

SURGICAL TECHNOLOGY (ST)

1500 clock hours/ 70 weeks (Total time to complete the program may vary based on school holidays and breaks)
45 weeks Theory/Lab (20 hours per week) + 25 weeks externship (24 hours per week)

Program Objective:

The Surgical Technology program is a 1500-hour Diploma comprehensive course of study that combines theory and clinical practice. The curriculum is designed to provide qualified individuals an opportunity to acquire the knowledge, attitudes and skills that will enable them to become safe and competent practitioners of Surgical Technology.

The program prepares students for entry-level positions in a number of health care facilities including hospitals, medical centers, and public and private surgical centers. The program includes a mandatory 600-hour Surgical Technology Externship that must be completed prior to graduation.

It is not currently mandatory that graduates take certification examination upon successful program completion. However, many employers prefer or require that ST graduates be certified by the National Board of Surgical Technology and Surgical Assisting (NBSTSA). At the successful completion of the program, the graduate will be eligible to take the Certified Surgical Technology (CST) Examination given by the National Board of Surgical Technology and Surgical Assisting (NBSTSA). The College's Surgical Technology curriculum incorporates the CST Examination topics and is designed to prepare students to pass the examination.

Upon successful completion of the program, graduates may obtain employment as:

- Surgical Technologist (CIP # 51.0909; O-NET # 29-2055.00)

Term #	Module Title	Week #	Clock Hours
I	Anatomy and Physiology	1-9	180
II	Basic Science	10-18	180
III	Surgical Technology	19-27	180
IV	Surgical Procedures	28-36	180
V	Mock Surgery	37-45	180
VI	Externship	46-70	600
Total:			1500

Note: one clock hour is defined as a 60-minute span of time in which 50 minutes is devoted to actual class instruction, with the remaining portion designated as a break.

For information on graduation rates, median debt of graduates, completing this program or other important information, visit: <http://www.cbd.edu/programs/surgical-technology/>

Program Syllabus:

Course Number	Course Title	Lecture	Lab	Externship	Total Hours
ST101	Anatomy & Physiology I	80	10	0	90
ST102	Anatomy & Physiology II	80	10	0	90
ST201	Medical Terminology	25	5	0	30
ST202	Med Law & Ethics	25	5	0	30
ST203	Patient Psychology	25	5	0	30
ST204	Disease Process & Pathophysiology	25	5	0	30
ST205	Microbiology	25	5	0	30
ST206	Pharm. & Anesthesia	25	5	0	30
ST301	Intro to ST & Asepsis	20	10	0	30
ST302	Sterilization	20	10	0	30
ST303	Surgical Instruments	20	10	0	30
ST304	Biomedical Science	25	5	0	30
ST305	Sutures & Wound Healing	25	5	0	30
ST306	Drains & Catheters	20	10	0	30
ST401	General & Pediatric Procedures	30	0	0	30
ST402	OBGYN & Urological Procedures	30	0	0	30
ST403	Orthopedic Procedures	30	0	0	30
ST404	Neurologic Procedures	30	0	0	30
ST405	Plastic-H&N Procedures	30	0	0	30
ST406	Vascular & Cardio Procedures	30	0	0	30
ST501	Mock Surgery I	10	40	0	50
ST502	Mock Surgery II	10	40	0	50
ST503	Mock Surgery III	10	40	0	50
ST001	CPR	5	5	0	10
ST002	Career Development	5	5	0	10
ST504	Mock Clearance	0	10	0	10
ST601	Externship	20	0	580	600
TOTAL		680	240	580	1500

ST Program Descriptions:

MODULE I ST101 ANATOMY AND PHYSIOLOGY I

Prerequisites: Admission to the Surgical Technology Program.

Total clock hours: 90

This course is a study of the following topics and human systems: biochemistry, the cell, tissues, bone, muscle, and endocrine systems. The functions and interrelationship of these systems are studied. The course emphasizes the homeostatic nature of these systems with reference to human disease states.

MODULE I ST102 ANATOMY AND PHYSIOLOGY II

Prerequisites: Admission to the Surgical Technology Program.

