

# Surgical Technology

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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.

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 first 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.



**FIRST SEMESTER – 15 CREDITS**

<u>Course #</u>	<u>Description</u>		<u>Prerequisites/Co-requisite</u>	<u>Date/Grade</u>
ANP101	Anatomy and Physiology I	3	ENG083, ENG093, MAT015 or MAT023	_____
ENG111	English Composition I	3	ENG083, ENG093	_____
MAT1XX	Mathematics Elective	3	MAT015 or MAT023	_____
HHS101	Medical Terminology	3	ENG083, ENG093	_____
PSY101	Introduction to Psychology		ENG083, ENG093, MAT015	_____
or				_____
SOC111	Introduction to Sociology	3	ENG083, ENG093, MAT015	_____
IVY1XX	Life Skills Course	1		_____

**SECOND SEMESTER – 16 CREDITS**

<u>Course #</u>	<u>Description</u>		<u>Prerequisites/Co-requisite</u>	<u>Date/Grade</u>
ANP102	Anatomy and Physiology II	3	MAT015 or MAT023, ANP101	_____
BIO201	Biology of Microorganisms	4	BIO101 or ANP101, ENG083, ENG083, MAT015 or MAT023	_____
HHS105	Medical Law and Ethics	3	ENG083, ENG093	_____
SUR201	Pharmacology	3	ENG083, ENG093, MAT015 or MAT023, ANP101, HHS101	_____
COM101	Fundamentals of Public Speaking	3	ENG083, ENG093,	_____
or				_____
COM102	Intro to Interpersonal Communication	3	ENG083, ENG093,	_____

**THIRD SEMESTER – 12 CREDITS (Selective admission to the clinical phase is required to proceed.)**

<u>Course #</u>	<u>Description</u>		<u>Prerequisites/Co-requisite</u>	<u>Date/Grade</u>
			(First 8 weeks)	
SUR111	Fundamental of Surgical Technology	4	ANP101, ANP102, MAT118, ENG111, HHS10, BIO201, SUR201, HHS105, <b>SUR112</b>	_____
SUR112	Application of Surgical Fundamentals	2	ANP101, ANP102, MAT118, ENG111, HHS10, BIO201, SUR201, HHS105, <b>SUR111</b>	_____
			(Second 8 weeks)	
SUR113	Surgical Procedures I	3	SUR111, SUR112, <b>SUR114</b>	_____
SUR114	Clinical Applications I	3	SUR111, SUR112, <b>SUR113</b> , CPR	_____

**FOURTH SEMESTER – 15 CREDITS**

<u>Course #</u>	<u>Description</u>		<u>Prerequisites/Co-requisite</u>	<u>Date/Grade</u>
SUR211	Surgical Procedures II	6	SUR 113, SUR 114, COM101 or COM102, PSY101 OR SOC111, <b>SUR212</b>	_____
SUR212	Clinical Applications II	9	SUR 113, SUR 114, COM101 or COM102, PSY101 OR SOC111, <b>SUR211</b>	_____

**FIFTH SEMESTER – 10 CREDITS**

<u>Course #</u>	<u>Description</u>		<u>Prerequisites/Co-requisite</u>	<u>Date/Grade</u>
^SUR213	Surgical Procedures III	3	SUR211, SUR212, <b>SUR214</b>	_____
^SUR214	Clinical Applications III	7	SUR211, SUR212, <b>SUR213</b>	_____

