



A DUAL ENROLLMENT CAREER PATHWAY FOR

VETERINARY TECHNOLOGY

tctc.edu/careerpathways

About the Program

- Get a head start on your Veterinary Technology program by completing Veterinary Technology prerequisites while still in high school.
- Complete VET 113 in summer term and be ready to begin Veterinary Technology clinical courses in the fall.
- As an LVT, qualify for employment with veterinary clinics, major teaching facilities, zoos, wildlife preserves, animal research and diagnostic labs, pharmaceutical companies, or any other animal related facility.

About the Pathway

- High school students take dual enrollment classes at **Tri-County Technical College**.
- Upon completion of the Veterinary Technology program, become a Licensed Veterinary Technician (LVT) after passing the national and state licensing exams.
- After earning your associate degree at Tri-County, continue studies towards a 4-year degree at Murray State University (Kentucky) or other universities.
- The number of Veterinary Technologists/Technicians employed in this region continues to increase due to the rapid demand in animal health care

Veterinary Technology CAREER PATHWAY

IN HIGH SCHOOL

Fall of 12th Grade Year:

- BIO 101
- ENG 101

Spring of 12th Grade Year:

- MAT 120
- ENG 102*

*Optional, but needed to complete some 4-year bachelor's degrees.

**HIGH SCHOOL GRADUATION
AND
13 HOURS COLLEGE CREDIT**

AFTER HIGH SCHOOL

Veterinary Technology Associate Degree

SUMMER

- VET 113

FALL

- VET 101 • VET 104 • VET 116 • VET 150

SPRING

- VET 140 • VET 142 • VET 152 • VET 160 • BIO 225

SUMMER

- VET 170

FALL

- VET 201 • VET 250 • VET 270 • PSY 201 • SPC 205

SPRING

- VET 215 • VET 260 • VET 290 • Humanities Requirement

SC Mean Annual Wages
\$36,578

AFTER TCTC GRADUATION

Transfer Opportunities with 4-year universities

BACHELOR'S DEGREE

Murray State University (KY)
Other universities

CONNECT WITH US

hsde@tctc.edu | 864-646-1505

VETERINARY TECHNOLOGY COURSE DESCRIPTIONS

Veterinary Technology is a career dedicated to the health and wellbeing of animals. Licensed veterinary technicians provide professional and technical support to veterinarians, biologists, researchers, and industry, by providing patient care, including anesthesia and surgical support, diagnostic imaging, and laboratory procedures.

BIO 101 - Biological Science I

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This course is a study of the scientific method, basic biochemistry, cell structure and function, cell physiology, cell reproduction and development, Mendelian genetics, population genetics, natural selection, evolution, and ecology. Laboratory requirement supplements lectures.

Prerequisites: Satisfactory placement test scores for ENG 101 or completion of ENG 101, ENG 103, ENG 155 or ENG 100 and RDG 100. Satisfactory placement test scores for MAT 101 or completion of MAT 032, MAT 101, MAT 102, MAT 103, MAT 109, MAT 110, MAT 111, MAT 120, MAT 130, MAT 138, or MAT 140. Completion of BIO 105 and CHM 105 replaces MAT and ENG prerequisites. All prerequisite courses require a grade of "C" or higher.

Note: Credit may not be earned for both BIO 101 and BIO 105 or BIO 113.

BIO 225 - Microbiology

Class Hours: 3 Lab Hours: 3 Credit Hours: 4

This is a detailed study of microbiology as it relates to infection and the disease processes of the body. Topics include immunity, epidemiology, medically important microorganisms, and diagnostic procedures for identification. Laboratory requirement supplements lectures.

Prerequisites: Completion of BIO 101 or BIO 113 with a grade of "C" or higher. Note: Credit may not be earned for both BIO 225 and BIO 115.

ENG 101 - English Composition I

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This is a (college transfer) course in which the following topics are presented: a study of composition in conjunction with appropriate literary selections, with frequent theme assignments to reinforce effective writing. A review of standard usage and the basic techniques of research are also presented.

Prerequisites: Satisfactory Writing placement score or a grade of C or higher in ENG 100 or in ENG 155 and satisfactory Reading placement score or a grade of C or higher in RDG 100.

MAT 120 - Probability and Statistics

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes the following topics: introductory probability and statistics, including organization of data; sample space concepts; random variables; counting problems; binomial and normal distributions; central limit theorem; confidence intervals and test hypothesis for large and small samples; types I and II errors; linear regression and correlation.

Prerequisites: Satisfactory math placement score or MAT 102 with a grade of "C" or higher, or MAT 101 with a grade of A and a satisfactory reading placement score or ROG 100 with a grade of "C" or higher or ENG 101 or ENG 103 with a grade of "C" or higher.

PSY 201 - General Psychology

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course includes the following topics and concepts in the science of behavior: scientific method, biological bases for behavior, perception, motivation, learning memory, development, personality, abnormal behavior, therapeutic techniques, and social psychology.

