



TJCTM

Diagnostic Medical Sonography
Diagnostic Echocardiography

Application Packet
Spring 2024



Diagnostic Medical Sonography Diagnostic Echocardiography

Spring 2024

Dear Applicant:

Thank you for your interest in the Diagnostic Medical Sonography Program (DMS) or Diagnostic Echocardiography (DE) Program. The information provided in this packet includes: admission requirements, point system, curriculum, and information to help students through the application process.

The DMS program is fully accredited by the **Commission on Accreditation of Allied Health Education Programs (CAAHEP)**. The Texas Higher Education Coordinating Board (THECB) has approved a twenty-four-month curriculum. Students who complete the curriculum will graduate with an **Associate in Applied Science (A.A.S.) degree in Diagnostic Medical Sonography or Diagnostic Echocardiography**.

Graduating DMS students will be eligible to sit for the registry examinations administered by the American Registry of Diagnostic Medical Sonography (ARDMS) in physics, abdomen, and obstetrics/gynecology. Graduating DE students will be eligible to sit for the registry examination administered by Cardiovascular Credentialing International (CCI) in adult echocardiography. Students from both programs will be eligible to apply for the Enhanced Skills Certificate in Vascular Technology offered concurrently with DMS and DE.

Tyler Junior College is an open admissions college; however, the DMS and DE programs have selective admission. Acceptance into the program is based on objective criteria utilizing a point system and reviewed by an admissions committee. All applicants who meet the basic admission requirements will not be interviewed nor accepted into the program due to limited enrollment. Applicant ranking by the point system will determine admission decisions.

Students planning to apply for admission to the DMS or DE program must submit a complete application to the DMS/DE administrative assistant (**Rogers NHS Building, Room 243**) **no later than May 15, 2024**.

The following is the tentative timeline of **mandatory** dates:

- May 15, 2024- Application deadline
- June 1, 2024- Interviews for top 40 applicants
- June 3, 2024- Final Selection sent out
- July 1, 2024- New Student Orientation for selected applicants of each program

*If students do not attend mandatory dates, an alternate will be selected. All meetings are in the RNHS Building 1200 E. Fifth Street, Tyler 75701.

For questions or more information, please email sonography@tjc.edu.

Sincerely,

Kathryn Trantham, BS, RDMS, RVT, RCS

Department Chair/ Professor

Diagnostic Medical Sonography & Diagnostic Echocardiography

TYLER JUNIOR COLLEGE GIVES EQUAL CONSIDERATION OF ALL APPLICANTS FOR ADMISSION, EMPLOYMENT AND PARTICIPATION IN ITS PROGRAMS AND ACTIVITIES WITHOUT REGARD TO RACE, CREED, COLOR, NATIONAL ORIGIN, GENDER, AGE, MARITAL STATUS, DISABILITY OR VETERAN STATUS.



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Mission Statement

The DMS & DE programs promote student success through education in job skills befitting of entry-level diagnostic sonographers or echocardiographers to provide our community and industry partners with stellar service, innovative programming, and authentic partnerships.

Application Process

Tyler Junior college is an equal opportunity institution and gives equal consideration of all applicants for admission regardless of race, creed, color, national origin, gender, age, marital status, disability, or veteran status. The DMS & DE programs are selective admission programs because more students apply than the programs can accommodate. The admission process is objective and largely based on prerequisite and entrance level scores.

Apply to TJC

- Complete an admissions application to Tyler Junior College online at www.tjc.edu/apply
- The application process for selective entry programs is a separate application
- This application will not be included in the applicant's packet

Selective Admissions Program Application

- Complete the Selective Admission Programs Application online at www.tjc.edu/selectiveadmissions
- Include in submission

Attend Information Session

- Information session dates are posted on our websites www.tjc.edu/dms and www.tjc.edu/de
- Mandatory to be considered for acceptance
- Form received during information session to be included in submission

Transcripts

- Official transcripts from all institutions attended must be sent directly to **Tyler Junior College Registrar's** office at registrars@tjc.edu AND to the **DMS Department Chair** at sonography@tjc.edu / include in submission
- Applicants must submit official transcript after spring grades are posted
- Foreign transcripts must be evaluated prior to application see:
 - https://www.tjc.edu/info/20005/admissions/133/international_student_steps_to_enrollment/5

Entrance Exam

- HESI A2- \$79 (https://www.tjc.edu/info/20031/testing_services/117/available_testing/10)
- Include scores of required sub-tests in submission:
 - Math
 - Reading
 - Vocabulary and General Knowledge
 - Anatomy and Physiology
 - Grammar
 - Learning Style (not included in points)
 - Personality Profile (not included in points)



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Prerequisites

- PHYS 1405- Elementary Physics
- BIOL 2404- Introduction to Anatomy and Physiology
- MATH 1314- College Algebra
- ENGL 1301- Composition I

All applicants must submit a transcript showing completion of courses by application deadline. All prerequisites must be completed with a grade of "C" or greater. Applicants requiring substitutions must be approved by the Department Chair. If prerequisites are in progress, applicants must submit a letter of good standing from instructor and current grade in application submission.

