



## **DIAGNOSTIC MEDICAL SONOGRAPHY PROGRAM**

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The Diagnostic Medical Sonography Program leads to an Associate of Applied Science degree. The program is 21 calendar months in duration and is full time. Students will complete classroom and laboratory work on the campus and clinical education in an affiliated ultrasound department. Students acquire skills in reviewing and recording pertinent clinical patient history, performing the sonographic examination, providing for the comfort and needs of the patient during the examination, and recording the anatomic, pathologic and physiologic data for interpretation by the supervising physician. Attention to detail, efficiency, excellent hand/eye coordination and compassion are traits needed by persons interested in this program. They should also be versatile and able to follow precise and detailed directions.

Upon successful completion of this program graduates are eligible to take the certifying examinations of the American Registry of Diagnostic Medical Sonographers in the specialty areas of Abdomen and Obstetrics & Gynecology and are eligible for employment in hospitals, clinics, and private physicians' offices.

This program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) on recommendation by the Joint Review Committee on Education Programs in Diagnostic Medical Sonography (JRC-DMS). The program at Tacoma Community College is accredited in the general concentration.

CAAHEP – 25400 U.S. Highway 19 North, Suite 158, Clearwater, FL 33763, (727) 210-2350, fax (727) 210-2354, [www.caahep.org](http://www.caahep.org).

JRC-DMS – 6021 University Boulevard, Suite 500, Ellicott City, MD 21043, (443) 973-3251, [www.jrcdms.org](http://www.jrcdms.org).



For more information on the Diagnostic Medical Sonography profession, go to the Society of Diagnostic Medical Sonography's website at [www.sdms.org](http://www.sdms.org).

Additional information regarding the National certifying examination can be found at the American Registry of Diagnostic Medical Sonographers' website: [www.ardms.org](http://www.ardms.org).

## **DMS Mission Statement**

The mission of the Diagnostic Medical Sonography Program at Tacoma Community College is to provide comprehensive instruction designed to respond to the dynamic and evolving nature of sonography and the healthcare field. This program emphasizes critical thinking skills, compassionate and quality patient care, as well as promotes professional interactions with patients, staff, and physicians.

## **Program Goals**

1. Prepare competent, entry-level general medical sonographers in the cognitive, psychomotor, and affective learning domains.
2. Utilize support services provided by the college to assist in overall course/program retention rate.
3. Provide a curriculum designed to meet requirements of professional bodies.
4. Prepare students to take the ARDMS examinations appropriate for a general concentration program.
5. Track success of graduates in obtaining employment as sonographers upon successful completion of program.
6. Survey graduates & employers within one year of graduation for input on DMS program strengths & areas for improvement.
7. Provide educational opportunities for re-careering and professional renewal consistent with the mission of the college.
8. Evaluate the appropriateness of the curriculum against the changing environment and assess progress towards achieving its goal.

## **Technical Statement**

The following statements identify the physical, mental, and emotional capabilities appropriate to the profession of Diagnostic Medical Sonography and the students enrolled in the clinical phase of the Diagnostic Medical Sonography Program.

### **A. Physical Requirements. The Diagnostic Medical Sonographer must possess sufficient strength, motor coordination and manual dexterity to:**

1. Work standing on his/her feet 80% of the time.
2. Use both hands, wrists, and shoulders to maintain prolonged arm positions necessary for scanning and perform finite motor skills.
3. Lift up to 50 pounds routinely.
4. Transport, move, and/or lift patients from a wheelchair or stretcher to the examination table or patient bed, and physically assist patients into proper positions for examination.
5. Push, pull, bend and stoop routinely to move and adjust sonographic equipment and perform studies.

6. Use senses (vision, hearing, touch) to adequately view sonograms, including color distinctions; distinguish audible sounds; perform eye/hand coordination skills required in sonographic examinations; and recognize changes in patients' condition and needs.
7. Work in a semi-darkened room for prolonged periods of time.
8. Be physically capable of carrying out all assigned duties.