Prerequisites: Satisfactory reading and English placement scores for ENG 101; or satisfactory English scores for ENG 101 and completion of RDG 100 with a grade of "C" or higher; or completion of ENG 100, ENG 101, ENG 103 or ENG 155 with a grade of "C" or higher. BIO 101 strongly recommended.

SPC 205 - Public Speaking

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course is an introduction to principles of public speaking with application of speaking skills.

Prerequisites: ENG 101, ENG 103, ENG 155, or ENG 156 with a grade of "C" or higher.

VET 101 - Animal Breeds and Husbandry

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course is a study of the various species and breeds of domestic animals commonly encountered in veterinary medicine. Emphasis is placed on the recognition of each breed as well as important terminology, physiological data, and behavior of each species of animal.

Prerequisite: VET 113.

VET 104 - Veterinary Anatomy and Physiology

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course provides a general survey of the functional anatomy and physiology of the domestic animals commonly encountered in veterinary medicine. Dissection of representative cadavers is performed in the laboratory.

Prerequisites: VET 113.

VET 113 - Introduction to Veterinary Technology

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course introduces veterinary medical terminology, anatomy, physiology and related areas of veterinary medicine. It will also introduce the student to job opportunities and the characteristics it takes to be successful in this field.

Prerequisites: Satisfactory placement test scores for ENG 101 or completion of ENG 101 or ENG 100 and RDG 100.

Note: Course offering every semester.

VET 116 - Radiology and Parasitology

Class Hours: 1 Lab Hours: 6 Credit Hours: 3

This course is a study of the radiologic techniques for all domestic animals in veterinary medicine, including taking, developing, and assessing for technical errors of large and small animal radiographs. This course also includes a survey and laboratory study of domestic animal parasitology.

Prerequisites: VET 113.

VET 140 - Veterinary Pharmacology

Class Hours: 2 Lab Hours: 0 Credit Hours: 2

This course is the study of the principles of pharmacology and the pharmaceutical products used in veterinary medicine.

Prerequisites: VET 150.

VET 142 - Veterinary Anesthesia

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course is the study of the principles and practical uses of anesthesia in veterinary medicine.

Prerequisites: VET 150.

VET 150 - Clinical Techniques I

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course includes a survey of the technical skills required by the veterinary technician in dealing with all domestic animals. The course includes techniques in restraint, handling, administration of medications, and collection of bodily specimens.

Prerequisites: VET 113.

VET 152 - Clinical Pathology

Class Hours: 2 Lab Hours: 6 Credit Hours: 4

This course provides a study of veterinary hematology, urology, and clinical chemistry followed by application of standard laboratory procedures and regulatory testing in each of these disciplines.

Prerequisites: VET 150.

VET 160 - Clinical Techniques II

Class Hours: 2 Lab Hours: 3 Credit Hours: 3

This course provides a survey of technical skills required by the veterinary technician with emphasis on radiographic and anesthetic procedures.

Prerequisites: VET 150.

VET 170 - Veterinary Technician Externship

Class Hours: 0 Lab Hours: 24 Credit Hours: 6

This course provides clinical training in the veterinary field under the direct supervision of a licensed veterinarian in a veterinary facility.

Note: Course is only offered in Spring and Summer.

VET 201 - Diseases and Zoonosis

Class Hours: 4 Lab Hours: 0 Credit Hours: 4

This course provides a study of domestic animal diseases, including their causes, symptoms, prevention, treatment, and public health significance.

Prerequisites: VET 160.

VET 215 - Laboratory Animal Medicine

Class Hours: 1 Lab Hours: 3 Credit Hours: 2

This course provides a study of the animals and facilities used in research procedures in medicine. The course includes equipment, aseptic techniques, vivarium management, husbandry, and disease prevention in laboratory animals.

Prerequisites: VET 250.

VET 250 - Clinical Techniques III

Class Hours: 1 Lab Hours: 6 Credit Hours: 3

This course includes a survey of technical skills required by the veterinary technician with emphasis on laboratory techniques.

Prerequisites: VET 160.

VET 260 - Clinical Techniques IV

Class Hours: 1 Lab Hours: 6 Credit Hours: 3

This course will survey technical skills required by veterinary technicians with emphasis on medical and surgical emergencies.

Prerequisites: VET 250.

VET 270 - Advanced Medical Care

Class Hours: 3 Lab Hours: 0 Credit Hours: 3

This course provides a study of the technician's role in emergency medical and surgical procedures. This course includes a survey of diagnostic procedures.

Prerequisites: VET 160.

VET 290 - Senior Integrated Learning

Class Hours: 4 Lab Hours: 0 Credit Hours: 4

This course will integrate foundational knowledge from learned information in preparation for taking the Veterinary Technician National Exam and a career in veterinary technology.

Prerequisites: VET 250.