ACADEMIC PLAN		ASA COURSES									
Ivy Tech Community College - Northwest Region		NEED	COURSE #	COURSE NAME	QUAL SCORE	SEM	GRADE				
<b>Surgical Technology</b> <b>Associate of Science</b>  Name ..... C0# ..... Email ..... @ivytech.edu  Application <input type="checkbox"/> YES <input type="checkbox"/> NO Transcripts <input type="checkbox"/> HS <input type="checkbox"/> GED <input type="checkbox"/> COLLEGE <input type="checkbox"/> INCOMPLETE  X = Complete    TR = Transfer Credit    CS - Course Substitution TO = Test Out    CE = Currently Enrolled    AP = Advanced Placement	ASA Writing Sequence	<input type="checkbox"/>	ENGL 093	Intro to College Writing	32-69						
	ASA Writing Sequence	<input type="checkbox"/>	ENGL 083	Reading strategies for college	49-79						
	ASA Reading Sequence	<input type="checkbox"/>	<b>PROGRAM READY ENGLISH</b>								
	ASA Reading Sequence	<input type="checkbox"/>	MATH 015	Fundamentals of Algebra I	(5 CR)	PALG 25-54					
	ASA Reading Sequence	<input type="checkbox"/>	MATH 035	Essentials of Algebra II	(5 CR)	ALG 35-51					
	ASA Math Score	<input type="checkbox"/>	MATH 023	Fundamentals of Algebra I	(3 CR)	ALG 24-34					
	ASA Math Score	<input type="checkbox"/>	MATH 043	Essentials of Algebra II	(3 CR)	ALG 52-65					
	Required pre-reqs	<input type="checkbox"/>	Ready for MATH 117/118		<input type="checkbox"/>	Ready for MATH 12X, 13X, and 14X					
	Required pre-reqs	<input type="checkbox"/>	IVYT 070	COLLEGE & LIFE SUCCESS SKILLS (optional)							
	Required pre-reqs	<input type="checkbox"/>									
Rank Score: _____		<input type="checkbox"/>									
<b>PREREQUISITE COURSES - These courses must be completed before you can be accepted to the SURG TECH Program*</b>											
AS	COURSE #	COURSE NAME	CR	PREREQUISITES	SEM	GRADE	SEM	GRADE	POINTS		
Note: Prerequisites for courses listed below are subject to change. If changes occur, updates will apply. Students must meet all current prerequisites as determined by the academic school.											
	ENGL 111	ENGLISH COMPOSITION	3	Program Ready ENGL							
	APHY 101	ANATOMY & PHYSIOLOGY I	3	Program Ready ENGL; MATH 015, 023, 050 or Assessment/Waiver							
	HLHS 101	MEDICAL TERMINOLOGY	3								
	MATH 1XX	MATHEMATICS ELECTIVE	3								
	APHY 102	ANATOMY & PHYSIOLOGY II	3	"C" or better in MATH 015, 023, 050 or Assessment/Waiver and APHY 101							
	HLHS 105	MEDICAL LAW AND ETHICS	3								
	BIOL 2XX	GENERAL MICROBOIOLOGY	3-4								
	SURG 201	PHARMACOLOGY***	3	Pre-req: APHY 101, HLHS 101, & demonstrated competency through appropriate assessment of earning a grade of "C" or better in MATH 015 or MATH 023 or MATH 050							
<b>ADDITIONAL COURSES</b>											
	IVYT 1XX	LIFE SKILLS	1	NONE							
	PSYC 101 OR SOC 111	INTRODUCTION TO PSYCHOLOGY OR INTRODUCTION TO SOCIOLOGY	3	Program Ready ENGL; MATH 015, 044 or Assessment/Waiver							
	COMM 101 OR COMM 102	INTRO TO INTERPERSONAL COMMUNICATION OR FUNDAMENTALS OF PUBLIC SPEAKING	3	Program Ready ENGL							

(Program-Accepted on Next Page)

## SELECTION CRITERIA

PSB		TOTAL ACADEMIC APTITUDE	SPELLING	READING	NATURAL SCIENCES	VOCATIONAL ADJUST	COMPOSITE SCORE
1. DATE:		1	1	1	1	1	1
2. DATE:		2	2	2	2	2	2
<b>BLS:</b>	<b>BLS:</b>	<b>TB:</b>	<b>TB:</b>	<b>CB:</b>	<b>CB:</b>	<b>DATE ACCEPTED INTO SURG TECH PROG:</b>	

SURG TECH SPECIALTY COURSES		CR	PREREQUISITES/COREQUISITES	SEM	GRADE	SEM	GRADE
SURG 111	FUNDAMENTALS OF SURGICAL TECHNOLOGY	4	Pre-req: Admission to Surgical Technology Program Co-req: SURG 112				
SURG 112	APPLICATION OF SURGICAL TECHNOLOGY	2	Pre-req: Admission to Surgical Technology Program Co-req: SURG 111				
SURG 113	SURGICAL PROCEDURES I	3	Pre-req: SURG 111, SURG 112Co-req: SURG 114				
SURG 114	CLINICAL APPLICATIONS	3	Pre-req: SURG 111, SURG 112Co-req: SURG 114				
SURG 211	SURGICAL PROCEDURES II	6	Pre-req: SURG 113, SURG 114, COMM 101 OR COMM 102, PSYC 101 OR SOCI 111 Co-req: SURG 212				
SURG 212	CLINICAL APPLICATIONS II	9	Pre-req: SURG 113, SURG 114, COMM 101 OR COMM 102, PSYC 101 OR SOCI 111 Co-req: SURG 211				
SURG 213	SURGICAL PROCEDURES III	3	Pre-req: SURG 211 & SURG 212 Co-req: SURG 214				
SURG 214	CLINICAL APPLICATIONS III	7	Pre-req: SURG 211 & SURG 212 Co-req: SURG 213				

SURG TECH CREDITS REQUIRED	49-50	
GENERAL EDUCATION CREDITS REQUIRED	19-21	EXPECTED GRADUATION DATE:
<b>TOTAL CREDITS</b>	<b>68-71</b>	

Pre-req= course must be taken before the start of the next class

\*\*\*Must be completed before start of the program

\*\*IVY TECH COMMUNITY COLLEGE RESERVES THE RIGHT TO CHANGE THE PROJECTED SCHEDULE FOR FUTURE COURSE OFFERINGS WITHOUT NOTICE