**B. Mental and Intellectual Requirements. The Diagnostic Medical Sonographer must be able to:**

1. Communicate effectively, verbally and non-verbally, with patients and other healthcare professionals to explain procedures, give instructions, and give and obtain information.
2. Organize and accurately perform the individual steps in a sonographic procedure in the proper sequence according to established standards.
3. Understand and react quickly to verbal instructions and patient needs.
4. Communicate in and understand the English language
5. Follow directions effectively and work closely with members of the health care community.
6. View and evaluate recorded images for the purpose of identifying proper protocol, procedural sequencing, technical qualities and identification of pathophysiology.
7. Apply problem solving skills to help optimize patient care and produce the best diagnostic information possible.

**C. Emotional Requirements. The Diagnostic Medical Sonographer must be able to:**

1. Provide physical and emotional support to the patient during sonographic procedures.
2. Interact compassionately and effectively with the sick and/or injured.
3. Handle stressful situations related to technical and procedural standards and patient care situations.
4. Adapt to changing environments and be able to prioritize tasks.
5. Project an image of professionalism.
6. Demonstrate a high level of compassion for others, a motivation to serve, integrity, and a consciousness of social values.
7. Interact positively with people from all levels of society and all ethnic and religious backgrounds.

**Diagnostic Medical Sonography Program Curriculum  
Associate of Applied Sciences Degree**

**First Quarter (Fall)**

<u>Course Title</u>	<u>Credits</u>
Sonography Lab I.....	DMS 101 2
Ultrasound Cross Sectional Anatomy with Lab.....	DMS 105 ...5
Pathophysiology I.....	DMS 110 ...3
Abdominal Sonography.....	DMS 120...3
Physics & Instrumentation I .....	DMS 130...3
Orientation to Diagnostic Medical Sonography.....	DMS 175 ...2

**Second Quarter (Winter)**

Sonography Lab II.....	DMS 102 ...3
Pathophysiology II.....	DMS 111 ...3
Small Parts and Superficial Structures .....	DMS 121 ...3
Gynecologic Sonography .....	DMS 122 ...3
Ultrasound Physics & Instrumentation II.....	DMS 131 ...3

**Third Quarter (Spring)**

Sonography Lab III.....	DMS 103 ...2
Obstetrical Sonography & Pathophysiology..	DMS 123 ...5
Advanced Sonography.....	DMS 125 ...2
Patient Care/Scope of Practice .....	DMS 140 ...2
Introduction to Clinical.....	DMS 150 ...2

**Fourth Quarter (Summer)**

Ultrasound Clinical I .....	DMS 151 ..13
Clinical Seminar I .....	DMS 160 ...2

**Fifth Quarter (Fall)**

Ultrasound Clinical II .....	DMS 250 ..13
Ultrasound Seminar and Critique II .....	DMS 260 ...2
Independent Study .....	DMS 299 3-13

**Sixth Quarter (Winter)**

Ultrasound Clinical III .....	DMS 251 ..13
Ultrasound Seminar and Critique III .....	DMS 261 ...2

**Seventh Quarter (Spring)**

Ultrasound Clinical IV.....	DMS 252 ..13
Sonography Registry Review .....	DMS 270 ...2

**TOTAL.....109-119**

**Estimated Program Cost\***

**Tuition/Fees:**

<b>Term</b>	<b>Credits</b>	<b>Tuition</b>	<b>Course Fees</b>
Quarter 1 – Fall	18 credits	\$1,539.24	\$108.50
Quarter 2 – Winter	15 credits	\$1,375.50	\$98.50
Quarter 3 - Spring	13 credits	\$1,414.55	\$197.10
Quarter 4 – Summer	15 credits	\$1,375.50	\$90.35
Quarter 5 – Fall	18-28 credits	\$1,539.24 +	\$136.75
Quarter 6 – Winter	15 credits	\$1,375.50	\$81.75
Quarter 7 – Spring	15 credits	\$1,375.50	\$60.00
<b>TOTAL</b>	<b>109-119 credits</b>	<b>\$9,995.03 +</b>	<b>\$772.95</b>