Total clock hours: 90

This course is a study of the following topics and human systems: nervous system, lymphatic, endocrine, blood, cardiovascular, digestive, and respiratory systems. The functions and interrelationship of these systems are studied. The course emphasizes the homeostatic nature of these systems with reference to human disease states.

MODULE II ST201 MEDICAL TERMINOLOGY

Prerequisites: Admission to the Surgical Technology Program.

Total clock hours: 30

This course includes an introduction to medical terminology based on anatomy and physiology. Emphasis is placed on medical word roots, combining forms, prefixes and suffixes, and body structure.

MODULE II ST202 MEDICAL LAW & ETHICS

Prerequisites: Admission to the Surgical Technology Program.

Total clock hours: 30

This course presents an overview of the legalities and ethical behavior associated with medical practice/facility. The AMA and AAMA codes of ethics and OSHA regulations as they apply to the office environment are also studied.

MODULE II ST203 PATIENT PSYCHOLOGY

Prerequisites: Admission to the Surgical Technology Program.

Total clock hours: 30

This course is an introduction to the principles and concepts basic to understanding human behavior. A general overview of the research methods and major research findings of psychology are presented, as well as a survey of current theories used to interpret these findings. Topics covered include methodology, physiology, learning, perception, and cognitive processes, development, motivation and emotion, personality, abnormal behavior, therapy, and social psychology.

MODULE II ST204 DISEASE PROCESS & PATHOPHYSIOLOGY

Prerequisites: Admission to the Surgical Technology Program.

Total clock hours: 30

This course is an introduction to the causes of disease and pathological conditions of the body and the body's response mechanisms, both adequate and inadequate. Common diagnostic and treatment modalities also will be discussed.

MODULE II ST205 MICROBIOLOGY

Prerequisites: Admission to the Surgical Technology Program.

Total clock hours: 30

This course is a study of basic microbiology, infection control, and disease processes to include the body's defense mechanisms to those diseases, and wound healing. Additionally, vital signs and blood borne pathogens will be included.

MODULE II ST206 PHARMACOLOGY AND ANESTHESIA

Prerequisite: Admission to the Surgical Technology Program.

Total clock hours: 30

This course is the study of drugs with emphasis on concepts related to steps in the drug cycles and side effects. Students will learn major classifications of drugs and usual drug choices for selected diseases and pathological conditions. They will learn appropriate terms, abbreviations, equivalents, and math concepts in calculations of dosages. Different modes of anesthesia will be discussed.

MODULE III ST301 INTRODUCTION TO ST & ASEPSIS

Prerequisite: ST101-ST206

Total clock hours: 30

This course is designed to orient the student to surgical technology and provide a comprehensive knowledge of patient care concepts, as well as personal and professional relationships in surgical technology. This course also introduces aseptic technique.

MODULE III ST302 STERILIZATION

Prerequisite: ST101-ST301

Total clock hours: 30

An overview of the disease process, infection control with emphasis on hand washing techniques, methods of sterilization, instrumentation classification, and first aid procedures will be presented. Universal precautions as well as draping and positioning patients are emphasized.

MODULE III ST303 SURGICAL INSTRUMENTATION

Prerequisite: ST101-ST302

Total clock hours: 30

This course introduces the student to the relationship between instrumentation, equipment, and supplies and quality patient care in the OR; items that require sterilization prior to use in the sterile field; basic instruments by type, function, and name; proper care, handling, and assembly of instruments; types of special equipment utilized in the OR; practice and demonstration of proper care; handling techniques, safety precautions, functions of accessory equipment and demonstration of proper care; handling, and assembly; relationship between instruments, equipment, and supplies; and the OR environment as related to safety.

MODULE III ST304 BIOMEDICAL SCIENCE

Prerequisite: ST101-ST303

Total clock hours: 30

This course introduces the student to computer hardware and software programs. Emphasis is placed on the development of word processing skills, which include techniques for creating, editing, saving, and printing documents. It also includes the safety factors regarding biophysical practices in the OR. Electricity, mechanical robotics, sterilization, chemical, heat, gases, and sounds and vibrations are some of the concerns discussed for patient safety.

MODULE III ST305 SUTURES AND WOUND HEALING

Prerequisite: ST101-ST304

Total clock hours: 30

This course introduces wound healing, possible complications of wound healing, classifications of surgical wounds, factors that influence healing and the manner in which they affect the healing process, and common suture terms. Suture materials and stapling devices and their usage, as well as types, characteristics, and uses of natural and synthetic absorbable suture materials are also introduced.

