing academic knowledge</p>	4(2-4-6)
GEN60-112	<p>English in Daily Life</p> <p>Prerequisite: GEN60-002 Fundamental English</p> <p>Development of all English skills: listening, speaking, reading and writing through practicing of everyday life topics--studying, shopping, food, travelling, tourism, entertainments and health; synthesis of useful grammatical structures and vocabulary; learning by role-play and daily life situations</p>	2(1-2-3)
GEN60-113	<p>English in Media Communication</p> <p>Prerequisite: GEN60-002 Fundamental English</p> <p>Development of all English skills: listening, speaking, reading and writing through English media--songs, advertisements, and news; practicing language patterns used for description, narration, and interpretation; synthesis of useful</p>	2(1-2-3)

	grammatical structures and vocabulary essential for effective communication through producing and presenting English media	
GEN60-141	Science and Mathematics in Daily Life Able to integrate scientific and mathematical knowledge to understand phenomena in daily life--global change, weather change, population increase, food security, water resources, energy resources, wastes, pollutions and effects of these phenomena on man; able to use scientific and/or mathematical knowledge for daily life benefits--banking and financial operations, financial control and management, investments; able to collect data and use preliminary statistics to explain the issues mentioned	4(3-2-7)
XXXXX-xxx	Elective subjects	2(x-x-x)
Total 19 credits		
2nd semester		
PHY60-105	Basic Medical Physics General mechanics, pressure of gases and fluids, basic optics and electricity, radiation and isotope, medical equipments and instruments, radiotherapy and diagnosis	2(2-0-4)
BIO60-105	General Biology Biological concepts, chemical basis of life, structure and function of cells, energy of life, principles of genetics, evolution, structures and functions of tissues, organs and organ systems of higher plants and animals, interaction between life and environment	4(4-0-8)
BIO60-106	General Biology Laboratory Pre-requisite: BIO60-105 General Biology or co-requisite with BIO60-105 General Biology Experiments in laboratory to complement general biology	1(0-3-2)
GEN60-114	English in Cultural Diversity Prerequisite: GEN60-002 Fundamental English Development of the four essential English skills: listening, speaking, reading and writing by practicing with multi-dimensional approaches; emphasizing on the use of language and presentation of the cultural diversity worldwide; careers, life styles, art and culture, differences, tourist attractions, cultural exchanges; synthesis of useful grammatical structures and vocabulary essential for effective communication	2(1-2-3)
GEN60-121	The Present World and Global Citizenship Understanding essential elements of the globalized world and consequences affecting changes in society and people's life; perception of being a global	4(3-2-7)

	<p>citizen; the value of good citizenship—accepting differences between people, realizing the existence of differences in all places, appreciating the value of those differences and seeing no obstacles in living together, ready to accept different points of view and lifestyles as well as ready to use others’ points of view to appreciate and understand other peoples, ready to learn from others to continuously improve oneself as a global citizen; able to express volunteering spirits or become social volunteers for others</p>	
GEN60-122	<p>Appreciation of Value and Beauty Realizing the value of principles, ideology, ethics and morality as emulated by society as guidelines for thoughts and practices in life; appreciating the value of something pleasant beautiful, melodious or both beauty of nature and art works as a result of human relationships; able to present something valuable or create art works that enrich the growth of spiritual health</p>	4(3-2-7)
XXX60-xxx	Elective subjects	2(x-x-x)
Total 19 credits		
3rd semester		
GEN60-115	<p>English in Health and Wellness Prerequisite: GEN60-002 Fundamental English Development of the four essential English skills: listening, speaking, reading and writing using health and wellness topics; knowing symptoms, causes, treatments, or preventions of selected health issues; synthesis of useful grammatical structures and vocabulary; learning by studying and presenting health issues of interest</p>	2(1-2-3)
GEN60-116	<p>English for Community Development Prerequisite: GEN60-002 Fundamental English Development of the four essential English skills: listening, speaking, reading and writing while focusing on essential expressions, structures and English vocabulary specific to the community development through the project-based learning approach; improving group dynamics and presentation skills; synthesis of useful grammatical structures and vocabulary</p>	4(2-4-6)
GEN60-118	<p>English for Scientific presentation Prerequisite: GEN60-002 Fundamental English Development of English skills focused on work level by practicing English communication that is essential in the workplace--job applications, job interview, writing email, customers relations, meetings and discussion; synthesis of useful grammatical structures and vocabulary essential for effective business communication</p>	4(2-4-6)