*\*Tuition and fee estimates are subject to change. Tuition is based on resident rates (2019-2020 academic year) established by the Washington State legislature.*

### **Miscellaneous Costs:**

Background Check (Verified Credentials)	\$82.50
Washington State Patrol Background Check (WATCH)	\$12
Drug Testing	\$26
Books	\$500
Lab jacket	Variable
Immunizations	\$250+
Medical Insurance	Variable
SPI ARDMS exam	\$250

In order to complete the required clinical rotations, students will need to provide the following additional documentation to a third party provider **upon acceptance into the program.**

- A. Background check:** Certain conviction history excludes persons from healthcare employment. If you have any prior convictions, even if you believe they may be sealed, please consult with the Program Director for DMS.
- B. Drug Testing:** Clinical agencies have to maintain a drug free workplace that promotes a safe and healthy work environment and is in compliance with applicable laws. Therefore, some clinical sites require all students in their facilities complete a drug screen. Additional fees maybe incurred by the student.
- C. Documentation of current immunizations or proof of immunity**

### **Graduation and Registered Diagnostic Medical Sonographer Fees:**

AB/OBGYN ARDMS national exam	(2 @ \$250 each)
Graduation regalia (optional)	\$25
Graduation Certificate	\$10.50

*\* Due to variations in books, disposables, and other associated costs, prices are subject to change without notice.*

## **Program Application Information**

**General Information:** Tacoma Community College does not discriminate on the basis of race, color, religion, national origin, gender, sexual orientation, age, marital status, or disability.

All **complete DMS online** applications received by the deadline of July 1<sup>st</sup> will be considered for acceptance. It is the student's responsibility to ensure that their online DMS application is complete in all respects.

Admission to the Diagnostic Medical Sonography program is a competitive process. Applications are carefully screened and awarded appropriate points by program faculty. Generally, there are more applicants to the program than available positions. Therefore, if a student takes all the prerequisite classes and meets the other requirements for a completed application, it **does not** guarantee the student admission to the program. One (1) point will be awarded to applicants who have previously submitted complete applications, up to two previous application cycles.

Admission policies are subject to change. Applications will be accepted under the terms in place at the time an application is received. It is the responsibility of the applicant to keep up to date on any changes that may affect their qualifications for acceptance. Notifications regarding acceptance status will be issued via email by the end of August. Applicants must be officially accepted by the program chair before enrolling in Diagnostic Medical Sonography courses.

### **Program Course Prerequisites:**

Prior to application, students must complete seven (7) specific prerequisite courses with a grade of “C+” (2.3) or better in each course, and a minimum **cumulative GPA of (2.7)** or better for the seven (7) prerequisite classes. All prerequisite courses must have been successfully passed **within two (2) attempts of taking the course, within the last five years prior to the application deadline.** After five years, an unsuccessful course grade will be forgiven. Attempts count when any letter grade is recorded on a student transcript. Withdrawals (W), or (WI) do **not** count as an attempt. Any higher level equivalent course may be accepted in place of the listed prerequisites. Please contact the Program Chair for approval of course substitutions. Any classes transferred in must be from a regionally accredited college or university acceptable to Tacoma Community College.

ENGL& 101 <i>or</i> ENGL& 102 <i>or</i> ENGL 103	English Composition I <i>or</i> Composition II: Argument & Persuasion <i>or</i> Composition III: Writing about Literature	5
CMST& 101 <i>or</i> CMST 110 <i>or</i> CMST& 210 <i>or</i> CMST& 220	Introduction to Communication <i>or</i> Multicultural Communication <i>or</i> Interpersonal Communication <i>or</i> Public Speaking	5
HIT 130	Medical Terminology I	3
MATH& 141 (taken in last 5 years)	Pre-Calculus 1	5
*BIOL& 241 (taken in last 5 years)	Human Anatomy and Physiology I	5
BIOL& 242 (taken in last 5 years)	Human Anatomy and Physiology II	5
*PHYS& 115 <i>or</i> PHYS& 116	General Physics II <i>or</i> General Physics III	6

