

IVY TECH COMMUNITY COLLEGE VALPARAISO

Surgical Technology Information and Application Package

Fall 2020

Surgical technologists are integral members of the surgical team who work closely with surgeons, anesthesiologists, registered nurses and other surgical personnel delivering patient care before, during and after surgery.

This health profession was developed during World War II when there was a critical need for assistance in performing surgery and a shortage of qualified personnel to meet that need. Individuals were specifically educated to assist in surgical procedures and perioperative care of the patient.

Surgical technologists may earn a professional credential by passing a nationally administered certifying examination. Those who become certified are granted the designation of certified surgical technologist (CST).

Description of the Role

CSTs prepare the operating room by selecting and opening sterile supplies appropriate for particular surgical procedures. Some of these items may include drapes, sponges, suction tubing and surgical instruments. Also, preoperatively the CST may carefully look over any nonsterile items being used such as electrosurgical units and diagnostic equipment to ensure proper working order. Common duties include operating sterilizers, lights, suction machines and diagnostic equipment.

CSTs may assist with positioning the patient and prepping the patient for surgery as well as providing physical and emotional support. The CST's primary responsibility is setting up the sterile field and being constantly observant that all members of the surgical team adhere to the principles of aseptic technique.

The CST most often functions as the sterile member of the surgical team who passes instruments, sutures and sponges during surgery. After "scrubbing," which involves meticulous cleansing of the hands and forearms, the technologist dons gown and gloves and prepares the sterile setup for the appropriate procedure. The technologist also assists other sterile team members with gowning, gloving and the application of sterile drapes.

To ensure that the surgery will proceed smoothly, the CST anticipates the surgeon's needs passing instruments and providing sterile items in an efficient manner. The CST also shares with the circulator the responsibility of accounting for sponges, needles and instruments before, during and after surgery.

Pass rates of CST by Surgical Technology students of Valparaiso, IN at Ivy Tech Community College: 2020-100% 2019-92% 2018-95% 2017-100% 2016 100%

CSTs may hold retractors or instruments, sponge or suction the operative site, or cut suture material as directed by the surgeon. They connect drains and tubing and receive and prepare specimens for analysis. They are responsible for preparing and applying sterile dressings following the procedure and may assist in the application of nonsterile dressings, including casts.

The CST must always ensure the safety and well-being of the patient under-going surgery while responding to the needs of other team members.

Employment

Many CSTs are employed in hospital operating rooms, delivery rooms, ambulatory care areas and central supply departments. They are also utilized in clinics and surgicenters as well as ophthalmologists', physicians' and dentists' offices.

CSTs with additional specialized education or training may also act in the role of the surgical first assistant. The surgical first assistant provides aid in exposure, hemostasis, and other technical functions that will help the surgeon carry out a safe operation with optimal results for the patient. CSTs may earn a professional credential as a first assistant by passing a certifying examination that awards the credential of certified surgical technologist/certified first assistant (CST/CFA).

Because of a broad educational background, CSTs function well as central service managers, surgery schedulers and materials managers. Other professional opportunities include organ and tissue procurement/preservation, cardiac catheterization laboratories, medical sales, product development and research. A number are instructors and directors of surgical technology programs.

Professional Credentials

The National Board of Surgical Technology and Surgical Assisting is the independent certifying agency for the profession. The NBSTSA awards certification to those who demonstrate their theoretical and practical knowledge by passing the national surgical technologist or fist assistant certifying examination. Beginning with the March 2000 administration of the CST examination, only currently or previously certified surgical technologist or graduates of surgical technology programs accredited by CAAHEP will be eligible to the CST certifying examination.

Commission on the Accreditation of Allied Health Education Programs (CAAHEP) 9355 – 113th St. N, #7709 Seminole, FL 33775

IVY TECH COMMUNITY COLLEGE

Valparaiso Campus School of Health Sciences Surgical Technology Program Fall 2020-2021 Calendar Program Cost (credit hour 149.55)

Fall Semester (16 credits)

Tuition and fees \$ 2392.80 Books** 500.00 Semester Total \$ 2,892.80
Spring Semester (15 credits)
Tuition and fees. \$ 2243.25 Books** 500.00 Semester Total \$ 2,743.25
2nd Year Fall Semester (12 credits)
Tuition and fees
Books**
Shoes
Lab Pack
Physical Exam with Lab Work, Immunization
Hepatitis B Vaccine
Cardiopulmonary Resuscitation (CPR)
Drug Screen and Background Check
Semester Total
Spring Semester (15 credits)
Tuition and fees
Books
Semester Total \$2,323.25
Summer Semester (10 credits)
Tuition and fees
Certification Exam Gold Package, including AST membership
Semester Total
Total Estimated Cost

^{*} These fees are subject to change without notice.

APPROXIMATE PROGRAM COST MAY VARY BY REGION AND CLINICAL SITE.

^{**} These prices are estimates <u>only</u> based on the previous year's costs.

ADMISSIONS PROCEDURE

Admission/Selection

The Surgical Technology Program has a two-step admission process as described below.