GEN60-123	Smart Life Management Understanding concepts and valuing the significance of self-management; able to apply this understanding in daily life activities and personal life management--time management, health management, study plans and self-management for social life: adaptations, conflict management and positive problem solving	4(2-4-6)
GEN60-131	Creating Quality of Life Understanding and valuing holistic health in four dimensions--physical, spiritual, social and spiritually wise or enlightened; able to apply the holistic health principles to solve current problems both problems form illnesses or problems resulting from lifestyles, propaganda and various influences as well as social relationships; able to lead a happier life, able to use exercise and recreational activities in solving problems and effectively developing holistic health	4(2-4-6)
GEN60-151*	IT for the Present and Beyond Students one required to take a test on fundamentals of information technology that covers on the advancement and future trends of information technology; information systems for better quality of life; the use of information technology to increase work efficiency: document management, creating good presentations, Information retrieval; a critical understanding of media and information; basic knowledge of computer network and internet technology; computer crime, law and ethics in information technology	4(0-0-8)
Total 18 credits		
* credit is excluded		
2nd Year		
1st semester		
VET61-201	The Veterinary Profession World history of the veterinary profession, various disciplines of the veterinary profession, veterinary roles in society, 21 st century skills, veterinarians and being global citizens and attitude of fondness toward the veterinary profession	1(1-0-2)
VET61-202	Animal Production System I Animal production systems (ruminants and poultry), location and housing design, animal breeds, animal breeding, feed and feeding, rearing management of each age-group, animal waste management, animal health management and use of information technology for animal production	4(4-0-8)
VET61-203	Animal Production System II Animal production systems (pigs and aquatic animals), location and housing design, animal breeds, animal breeding, feed and feeding, rearing management	4(4-0-8)

	of each age-group, animal waste management, animal health management and use of information technology for animal production	
VET61-211	Basic Practical Skills I Basic practical skill for veterinary students, physical examination, animal behaviors and animal rehabilitation	2(0-4-2)
VET61-221	Body Structure and Function I Introduction of body structure and function, gametogenesis, fertilization, early embryonic development, placenta development, development of nervous system, circulatory system, endocrine system, pharynx, and face, respiratory system, gastrointestinal system, musculoskeletal and integumentary system, reproductive system and urinary system	2(1-2-3)
VET61-222	Body Structure and Function II Gross anatomy, histology, physiology of musculo-skeletal, nervous and sensory systems of different species	6(3-6-9)
Total 19 credits		
2nd semester		
VET61-204	Veterinary Genetics Introduction to veterinary genetics, statistics in animal breeding, population genetics, qualitative and quantitative genetics, genetic parameters, selection methods, response to selection, mating system and animal breeding	2(2-0-4)
VET61-205	Animal Nutrition Principles of animal nutrition, comparative animal gastrointestinal tracts, nutrients classification, feedstuffs, determination of feed and nutrient utilization, determination of animal nutrient requirement, factors affecting feed consumption, inhibitory factors in feedstuffs, feeding standard and productivity, feed formulation concept, feed preparation and processing, feed quality control and feed proximate analysis	4(2-4-6)
VET61-206	Veterinary General Biochemistry Molecular structure and function of water, proteins, carbohydrates, lipids, nucleic acid, minerals and vitamins; enzyme mechanisms, nucleic acids and protein synthesis, gene regulation, molecular biology and its application in veterinary medicine, biochemical instrumental techniques, pH meter, spectrophotometer, electrophoresis and chromatography, qualitative and quantitative analysis of biomolecules and recombinant DNA	3(2-2-6)
VET61-212	Basic Practical Skills II Basic practical skill for veterinary students, general animal care, primary animal health care and animal handling of different species	2(0-4-2)

