Minnesota Dual-Training Pipeline Competency Model for Health Care Services Occupation: Surgical Technologist

Employer Requirements		
	Perform aseptic and sterile techniques Prepare patients for surgery Maintain accuracy of surgical counts Conduct preoperative preparation for surgical procedure Provide technical assistance to surgeons and medical personnel during operation Complete cleaning and turnover of operating rooms Maintain environmental practices	Practice teamwork and strong communication skills Follow best practices of medical safety, laser and electrosurgical unit safety, and sharps safety Maintain supply of fluids and medications for use during operations Conduct decontamination and sterilization process
Ir	ndustry-Sector Technical Con	npetencies*
Strong oral and written	communication Patient and t	family-centered care Disease
Practice ethical responsib	oility Surgical pharmacology	Medication Infection control
Operating room techniqu	es Sterile processing Health and sa	afety promotion Diagnostic procedures
	Industry-Wide Technical Com	ppetencies
Health care Health delivery information	Health Laws and industry ethics regulations	Care of chronic conditions Safety systems Health industry fundamentals
	Workplace Competen	cies
Teamwork Creative thinking ealth and safety Schedulin coording Busine fundame	ating Planning with tools and and ess organizing	Attention Checking, Problem to detail examining solving and Customer/ and decision patient focus recording making
	Academic Competend	cies
eading Writing Ma	athematics Science and technology Co	Critical and Basic ommunication analytical computer thinking skills
	Personal Effectiveness Co	mpetencies
rsonal Integrity Profession	onalism Initiative Dependability and reliability	Adaptability and Lifelong learning lear

Based on: Fundamentals of Health Care Competency Model, Employment and Training Administration, United States Department of Labor, February 2025. For more detailed information about competency model creation and sources, visit dli.mn.gov/business/workforce/health-care-services.

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Competency Model for Surgical Technologist

Surgical Technologist – An individual who assists in operations, under the supervision of surgeons, registered nurses, or other surgical personnel. This person may help set up the operating room, prepare and transport patients for surgery, adjust lights and equipment, pass instruments and other supplies to surgeons and surgeon assistants, hold retractors, cut sutures, and help count sponges, needles, supplies, and other instruments.

*Pipeline recommends the Industry-Sector Technical Competencies as formal training opportunities (provided through related instruction) and the Occupation-Specific Competencies as on-the-job (OJT) training opportunities.

Industry-Sector Technical Competencies

Related Instruction for dual training means the organized and systematic form of education resulting in the enhancement of skills and competencies related to the dual trainee's current or intended occupation.

- **Strong oral and written communication** Ability to exchange information in writing, speaking, and listening, cognizance of both verbal and non-verbal communication.
- **Patient and family-centered care** Understand the human values necessary to implement patient and family-centered care.
- **Disease** Understand any deviation from or interruption of the normal structure or function of any body part, organ, or system.
- **Practice ethical responsibility** Understand principles of medical ethics and how they apply in professional standards.
- **Surgical pharmacology** Knowledge of how drugs and medications used in surgery treat patients and the effects of these substances.
- **Medication** Understanding of medication classifications, usages, and side effects.
- Infection control Understand and practice infection control to ensure a sanitary environment for clients. Knowledge of gowning and gloving, waste disposal and infection containment procedures.

- **Operating room techniques** Ability to provide technical assistance to surgeons, surgical nurses, anesthesiologists, and other medical team during surgery.
- Sterile processing Ability to clean and sterilize devices used in medical procedures.
- **Health and safety promotion** Proficiency with what constitutes good health, and knowledge of how to access support and services to maintain/return good health.
- **Diagnostic procedures** Knowledge of medical tests performed to detect, diagnose, or monitor diseases and determine a course of treatment.

Occupation-Specific Competencies

On-the-Job Training is hands-on instruction completed at work to learn the core competencies necessary to succeed in an occupation. Common types of OJT include job shadowing, mentorship, cohort-based training, assignment-based project evaluation and discussion-based training.

- **Perform aseptic and sterile techniques** Ability to maintain a proper sterile field during surgical procedures.
- **Prepare patients for surgery** Ability to correctly identify patients, surgical site, and procedure.
- Maintain accuracy of surgical counts Understand how to prepare necessary instrumentation and equipment for surgical case. Proper care, handling and use of instrumentation.
- **Conduct preoperative preparation for surgical procedures** Ability to assist surgical team to gown and glove. Perform in scrub and first assistant role.
- Provide technical assistance to surgeons and medical personnel during operation –
 Understand how to facilitate the safe and effective application of technologies.
- Complete cleaning and turnover of operating rooms Understand the complex task where numerous resources must be synchronized in order to achieve efficiency in cleaning and turnover.
- **Maintain environmental practices** Understand how to implement steps to reduce the impact of surgery on the environment while not compromising quality of care.
- **Practice teamwork and strong communication skills** Ability to work closely and cooperatively with peers while communicating effectively to produce positive results.
- Follow best practices of medication safety, laser and electrosurgical unit safety and sharps safety Ability to utilize the latest technology and clinical guidelines for safe usage.

- Maintain supply of fluids and medications for use during operations Understand the importance of having available fluids and medications while maintaining a proper sterile field during surgical procedures.
- Conduct decontamination and sterilization process Ability to clean and disinfect surgical instruments according to established healthcare facility protocols.