Hepatitis B

- Proof of the Hepatitis B series and a titer is required for practicum rotations by July 1. Texas Administrative Code, Title 25, Part 1, Chapter 97, Sub-chapter B, Rule 97.64 requires students to have a complete series of the Hepatitis B vaccination prior to the start of direct patient care. Include in submission.
- It is highly recommended that anyone who is planning to apply to a health science program begin the Hepatitis B series as soon as possible because practicum rotations begin when the program begins.
- Traditional Hepatitis B series requires 3 immunizations:
 - First immunization
 - Second immunization one (1) month after 1st immunization
 - Third immunization five (5) months after 2nd immunization
- Accelerated Hepatitis B requires 2 doses
 - 1st immunization
 - 2nd immunization four (4) weeks after 1st immunization

Observation and Evaluation

- Each applicant must observe or job shadow eight (8) hours with a credentialed sonographer
- Four (4) hours in General/Vascular ultrasound: abdomen, OB/GYN, small parts, vascular
- Four (4) hours in Cardiovascular ultrasound: echocardiography, vascular
- Include observation log and sonographer's evaluation in submission (found at the end of packet)

Signed forms from application packet

Forms to be included in submission:

- Technical performance standards
- Drug screen acknowledgment
- Criminal background check acknowledgment
- Release of liability
- Pregnancy policy
- Program choice
- Application packet attestation



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Selection of Top 40 Applicants

Point-Based System

The following items are evaluated for points:

- Prerequisite grades
- HESI A2 cumulative score
- HESI A2 reading comprehension score
- HESI A2 A&P score
- Previous degree in healthcare- AAS, BS, MS, MD, etc.
- Work experience in direct patient care
 - Letter from employer confirming employment - NOT a letter of recommendation
 - Resume including date of hire and responsibilities
- Previous applicant
- Cumulative GPA

Deductions:

- Withdrawal from prerequisite courses
- Failure in prerequisite courses

Point System

Points	
Prerequisite grades (A=4, B=3, C=2)	Points Possible
○ PHYS 1405	4
○ BIOL 2404	4
○ MATH 1314	4
○ ENGL 1301	4
HESI A2 (Actual Score)	
○ Cumulative (>/= 80)	100
○ Reading Comprehension	100
○ A&P	100
Work experience in direct patient care	10
Previous Healthcare Degree	5
Cumulative GPA (Actual GPA)	4
GPA of Prerequisites and CORE courses included in DMS/DE Degree Plan (GPA*4)	16
In- District Residence Status	3
Optional Class (3)- HITT 1305 OR BIOL 2401 OR BIOL 2402 (A=4, B=3, C=2)	4
Previous applicant	2
Deductions	
Withdrawal from prerequisite (-3)	
Failure in prerequisite (-5)	



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Interviews

The top 40 applicants will be interviewed by an interview committee. Applicants selected for interviews will be notified by email.

- Instructions for interview will be emailed prior to interview
- Points for interview (maximum of 100) will be added to point system for final applicants

Student Notification

All applicants will be notified of either acceptance or denial by email.

Acceptance

- Accepted- fully accepted
- Contingent- acceptance contingent upon completion of prerequisite courses

Alternate

- Listed as an alternate in the instance that someone declines acceptance or does not pass drug screen or background check

Denied

- Unfortunately, not all applicants can be accepted due to space in the lab and clinical affiliations. We encourage any student that is not accepted to apply again in our next application period

Drug Screening

- Accepted applicants will be required to pass a 10-panel drug screening with negative result after acceptance at the student's expense. More information will be provided prior to new student orientation.
- NOTE: The use of CBD oil can cause a positive test and will be grounds for denial of admission.