VET61-223	Body Structure and Function III Prerequisite: VET61-221 Body Structure and Function I, VET61-222 Body Structure and Function II Gross anatomy, histology, physiology of gastro-intestinal, circulatory and respiratory systems of different species	6(3-6-9)
XXX60-xxx	Elective subjects	2(x-x-x)
Total 19 credits		
3rd semester		
VET61-213	Basic Practical Skills III Basic practical skill for veterinary students, general procedurs in microbiology, serological diagnosis, molecular techniques in diagnostic microbiology and antimicrobial susceptibility testing	2(0-4-2)
VET61-224	Body Structure and Function IV Prerequisite: VET61-223 Body Structure and Function III Gross anatomy, histology, physiology of reproductive, urinary systems and endocrine systems of different species	6(3-6-9)
VET61-231	Veterinary General Pathology Introduction to veterinary pathology, terminology, mechanism of cell injury, degeneration, adaptation and cell death, inflammation and tissue healing, circulatory disturbance, neoplasia and cancer	2(2-0-4)
VET61-232	Veterinary Microbiology Classification, morphology, structure, biochemical properties, growth, and pathogenicity of important bacteria, fungi and virus in animals, specimen collection and storage and laboratory diagnostic techniques	4(4-0-8)
VET61-233	Veterinary Immunology Immune system, immune response to antigen, mechanisms of immunity, immunity to microbes, hypersensitivity, immunity at body surface, immunity in the fetus and newborn, diseases of immune system, immunological diagnosis and animal vaccine	2(2-0-4)
VET61-291	Interdisciplinary Integration I Interdisciplinary integration of preclinical knowledges-2 nd year courses with problem based learning	1(0-2-1)
XXX60-xxx	Elective subjects	2(x-x-x)
Total 19 credits		
3rd Year		
1st semester		
VET61-307	Veterinary Clinical Biochemistry	3(3-0-6)

	Prerequisite: VET61-206 Veterinary General Biochemistry Principles, laboratory techniques, analysis and interpretation of clinical chemistry data, showing normality and abnormality of animal organs: muscles, heart, bones, liver, kidneys, pancreas, gastrointestinal tract, endocrine, acid-base balance, minerals, blood gas and serum proteins for pathogenesis, diagnosis and prognosis of animal diseases	
VET61-308	Laboratory Animal Care and Management Prerequisite: VET61-231 Veterinary General Pathology Ethical use of laboratory animals, animal welfare, species and breed of laboratory animals, laboratory animal quality, heritability and production, laboratory animal care, management and preventive health care and occupational health	2(2-0-4)
VET61-314	Basic Practical Skills IV Basic practical skill for veterinary students, practice in animal necropsy (companion animals, food animals and laboratory animals), histopathology and cytology	4(0-8-4)
VET61-325	Veterinary General Pharmacology Principles of veterinary pharmacology, pharmaceutical dosage forms and regimens, leaflet, pharmaceutical formulations, routes of drug administration, concept and rationale use of drugs, drug regulations and authorities, principles of pharmacokinetics and pharmacodynamics, drug interaction and variation in drug responses	3(2-2-5)
VET61-334	Veterinary Systemic Pathology Prerequisite: VET61-231 Veterinary General Pathology, VET61-221 Body Structure and Function I, VET61-222 Body Structure and Function II, VET61-223 Body Structure and Function III Pathological changes of cells, tissues, and various organs that correlate to the clinical pictures and necropsy findings in circulatory, respiratory, digestive, reproductive, nervous, sensory, integument, urinary, musculoskeletal, endocrine, and hemopoietic systems	4(4-0-8)
Total 16 credits		
2nd semester		
VET61-315	Basic Practical Skills V Basic practical skill for veterinary students, practice in specimen collections and clinical pathology laboratories	5(3-4-8)
VET61-326	Veterinary Clinical Pharmacology	2(2-0-4)