*\*There is an additional prerequisite for BIOL& 241, which is BIOL&160 and CHEM&121, and an additional prerequisite for PHYS 115, which is PHYS 114. (This is a requirement for students attending Tacoma Community College only)*

Each grade earned in a prerequisite class will be assigned a certain number of points. For example, an A= 4.0, a B = 3.0, C = 2.0, etc. These points will be totaled for every applicant. For this criterion, seven (7) prerequisite classes would equal total possible points of 28. For a more definitive scale, refer to the TCC college catalog. In the event of a scoring tie, the applicant’s overall GPA will be used as a tie-breaker. In this instance, if the overall GPAs are the same, then the student will be randomly selected for acceptance into the program.

### **PHYSICS 115 COURSE EXCEPTION:**

- The Physics department at TCC will be offering PHYS 115 during winter & summer quarters.
- Only those students who must enroll in the PHYS 115 course at TCC during summer quarter to complete their prerequisites will be allowed to submit this course grade after the July 1 deadline.
- ONLY the PHYS 115 at TCC will be accepted and evaluated after July 1.
- PHYS 115 (or equivalent) from other schools are not acceptable for summer quarter only.

# Diagnostic Medical Sonography Online Admission Process

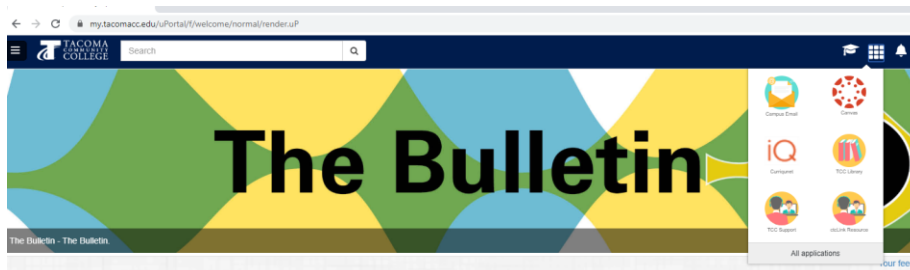
The application is available online through the student portal beginning on April 1<sup>st</sup> and will be accepted until July 1<sup>st</sup> at 5:00 pm. Applications will only be accepted via the online submission process.

To apply to the **Diagnostic Medical Sonography** program, you first will need to apply for admission at Tacoma Community College to gain access to the student portal, and a TCC e-mail account. If you have not attended TCC in the past 12 months, please fill out the admission application link on the main TCC web page, or you can type in the following link:

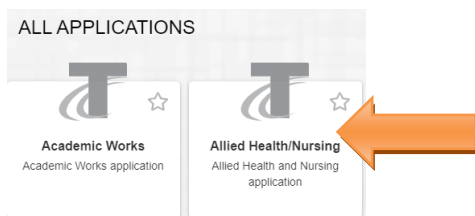
<http://www.tacomacc.edu/gettingstarted/thenrollmentprocess/>

It may take 24-48 hours for your account to be activated and for you to be granted TCC student portal and email access. There is no fee to apply to the DMS program. Once you are admitted as a TCC student, and have access to the student portal, you may access the online application by following the directions below.

1. Sign into the TCC portal (requires you to have an active TCC student account)
2. Click on the square icon (in the upper right corner), to expand options. Select "All Applications."



3. Select the Allied Health/Nursing link.



4. This will allow you to access the online application. The application involves selecting the program you are applying for (DMS), the quarter (Fall 2020) and uploading the required documentation (DMS Virtual Information Session, Healthcare Related Experience form(s) – or a blank page, if not applicable, and Unofficial College Transcripts).

\*Please note: TCC previously required students to participate in an Ultrasound Job Shadow/Observation. We are not requiring this for the Fall 2020 application, as area health care organizations are currently not allowing student observations and limiting non-essential personnel in their diagnostic ultrasound departments.

5. When you have completed the application, the system will send a confirmation to your TCC e-mail. This is the **only e-mail** that Tacoma Community College/Allied Health Division will use to communicate with students on their DMS applications. If you do not receive a confirmation email, you may need to re-apply.