Criminal Background Check

- All students will be required to pass a criminal background test after acceptance at the student's expense.
- If you have a criminal record, notify the Program Chair and go to <https://www.ardms.org/compliance-predetermination-application/> or <https://cci-online.org/wp-content/uploads/2022/12/Policy-18A-Form-Pre-application-pertaining-to-Criminal-Matter.pdf> prior to applying. ARDMS or CCI will review records and notify if eligible to take the registry exam.



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Technical Performance Standards

The Americans with Disabilities Act (ADA)

Technical Standards for the Sonography Profession

<https://hholdorf.files.wordpress.com/2016/03/the-ada-and-technical-standards.pdf>

The Americans with Disabilities Act requires that careful consideration be given to all applicants seeking education or employment. The Act also requires that accommodations be provided to the disabled person when proven to be reasonable. It also supports the identification of essential job functions that may be used with other selection criteria in the screening of potential applicants for a professional curriculum or employment.

The sonographer is a caregiver that plays a fundamental role in the diagnosis of a patient's medical condition. The sonographer does this by providing a collection of diagnostic medical sonograms and assisting in interventional procedures.

Implied in this caregiving role are essential job functions that require the sonographer to demonstrate cognitive, psychomotor, and affective skills. The performance of these job functions must be consistent with the expectation that Diagnostic Medical Sonographer must not place his or herself, a fellow worker, or the patient in jeopardy of physical or mental harm.

The purpose of the following is to identify the physical, mental, and emotional requirements appropriate to the profession of Diagnostic Medical Sonography and Echocardiography.

Examples of a sonographer's essential job functions

A. Physical Requirements

The sonographer must be able 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 fine motor skills.
3. Lift more than 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, and touch) to adequately view sonograms, including color distinctions; distinguish audible sounds; perform eye/hand coordination skills required in sonographic examinations; and recognize changes in patient's 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.



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B. Mental and Intellectual Requirements

The sonographer must be able to:

1. Communicate effectively, verbally and nonverbally, 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. Follow directions effectively and work closely with members of the healthcare community.
5. View and evaluate recorded images for the purpose of identifying proper protocol, procedural sequencing, technical qualities and identification of pathophysiology.
6. Apply problem solving skills to help optimize patient care and produce the best diagnostic information possible.

C. Emotional Requirements

The 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 the 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 Curriculum Sequence

Prerequisites

BIOL 2404 Anatomy and Physiology	4
PHYS 1405 Elementary Physics	4
MATH 1314 College Algebra	3
ENGL 1301 Composition I	3

Note: All prerequisites must be completed by the end of the Spring semester prior to admittance into the DMS program.

First Semester

DMSO 1441 Abdominopelvic Sonography	4
DMSO 1302 Basic Ultrasound Physics	3
DMSO 1210 Introduction to Sonography	2
DMSO 1266 Practicum I (or Field Experience) - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician	2
xxxx x3xx Lang., Philosophy, and Culture Core OR	3
Creative Arts Core	

Second Semester

DMSO 1342 Intermediate Ultrasound Physics	3
DMSO 2405 Sonography of Obstetrics/Gynecology	4
DMSO 1267 Practicum II (or Field Experience) - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician	2
DMSO 2342 Sonography of High-Risk Obstetrics	3

Third Semester

DMSO 2441 Sonography of Abdominopelvic Pathology	4
DMSO 2353 Sonography of Superficial Structures	3
DMSO 2366 Practicum III - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician	3
PSYC 2301 General Psychology OR	3
PSYC 2314	

Fourth Semester

DMSO 2345 Advanced Sonography Practices	3
DMSO 2230 Advanced Ultrasound and Review	2
DMSO 2367 Practicum IV (or Field Experience) - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician	3
Total Program Hours	61



Diagnostic Echocardiography Curriculum Sequence

Prerequisites

BIOL 2404 Anatomy and Physiology	4
PHYS 1405 Elementary Physics	4
MATH 1314 College Algebra	3
ENGL 1301 Composition I	3

Note: All prerequisites must be completed by the end of the Spring semester prior to admittance into the DMS program.