	<p>Prerequisite: VET61-325 Veterinary General Pharmacology</p> <p>Veterinary pharmacology of systemic drugs including autonomic and central nervous, cardiovascular, respiratory, gastrointestinal, endocrine systems, analgesic, antipyretic, non-steroidal anti-inflammatory drugs, autacoids and antagonists, steroidal anti-inflammatory drugs, dermatologic and ophthalmic drugs, antimicrobial agents, antifungal, antiviral, anti-parasitic drugs, disinfectants, antiseptic, and sterilants, chemotherapy, immune-modulating agents, animal behavior-modifying drugs and veterinary herbal medicine</p>	
VET61-327	<p>Veterinary Toxicology</p> <p>Principles in toxicology, mechanisms of toxic injuries, classification of toxic substances, toxicity evaluation and risk assessment, laboratory analysis of toxic substances, principles of poison treatment, toxicology of insecticides, pesticides, rodenticides, plant and animal toxins, heavy metals and industrial pollutants</p>	3(3-0-6)
VET61-335	<p>Veterinary Clinical Pathology</p> <p>Prerequisite: VET61-232 Veterinary Microbiology, VET61-233 Veterinary Immunology, VET61-336 Veterinary Parasitology, VET61-334 Veterinary Systemic Pathology</p> <p>The collection of cells, blood, feces, urine, serum, cerebrospinal fluid and body fluid, preparation and shipment of laboratory specimens, detection of pathological changes in body functions using laboratory findings and forensic medicine</p>	5(3-4-8)
VET61-336	<p>Veterinary Parasitology</p> <p>Classification morphology, life cycle, pathogenesis, epidemiology, diagnosis, treatment, prevention and control of important helminthes, protozoa and arthropods in veterinary medicine</p>	2(0-4-4)
Total 17 credits		
3rd semester		
VET61-341	<p>Small Animal Medicine I</p> <p>Prerequisite: VET61-335 Veterinary Clinical Pathology, VET61-315 Basic Practical Skills V</p> <p>Diagnosis and treatment of dogs, electrolytes and acid-base imbalance, transfusion medicine, parenteral nutrition, diagnosis and treatment of clinical problem of the hematology and immunology, dentistry, ophthalmology, dermatology and endocrinology related to skin diseases, oncology, joint and neuromuscular disorders, behavior medicine, gastroenterology, hepatology, pancreas, endocrinology, cardiology, respiratory, nephrology, and urology,</p>	6(4-4-10)

	reproduction, infectious diseases, emergency medicine, preventive medicine and client communication	
VET61-351	<p>Veterinary Anesthesiology</p> <p>Prerequisite: VET61-335 Veterinary Clinical Pathology, VET61-315 Basic Practical Skills V</p> <p>Principles of veterinary anesthesiology, pharmacology, general anesthesia, perioperative patient assessment, physiological monitoring, local anesthesia, pain management, complications and treatment in small and large animals</p>	2(2-0-4)
VET61-352	<p>Veterinary Diagnostic Imaging</p> <p>Prerequisite: VET61-335 Veterinary Clinical Pathology, VET61-315 Basic Practical Skills V</p> <p>Principles of veterinary diagnostic imaging, radiographic techniques, positioning, radiographic interpretations, radiation protection, ultrasonographic applications and interpretations, computed tomography and magnetic resonance imaging</p>	3(2-2-5)
VET61-353	<p>Small Animal Surgery and Orthopedics</p> <p>Prerequisite: VET61-335 Veterinary Clinical Pathology, VET61-315 Basic Practical Skills V</p> <p>Principles of veterinary surgical procedures, sterilization and disinfection, surgical tie and suturing, hemostasis, wound healing process, classification of bone fracture, bone healing process, diagnostic and fixation methods, fluid therapy in veterinary surgery, surgical skills, post-operative care and complications of soft tissue surgery and orthopedics in dogs and cats</p>	5(3-4-8)
VET61-392	<p>Interdisciplinary Integration II</p> <p>Interdisciplinary integration of preclinical and clinical knowledges with clinical problem-oriented approach, assessment and diagnostic plans</p>	1(0-2-1)
Total 17 credits		
4th Year		
1st semester		
VET61-442	<p>Small Animal Medicine II</p> <p>Prerequisite: VET61-335 Veterinary Clinical Pathology, VET61-315 Basic Practical Skills V</p> <p>Diagnosis and treatment of cats, electrolytes and acid-base imbalance, transfusion medicine, parenteral nutrition, diagnosis and treatment of clinical problem of the hematology and immunology, dentistry, ophthalmology, dermatology and endocrinology related to skin diseases, oncology, joint and neuromuscular disorders, behavior medicine, gastroenterology, hepatology,</p>	2(2-0-4)