Step 1 – Admission to the College

1. Follow standard college admission requirements.

APPLICATION TO THE PROGRAM OR ENROLLING IN CLASSES THAT ARE PART OF THE SURGICAL TECHNOLOGY PROGRAM DOES NOT MEAN THAT THE STUDENT IS ADMITTED TO THE PROGRAM

Step 2 – Admission to the Program-limited enrollment program

- 1. Take the HESI Exam for Surgical Technology by the program deadline: The testing window for the 2021 admittance is January 8^{th} April 30^{th}
- 2. The HESI Entrance Exam, sometimes referred to as the Evolve HESI Admission Assessment (A2) Exam, is used by many traditional and accelerated health programs to evaluate candidates for admission. The HESI Entrance exam consists of exams on different academic topic areas such as: reading comprehension, vocabulary and general knowledge, grammar, math, biology, and anatomy and physiology. There is also a section intended to help identify a candidate's personality and learning style.
- 3. The student must successfully complete the following courses before the application deadline

Anatomy and Physiology 1 (APHY101) English Composition (ENGL111)

Anatomy and Physiology 2 (APHY102) Mathematics elective (MATH123 or higher)

Microbiology (BIOL201 or BIOL211) Pharmacology (SURG203)

Medical Terminology (HLHS101) Communications (COMM 101, or 102)

Medical Law and Ethics (HLHS105) Psychology or Sociology (101, 111)

4. All applicants to the Surgical Technology Program must be physically able to perform all of the Essential Functions Required for the Surgical Technology Program (attached).

Application Details

- Students will be able to select up to 3 programs and 3 campuses each.
- Depending on their rank and offers, students could potentially receive multiple offers.
- Once a student accepts 1 offer, then they are immediately withdrawn from all offers.
- A student does have the option to withdraw, his/her application entirely from the system. In this case, the student will not be placed back into the application pool for this application cycle.
- Student applications are assigned points on the following criteria: Grades, Pre-admission testing, and Certifications as applicable to the program.

Point Values

Point Scale	SCIENCE	NON-SCIENCE
Α	30	15
В	20	10
С	10	5
D	0	0
F	0	0

Science Classes – APHY, BIOL, MATH, HLHS 101, SURG 203 Non-Science Classes – ENGL, PSYC, COMM, IVYT, HLHS 105

CLEP/DANTES/VERIFIED CREDIT = B (Non-Science) S/T/Pass = Letter grade of C per category

Pre-Requisites for Program

Surgical	APHY 101, APHY 102, BIOL 2XX, HLHS 101, ENGL 111, MATH 123 or higher, COMM
Technology	101/102, PSYC101 OR SOCI 111, HLHS 105, SURG 203

Criminal background checks and drug screening are required within the program

SURGICAL TECHNOLOGY PROGRAM ESSENTIAL FUNCTIONS

ESSENTIAL FUNCTION	DESCRIPTION	EXAMPLES
Motor	Physical health, ability, and stamina	 presents the following documents: head-to-toe physical examination weight lifting ability (Lift and carry 50 pounds) immunizations, as required by clinical facility hepatitis B immunization or declination form CPR certification Criminal background check and drug screen, as required by clinical facility demonstrates visual acuity (with correction if needed) within normal range, including peripheral and color vision with ability to read fine print and function visually in semi-dark room demonstrates auditory acuity (with correction if necessary) with ability to hear muffle voices (through masks) with extraneous background noise possess stamina for long periods of standing ability to wear sterile surgical attire, including personal protective equipment ability to withstand exposure to irritating soaps and solutions ability to withstand unusual smells such as cauterized, infected or necrotic tissue
	Gross motor skills	 demonstrates ability to focus intently on the task at hand without distraction ability to bend, reach, pull, push, stand, stoop and walk during all aspects of the educational experience ability to lift, position and move patients and heavy equipment fastens masks and protective gowns responds quickly to surgeon's request for instrumentation scrubs all aspects of fingers, hands and arms visually identifies differences between instruments regulates equipment, including electrocautery, Lasers, endoscopy performs patient assessment
Fine n	Fine motor skills	 possesses eye-hand coordination, both hands manipulates needles, blades, sutures, and instrumentation with both hands evaluates size of suture by feel
Behavioral/ Social	Emotional stability	accepts responsibility for total patient care possesses stable temperament, is responsible, organized and patient responds in an emotionally controlled manner in emergency situations
	Flexibility Functions effectively under stress	 adapts to rigorous clinical attendance requirements, irregular working hours, and emergency call schedule utilizes acceptable coping mechanisms in a high stress environment accepts criticism without retaliation, particularly regarding sterile techniques, assignments, shift and unit/clinical rotation plans and implements execution of duties independently avoids demonstrating personal stress or frustration when interacting with clients, significant others, and health care team members
	Demonstrates caring behavior	 avoids use of drugs or alcohol in or before clinical or class setting interacts with client and significant other in a positive manner without demonstrating personal stress or frustration provides emotional support to surgical team members and the patient
Intellectual/ Conceptual/ Judgmental	Problem solving ability; critical thinking Recognizes hazards and	 interacts professionally with clients, significant others and health care team members and organizations calculates dosages to prepare and mix medications correctly anticipates the needs of the surgical team for instrumentation and supplies in routine & unexpected situations demonstrates ability to respond quickly and prioritize the surgeon's needs in routine & emergency situations analyzes situations involving a potential break in aseptic technique recognizes and initiates interventions for client status changes prepares in advance for clinical and integrates general information to specific tasks and procedures awareness of exposure to toxic substances such as Laser, sterilants, x-ray, fumes, blood, etc.
	assumes responsibility for safety	 awareness of exposure to toxic substances such as Laser, sterilants, x-ray, fumes, blood, etc. takes appropriate safety precautions to prevent injury to self or others
Communication	Interaction and therapeutic communication	 speaks effectively with patients, families, and health care team members identifies and interprets non-verbal communication demonstrates knowledge of items and events that must be documented such as counts, implants, equipment use, etc. accurately, objectively, concisely and legibly documents information on the patient's chart, specimens and other written documentation reads surgeon's preference cards, medication labels, orders (typed and handwritten), policies, procedures, and instructions ability to communicate in a rational and coherent manner both orally and in writing maintains professionalism and minimizes social interaction