First Semester

DSAE 1203 Introduction to Echo. Techniques	2
DMSO 1302 Basic Ultrasound Physics	4
DSAE 1415 Principles of Adult Echocardiography	2
DSAE 1264 Practicum (or Field Experience) Diagnostic Medical Sonography	3
xxxx x3xx Lang., Philosophy, and Culture Core OR	3
Creative Arts Core	

Second Semester

DMSO 1342 Intermediate Ultrasound Physics	3
DSAE 2303 Cardiovascular Concepts	3
DSAE 1440 Diagnostic Electrocardiography	4
DSAE 1265 Practicum II (or Field Experience) - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician	2

Third Semester

DSAE 2335 Advanced Echocardiography	3
DSAE 2404 Echo. Evaluation of Pathology I	4
DSAE 2366 Practicum III (or Field Experience) - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician	3
PSYC 2301 General Psychology OR	3
PSYC 2314 Lifespan Growth & Development	

Fourth Semester

DSAE 2255 Echocardiography Professionalism and Registry Review	2
DSAE 2337 Echocardiographic Evaluation of Pathology II	3
DSAE 2367 Practicum IV - Diagnostic Medical Sonography/Sonographer and Ultrasound Technician	3
Total Program Hours	61



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Observation Form

Please use this form to document professional observations. Each applicant must observe or job shadow eight (8) hours with a credentialed sonographer. Be professional at all times and dress appropriately.
Four (4) hours in General/Vascular ultrasound: abdomen, OB/GYN, small parts, vascular
Four (4) hours in Cardiovascular ultrasound: echocardiography, vascular

Applicant Name:

Date	Hours	Name of Facility	Technologist Signature	Credentials



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Observation Evaluation

This form will be completed by the credentialed sonographer.

Rate: (1) Strongly Disagree (2) Disagree (3) Neither Agree nor Disagree (4) Agree (5) Strongly Agree

Facility attended:	
Evaluation Criteria	Rate
4. Student arrived promptly as scheduled.	
5. Student was courteous and receptive to information pertaining to your facility.	
6. Student used Standard Precautions during the experience.	
7. Student showed an interest in watching the sonography procedures.	
8. Student introduced self to patients, or was introduced by the staff, and was received favorably by the patients and facility staff.	
9. The student was professional in attitude and appearance.	
10. Student was helpful, asked questions and spent time appropriately while at facility.	

Comments:

Sonographer's signature:	
Credentials:	Date:

*This form should be sealed in an envelope and returned to the applicant. The applicant will include the sealed envelope in application.



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Technical Performance Standards Attestation

I attest that I have read and understood the **Technical Standards for the Sonography Profession**. I confirm that I am capable of meeting the physical, mental, intellectual, and emotional requirements of the sonography profession. I understand that falsification of any information in the application after accepted will result in dismissal from the program.

_____ (Initial)

Drug Screen Acknowledgement

I understand that following the selection of students for admission into the DMS/DE programs, each student is required to complete a 10-panel drug screen at the student's expense. Additionally, I understand that I will be dismissed from selection if there is a positive drug screen result.

_____ (Initial)

Background Check Acknowledgement

I understand that following the selection of students for admission into the DMS/DE programs, each student is required to complete a criminal background check at the student's expense. Additionally, I understand that if I have a criminal history, I am required to apply through ARDMS (Diagnostic Medical Sonography students) <https://www.ardms.org/compliance-predetermination-application/> or CCI (Diagnostic Echocardiography students) <https://cci-online.org/wp-content/uploads/2022/12/Policy-18A-Form-Pre-application-pertaining-to-Criminal-Matter.pdf> to assess registry eligibility and provide documentation to the Program Chair.

_____ (Initial)

Release of Liability

As an applicant of the TJC Diagnostic Medical Sonography or Diagnostic Echocardiography program, I understand that rotations to clinical sites are required and TJC is not liable for damages incurred during travel. I am responsible for personal transportation and any expenses related to travel.

_____ (Initial)

Pregnancy Policy

Students who become pregnant during the DMS/DE program, should discuss their plans for completion of the program with the Program Chair. The student should also present a statement from their physician indicating the student's ability to perform the physical activities required in the DMS/DE program. The student will be counseled regarding safety measures within the clinical setting, particularly in radiation areas like the radiology department and catheterization labs.

If the student does not inform the Department Chair of pregnancy, appropriate measures cannot be taken to protect the student and baby. Without the student's cooperation, the approved safety precautions cannot be implemented.

Attendance policies (didactic and clinical) apply equally to pregnant and non-pregnant students.

_____ (Initial)



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Program Choice

Identify which program would be first choice by entering one (1) and second choice by entering two (2). If you choose only one program, you will only be grouped in that application pool.

I would like to be considered for:

_____ DMS _____ DE

Application Packet Attestation

I attest that I have read the application packet for Diagnostic Medical Sonography and Diagnostic Echocardiography in its entirety. I understand that this packet must be fully completed with all required attachments to be considered for entry into either program.

Printed Name	
Signature	
A #	
Date	