	pancreas, endocrinology, cardiology, respiratory, nephrology, and urology, reproduction, infectious diseases, emergency medicine, preventive medicine and client communication	
VET61-443	<p>Equine Medicine</p> <p>Prerequisite: VET61-335 Veterinary Clinical Pathology, VET61-315 Basic Practical Skills V</p> <p>Physical examination, diagnostic procedures, treatment and prevention on diseases of the respiratory, cardiovascular and lymph vessels, gastrointestinal, immune, musculoskeletal, urinary, integument, nervous, and endocrine systems, ophthalmic diseases, nutritional management, infectious diseases, metabolic diseases, neonatal and geriatrics diseases</p>	4(2-4-6)
VET61-444	<p>Ruminant Health and Production Medicine</p> <p>Prerequisite: VET61-202 Animal Production System I, VET61-335 Veterinary Clinical Pathology, VET61-315 Basic Practical Skills V</p> <p>Ruminant production medicine and herd health management, production cycle, farm visit, data records, data analysis, important infectious and non-infectious diseases of various systems, diagnosis and treatment, disease monitoring and disease prevention and control</p>	6(4-4-10)
VET61-454	<p>Large Animal Surgery and Orthopedics</p> <p>Prerequisite: VET61-353 Small Animal Surgery and Orthopedics, VET61-351 Veterinary Anesthesiology, VET61-352 Veterinary Diagnostic Imaging</p> <p>History taking, diagnostic procedures, therapeutic plans, local and general anesthesia, surgical skills, post-operative care and complications of soft tissue surgery and orthopedics in cattle, horses and pigs</p>	3(1-4-4)
VET61-493	<p>Research Methodology and Biostatistics</p> <p>Introduction to research, literature review, problems and hypotheses, research design, sampling techniques, processing of data, statistical analysis, writing of research report and ethics for researchers</p>	3(3-0-6)
Total 18 credits		
2nd semester		
VET61-445	<p>Large Animal Reproduction and Obstetrics</p> <p>Prerequisite: VET61-335 Veterinary Clinical Pathology, VET61-315 Basic Practical Skills V</p> <p>Breeding soundness examination, heat detection, rectal palpation and ultrasonography of reproductive organs, pregnancy diagnosis, reproductive</p>	4(2-4-6)

	disorders, dystocia and correction, pharmacological and hormonal use, artificial insemination and reproductive biotechnology in large animals	
VET61-446	<p>Swine Health and Production Medicine</p> <p>Prerequisite: VET61-203 Animal Production System II, VET61-335 Veterinary Clinical Pathology, VET61-315 Basic Practical Skills V</p> <p>Swine production medicine and herd health management, production cycle, farm visit, data records, data analysis, important infectious and non-infectious diseases of various systems, diagnosis and treatment, disease monitoring and disease prevention and control</p>	5(3-4-8)
VET61-447	<p>Zoo and Wildlife Medicine</p> <p>Prerequisite: VET61-335 Veterinary Clinical Pathology, VET61-315 Basic Practical Skills V</p> <p>Physical examination, animal restraint, diagnostic procedures, treatment and prevention on diseases of various systems, nutritional management, infectious diseases, metabolic diseases of zoo and wildlife animals</p>	4(3-2-7)
VET61-461	<p>Veterinary Epidemiology</p> <p>Prerequisite: VET61-493 Research Methodology and Biostatistics</p> <p>Principles of veterinary epidemiology, disease occurrence and determinants, disease occurrence and frequency, types of epidemiological studies, screening and diagnostic test, sample size determinations, disease-outbreak investigation and disease surveillance, disease prevention and control, epidemiological data presentation and the application in veterinary public health</p>	4(4-0-8)
VET61-462	<p>Zoonoses and Public Health</p> <p>Definition of zoonosis, emerging and re-emerging zoonoses, application of one health concept and public health, species oriented of zoonotic diseases, occupational health, biosafety, biosecurity, prevention and control</p>	1(1-0-2)
Total 18 credits		
3rd semester		
VET61-409	<p>Veterinary Ethics and Jurisprudence</p> <p>Introduction to law, laws and acts related to the veterinary profession, laws and regulations concerning public health and environment, rules and regulation mandated by international organization and veterinary ethics</p>	1(1-0-2)
VET61-448	<p>Poultry Health and Production Medicine</p> <p>Prerequisite: VET61-202 Animal Production System I, VET61-335 Veterinary Clinical Pathology, VET61-315 Basic Practical Skills V</p>	5(3-4-8)