Advisor Signature: \_\_\_\_\_ Date \_\_\_\_\_

Advisor Signature: \_\_\_\_\_ Date \_\_\_\_\_

Advisor Signature: \_\_\_\_\_ Date \_\_\_\_\_

Advisor Signature: \_\_\_\_\_ Date \_\_\_\_\_

## SURGICAL TECHNOLOGY PROGRAM APPLICATION INSTRUCTIONS

- ◆ Complete an application process for admission to Ivy Tech Community College of Indiana. For information, contact the office of (**Admissions**.)
- ◆ Complete general education prerequisite coursework. It is recommended that you discuss your education plan with an advisor. It is NOT necessary to complete all prerequisites before taking the PSB or before submitting an application to the program. However, all prerequisite coursework MUST be completed before beginning the program, including IVYT1XX, HLHS101, HLHS105, SURG201, APHY101, APHY102, BIOL2XX, MATH1XX, and ENGL111. It is strongly recommended that students also complete PSYC101 or SOCI101 AND COMM101 or COMM102 before beginning the program. Time constraints of the program during the fall semester make it very difficult to complete both of these courses while enrolled as a full-time, first-semester surgical technology program student. Please review the full admission/selection process which is available at <http://www.ivytech.edu/northwest/schools/Health/index.html>
- ◆ All applicants to the Surgical Technology Program must be physically able to perform all of the Essential Functions Required for the Surgical Technology Program. Please review the essential functions at <http://www.ivytech.edu/northwest/schools/Health/index.html>
- ◆ Take the PSB for Health Occupations test by **April 1<sup>st</sup>**. PSB-HO scores will be valid for one (1) year. Students must have a percentile score of twenty-five (25) or higher in each category or a composite score of 200 to be considered for admission to the program. If the PSB test is NOT taken at the Ivy Tech campus for which this application is submitted, it is the student's responsibility to see that PSB results are e-mail/faxed/mailed from the testing site to the program chair. Results are best e-mailed to [meriks@ivytech.edu](mailto:meriks@ivytech.edu)
- ◆ Submit the application packet by **May 1<sup>st</sup>** for August admissions, including:
  - ✓ Applicant information sheet (attached)
  - ✓ Copies of all college transcripts. This includes Ivy Tech and any other colleges you have attended. Unofficial copies are acceptable for this application. However, official copies must be submitted to the Registrar for consideration of transfer credit. It is the student's responsibility to have all official transcripts sent to the Registrar.

If the application date falls on a Saturday or Sunday, the application will be due the Monday immediately following the application date listed.

It is your responsibility to ensure that the entire packet is submitted in its entirety by the deadline. Pieces of information will **NOT** be accepted. This application will be considered only after the application packet is found to be complete.

Criminal background checks and drug screenings will be required for admission to the technical sequence of surgical technology courses beginning with Intro to Surgical Technology, SURG111. Current criminal background check and drug screening documentation obtained through [criminalbackground.com](http://criminalbackground.com) must be submitted two weeks prior to the start of SURG111. Students who refuse to comply with the background check and drug screening will not be eligible for admission to the surgical technology program. Completion of background checks and/or drug screenings from other vendors, such as those required by

current employers of the students, may not be used in lieu of the College requirements. Completion of a criminal background check and drug screening does not ensure clinical or externship placement. Clinical sites have the right to refuse any student for clinical placement. Policy at clinical sites may vary in whether or not students with particular positive findings on the background check will be allowed to attend clinical. Completion of a criminal background check and drug screening does not ensure eligibility for credentialing or future employment. Additional criminal background checks and/or drug screenings may be required for credentialing or employment.

Applications may be dropped off or mailed to:

Valparaiso Surgical Technology Program D145  
Ivy Tech Community College  
3100 Ivy Tech Dr.  
Valparaiso, IN 46383  
Phone: 219-476-4702

Applications may be e-mailed to:

[meriks@ivytech.edu](mailto:meriks@ivytech.edu) or  
[dnicholson32@ivytech.edu](mailto:dnicholson32@ivytech.edu)

### SURGICAL TECHNOLOGY PROGRAM APPLICANT INFORMATION SHEET

Last Name:	_____	First Name:	_____
Middle Name:	_____	Maiden Name:	_____
SS Number:	_____	C Number:	_____
Street Address:	_____		
City:	_____	State	_____ Zip: _____
Home Phone:	_____	Cell Phone:	_____
E-mail Address:	_____		

List all colleges for which transcripts are submitted

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

PSB date: \_\_\_\_\_ Location of testing: \_\_\_\_\_

Admission Desired (August, 2###): \_\_\_\_\_

Deadline for submission: May 1<sup>st</sup>

**Do not contact the surgical technology office to inquire on the status of your application after the deadline. You will be notified by mail of your status.**

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#### FOR OFFICE USE ONLY

Date Received \_\_\_\_\_

Applicant response: Accepts: \_\_\_\_\_ Declines: \_\_\_\_\_ Year: \_\_\_\_\_