## **Diagnostic Medical Sonography Applicant Checklist**

- Complete program course pre-requisites with a grade of “C+” or better in each course, with a minimum cumulative GPA of 2.7 in the pre-requisite courses.
- Complete the Diagnostic Medical Sonography Virtual Information Session within 5 years prior to the application deadline. **The Virtual Information Session certificate must be uploaded to the DMS online application.** Refer to the DMS webpage for access to the Virtual Information Session at <https://www.tacomacc.edu/academics-programs/programs/dms/> .
- To verify pre-requisite completion, **upload unofficial transcripts to the DMS online application.**
- In evaluating applications, additional points may be awarded for patient-related healthcare experience. ***If you have previous healthcare experience, the Healthcare Related Experience form(s) must be uploaded to the DMS online application.*** Refer to program packet for detailed instructions and the Healthcare Related Experience form.
- Submit DMS online application with supporting documents by the **DEADLINE of JULY 1<sup>st</sup>.**
- If transferring pre-requisites from another educational institution, submit official transcripts with transfer request form by the application deadline of July 1<sup>st</sup> to:  
***Tacoma Community College  
Bldg. 7, Records Department  
Attention: Transcript Evaluator  
6501 South 19<sup>th</sup> Street  
Tacoma, WA 98466***



## **Healthcare Related Experience Instructions and Guidelines**

Healthcare related experience is defined as any work or activity involved in a clinic, office, hospital, or homecare setting in which the applicant interacted with a patient and was considered a provider of a type of service to that patient.

- The Healthcare Related Experience form provided in the program packet must be submitted with the DMS application, whether or not the applicant has prior experience.
- Points will be awarded based on amount of time spent directly serving patients, type of interaction, and job duties of the position.
- ALL duties must be verified by a direct supervisor.
- All healthcare experience submitted must have been completed within 5 years of the application deadline.
- Falsification or inability to verify this healthcare experience documentation will result in disqualification of the application.
- Forms will NOT be evaluated and a point value will not be awarded prior to the July 1 application deadline.

<b>HOURS OF HEALTHCARE EXPERIENCE</b>	<b>TOTAL POINTS AWARDED</b>	<b>HOURS OF HEALTHCARE EXPERIENCE</b>	<b>TOTAL POINTS AWARDED</b>
0-49	1	300-349	7
50-99	2	350-399	8
100-149	3	400-449	9
150-199	4	450-499	10
200-249	5	500-549	11
250-299	6	550+	12

## HEALTHCARE RELATED EXPERIENCE FORM

- YES** – I have completed extra healthcare related experience. You must complete and upload this form to your online DMS application BY JULY 1<sup>ST</sup>.
- NO** – I have not completed any extra healthcare related experience. You must upload this form to your online DMS application BY JULY 1<sup>ST</sup>.

Healthcare related experience is defined as any work or activity involved in a clinic, office, hospital, or homecare setting in which the applicant interacted with a patient and was considered a provider of a type of service to that patient.

FIRST and LAST NAME: \_\_\_\_\_

JOB TITLE: \_\_\_\_\_

EMPLOYER: \_\_\_\_\_

DATES OF PATIENT CARE EXPERIENCE:

From (MM/YY): \_\_\_\_\_ To (MM/YY): \_\_\_\_\_

TOTAL PATIENT CARE HOURS COMPLETED: \_\_\_\_\_

DESCRIPTION OF HEALTHCARE RELATED EXPERIENCE:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PRINT DIRECT SUPERVISOR NAME: \_\_\_\_\_

DIRECT SUPERVISOR CONTACT INFO: \_\_\_\_\_

DIRECT SUPERVISOR SIGNATURE: \_\_\_\_\_

**To be completed by DMS Program:** DMS Representative: \_\_\_\_\_

This request has been:      ACCEPTED      DENIED      Points Awarded: \_\_\_\_\_

Reason for approval or denial: \_\_\_\_\_

**\*THIS FORM MAY BE PHOTOCOPIED FOR ADDITONAL HEALTHCARE EXPERIENCE\***