	Poultry production medicine and herd health management, production cycle, farm visit, data records, data analysis, important infectious and non-infectious diseases of various systems, diagnosis and treatment, disease monitoring and disease prevention and control	
VET61-449	<p>Aquatic Animal Health and Production Medicine</p> <p>Prerequisite: VET61-203 Animal Production System II, VET61-335 Veterinary Clinical Pathology, VET61-315 Basic Practical Skills V</p> <p>Aquatic animal production medicine and herd health management, production cycle, farm visit, data records, data analysis, important infectious and non-infectious diseases of various systems, diagnosis and treatment, disease monitoring and disease prevention and control</p>	4(2-4-6)
VET61-463	<p>Food Safety and Inspection</p> <p>Prerequisite: VET61-461 Veterinary Epidemiology</p> <p>Roles of veterinarians in food safety, foodborne diseases, microorganisms in foods of animal origin, methods of sampling and quality control, milk and meat inspection, hygienic food production and food processing control, personal hygiene, cleaning and use of disinfectant, cross-contamination management, risk analysis and risk assessment of animal product processing plants</p>	4(4-0-8)
VET61-464	<p>Environmental Health and Safety</p> <p>Causes and effects of environmental pollution, air pollution, water pollution, environmental toxicology, animal waste management, veterinary hospital waste management, law and its regulation, risk analysis and risk assessment and audit system for environmental health impact</p>	1(1-0-2)
VET61-465	<p>Food and Environmental Safety Laboratory</p> <p>Laboratory in food microbiology, food and water quality analysis, chemical and toxic substances analysis, antibiotic residues contaminated in meats and their products, milk quality analysis, standard of abattoir and animal products processing plants</p>	2(0-4-2)
Total 17 credits		

5 th Year		
All year round		
VET61-537	<p>Clinical Practice in Veterinary Diagnostic Medicine</p> <p>Prerequisite: VET61-335 Veterinary Clinical Pathology, VET61-314 Basic Practical Skills IV, VET61-315 Basic Practical Skills V</p> <p>Clinical skill practice in veterinary diagnostic medicine under guidance of instructors</p>	4(0-12-6)
VET61-555	<p>Clinical Practice in Small Animal Diagnostic Imaging, Surgery and Orthopedics</p> <p>Prerequisite: VET61-353 Small Animal Surgery and Orthopedics</p> <p>Clinical skill practice in small animal diagnostic imaging, surgery and orthopedics under guidance of instructors</p>	4(0-12-6)
VET61-556	<p>Clinical Practice in Equine Medicine and Surgery</p> <p>Prerequisite: VET61-443 Equine Medicine, VET61-454 Large Animal Surgery and Orthopedics</p> <p>Clinical skill practice in equine medicine and surgery under guidance of instructors</p>	4(0-12-6)
VET61-571	<p>Clinical Practice in Small Animal Medicine</p> <p>Prerequisite: VET61-341 Small Animal Medicine I, VET61-442 Small Animal Medicine II</p> <p>Clinical skill practice in small animal medicine under guidance of instructors</p>	4(0-12-6)
VET61-572	<p>Clinical Practice in Small Animal Specialty Medicine</p> <p>Prerequisite: VET61-341 Small Animal Medicine 1, VET61-442 Small Animal Medicine II</p> <p>Clinical skill practice in small animal specialty medicine under guidance of instructors</p>	4(0-12-6)
VET61-573	<p>Clinical Practice in Ruminant Health and Production Medicine</p> <p>Prerequisite: VET61-444 Ruminant Health and Production Medicine, VET61-454 Large Animal Surgery and Orthopedics</p> <p>Clinical skill practice in ruminant health and production medicine under guidance of instructors</p>	4(0-12-6)
VET61-574	<p>Clinical Practice in Swine Health and Production Medicine</p> <p>Prerequisite: VET61-446 Swine Health and Production Medicine, VET61-454 Large Animal Surgery and Orthopedics</p> <p>Clinical skill practice in swine health and production medicine under guidance of instructors</p>	4(0-12-6)
VET61-575	<p>Clinical Practice in Poultry Health and Production Medicine</p> <p>Prerequisite: VET61-448 Poultry Health and Production Medicine</p>	4(0-12-6)