MODULE III ST306 DRAINS AND CATHETERS

Prerequisite: ST101-ST305

Total clock hours: 30

This course introduces various types and usage of the drainage system, catheters, and tubes used in the surgical procedures.

MODULE IV ST401 GENERAL AND PEDIATRIC PROCEDURES

Prerequisite: ST101-ST306

Total clock hours: 30

This course is designed to provide comprehensive knowledge and skills for specific surgical procedures in diagnostic, general, and pediatric procedures.

MODULE IV ST402 OBGYN AND UROLOGIC PROCEDURES

Prerequisite: ST101-ST401

Total clock hours: 30

This course is designed to provide comprehensive knowledge and skills for specific OBGYN and urologic procedures.

MODULE IV ST403 ORTHOPEDIC PROCEDURES

Prerequisite: ST101-ST402

Total clock hours: 30

This course is designed to provide comprehensive knowledge and skills for specific orthopedic procedures.

MODULE IV ST 404 NEUROLOGICAL PROCEDURES

Prerequisite: ST101-ST403

Total clock hours: 30

This course is designed to provide comprehensive knowledge and skills for specific neurological procedures.

MODULE IV ST405 PLASTIC AND H&N PROCEDURES

Prerequisite: ST101-ST404

Total clock hours: 30

This course is designed to provide comprehensive knowledge and skills for specific surgical procedures in plastic and H&N procedures.

MODULE IV ST406 VASCULAR AND CARDIOTHORACIC PROCEDURES

Prerequisite: ST101-ST405

Total clock hours: 30

This course is designed to provide comprehensive knowledge and skills for specific vascular and cardiothoracic procedures.

MODULE V ST501 MOCK SURGERY I

Prerequisite: ST101-ST406

Total clock hours: 50

This course is designed to provide comprehensive knowledge and skills for specific surgical procedures in diagnostic, general surgery, orthopedic, neurological, plastic and reconstructive, peripheral vascular, obstetric/gynecology, ophthalmic, otorhinolaryngologic, and oral/maxillofacial surgical procedures for the surgical technologist

MODULE V ST502 MOCK SURGERY II

Prerequisite: ST101-ST501

Total clock hours: 50

This course is designed to provide comprehensive knowledge and skills for specific surgical procedures in plastic and reconstructive surgery, genitourinary surgery, orthopedic surgery, cardiothoracic surgery, and peripheral vascular surgery procedures for the surgical technologist.

MODULE V ST503 MOCK SURGERY III

Prerequisite: ST101-ST502

Total clock hours: 50

This course is designed to evaluate the student in his/her knowledge and skills in basic surgical preparation and procedures. Students will recall the preparations for anesthesia and pharmaceuticals used, instrumental set-ups, and circulating methods, and will understand the use of different needles and sutures.

MODULE V ST504 CPR

Prerequisite: ST101-ST503

Total clock hours: 10

This course is designed to introduce surgical technology candidates to basic clinical skills, CPR, HIV/AIDS, and OSHA. Emphasis is placed on measurement and recording of temperature, pulse, respiration, blood pressure, height, and weight. Included is a CPR session taught by a certified instructor.

MODULE V ST505 CAREER DEVELOPMENT

Prerequisite: ST101-ST504

Total clock hours: 10

This course on career development emphasizes assessing personal strengths, understanding career expectations, developing job search techniques, and preparing an effective resume.

MODULE V ST506 MOCK CLEARANCE

Prerequisite: ST101-ST505

Total clock hours: 10

In this course, emphasis is placed on the scrub and circulating roles of the surgical technologist including aseptic technique and basic care presentation for selected surgical procedures.

MODULE VI ST601 EXTERNSHIP

Prerequisite: ST101-ST506 with a grade B or better

Total clock hours: 600

This course is conducted in a surgical facility and provides students a clinical experience with a variety of preoperative assignments. Emphasis is placed on the scrub and circulating roles of the surgical technologist including aseptic technique and basic care presentation for selected surgical procedures. Students will observe and take part in surgical procedures and work as members of the surgical team.