	Clinical skill practice in poultry health and production medicine under guidance of instructors	
VET61-576	Clinical Practice in Aquatic Animal Health and Production Medicine Prerequisite: VET61-449 Aquatic Animal Health and Production Medicine Clinical skill practice in aquatic animal health and production medicine under guidance of instructors	4(0-12-6)
VET61-577	Clinical Practice in Zoo and Wildlife Medicine Prerequisite: VET61-447 Zoo and Wildlife Medicine Clinical skill practice in zoo and wildlife medicine under guidance of instructors	4(0-12-6)
VET61-594	Research and Innovation Project Prerequisite: VET61-493 Research Methodology and Biostatistics Proposal writing of research project and innovation, proposal presentation, conducting research, writing of scientific paper, presentation, moral and ethics of researcher	6(0-18-9)
Total 46 credits		
* Begin in 1 st semester of 4 th Year		
6th Year		
All year round		
VET61-610*	Professional Practice in Ambulatory Veterinary Unit Prerequisite: VET61-573 Clinical Practice in Ruminant Health and Production Medicine Professional practice in medicine, diagnostic imaging, surgery, reproduction and obstetrics in food animals (ruminants, pigs, poultry and aquatic animals)	12(0-36-18)
VET61-616*	Professional Practice in Equine Sports Medicine Prerequisite: VET61-556 Clinical Practice in Equine Medicine and Surgery Professional practice in equine sports medicine	4(0-12-6)
VET61-617*	Professional Practice in Aquatic Animal Health and Production Medicine Prerequisite: VET61-449 Clinical Practice in Aquatic Animal Health and Production Medicine Professional practice in aquatic animal health and production medicine	8(0-24-12)
VET61-618*	Professional Practice in Zoo and Wildlife Medicine Prerequisite: VET61-577 Clinical Practice in Zoo and Wildlife Medicine Professional practice in medicine, diagnostic imaging, surgery, orthopedics and reproduction and obstetrics in zoo and wildlife	8(0-24-12)
VET61-619*	Professional Practice in Small Ruminant Health and Production Medicine Prerequisite: VET61-573 Clinical Practice in Ruminant Health and Production Medicine	4(0-12-6)

	Professional practice in medicine, diagnostic imaging, surgery, reproduction and obstetrics in food animals (ruminants, pigs, poultry and aquatic animals)	
VET61-638*	Professional Practice in Veterinary Diagnostic Unit Prerequisite: VET61-537 Clinical Practice in Veterinary Diagnostic Medicine Professional practice in veterinary diagnostic medicine	8(0-24-12)
VET61-657*	Professional Practice in Small Animal Diagnostic Imaging Surgery and Orthopedics Prerequisite: VET61-555 Clinical Practice in Small Animal Diagnostic Imaging, Surgery and Orthopedics Professional practice in small animal diagnostic imaging, surgery and orthopedics	8(0-24-12)
VET61-658*	Professional Practice in Equine Medicine and Surgery Prerequisite: VET61-445 Large Animal Reproduction and Obstetrics, VET61-556 Clinical Practice in Equine Medicine and Surgery Professional practice in medicine, surgery, orthopedics, diagnostic imaging, reproduction and obstetrics in horses	8(0-24-12)
VET61-666*	Professional Practice in Veterinary Public Health Prerequisite: VET61-461 Veterinary Epidemiology, VET61-462 Zoonotic Diseases, VET61-463 Food Safety of Animal Origin, VET61-464 Environmental Health and Safety Professional practice in veterinary public health	8(0-24-12)
VET61-681*	Professional Practice in Small Animal Medicine Prerequisite: VET61-555 Clinical Practice in Small Animal Medicine Professional practice in small animal medicine	12(0-36-18)
VET61-682*	Professional Practice in Small Animal Specialty Medicine Prerequisite: VET61-572 Clinical Practice in Small Animal Specialty Medicine Professional practice in small animal specialty medicine	8(0-24-12)
VET61-683*	Professional Practice in Dairy Cattle Reproduction Prerequisite: VET61-445 Large Animal Reproduction and Obstetrics, VET61-573 Clinical Practice in Ruminant Health and Production Medicine Professional practice in dairy cattle reproduction and obstetrics	8(0-24-12)
VET61-684*	Professional Practice in Udder Health and Milk Quality Prerequisite: VET61-573 Clinical Practice in Ruminant Health and Production Medicine	4(0-12-6)

	Professional practice in udder health and milk quality	
VET61-685*	<p>Professional Practice in Dairy Cattle Nutrition</p> <p>Prerequisite: VET61-205 Animal Nutrition, VET61-573 Clinical Practice in Ruminant Health and Production Medicine</p> <p>Professional practice in dairy cattle nutrition</p>	4(0-12-6)
VET61-686*	<p>Professional Practice in Swine Health and Production Medicine</p> <p>Prerequisite: VET61-574 Clinical Practice in Swine Health and Production Medicine</p> <p>Professional practice in swine health and production medicine</p>	8(0-24-12)
VET61-687*	<p>Professional Practice in Swine Reproduction</p> <p>Prerequisite: VET61-574 Clinical Practice in Swine Health and Production Medicine</p> <p>Professional practice in swine reproduction</p>	4(0-12-6)
VET61-688*	<p>Professional Practice in Swine Nutrition</p> <p>Prerequisite: VET61-205 Animal Nutrition, VET61-574 Clinical Practice in Swine Health and Production Medicine</p> <p>Professional practice in swine nutrition</p>	4(0-12-6)
VET61-689*	<p>Professional Practice in Poultry Health and Production Medicine</p> <p>Prerequisite: VET61-575 Clinical Practice in Poultry Health and Production Medicine</p> <p>Professional practice in poultry health and production medicine</p>	8(0-24-12)
VET61-680*	<p>Professional Practice in Poultry Nutrition</p> <p>Prerequisite: VET61-205 Animal Nutrition, VET61-575 Clinical Practice in Poultry Health and Production Medicine</p> <p>Professional practice in poultry nutrition</p>	4(0-12-6)
Registration in elective subjects at least 36 credits		
VET61-695*	<p>Pre-Cooperative Education</p> <p>Concepts and Philosophy of Cooperative Education, Socialization and Social Adjustments, Structure of a Business Enterprise, Administrative work Flow, Basic Knowledge of Labour Laws, Life-Style and Career Planning, Project Planning, Formal Academic Report Writing and Presentation Skills, Preparation of Resume and job Application Letter, Job Application and interview Techniques, Cooperative Education Experience of Specific Degree Programmes and Work Ethics.</p>	1(0-2-1)

VET61-696*	<p>Cooperative Education</p> <p>Conditions: For students who have received an S grade from VET61-690 Pre-Cooperative Education 1(0-2-1) and have received the approval of School's committee</p> <p>Full time work performance in the approve workplace in an area related to the student's program of study for one trimester but not less than 16 weeks.</p>	8(0-40-0)
		Total 45 credits
Remarks: * Elective subjects		