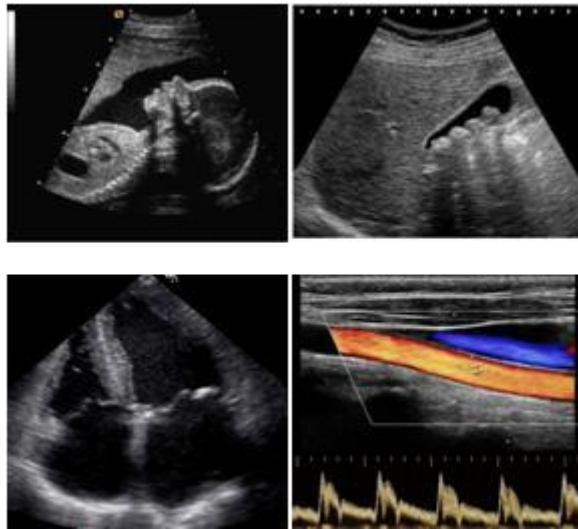




**Terre Haute**

**Diagnostic Medical**

**SONOGRAPHY PROGRAM**



**Program Information**

**Terre Haute Campus**

## **Overall Program Information**

**The following pages contain a large amount of information about the program. Please read all the information included. If you email the program regarding the information already in this packet, you will be referred to this packet.**

**Remember- sonography is a detail profession with a great amount of responsibility and willingness to learn and investigate. In all healthcare professions, you must be able to follow directions and be observant. Please pay attention and carefully read the information as all of this is important to the process and your decision to apply to the program.**

Dear Interested Candidate:

Thank you for your interest in the Sonography Program at Ivy Tech Community College in Terre Haute. This packet provides a brief description of the profession, admission and application procedures, basic information about the program and frequently asked questions. Please read this thoroughly and follow all directions.

**Our college is accredited by the North Central Association of Colleges. The Ivy Tech Community College Terre Haute Diagnostic Medical Sonography program is accredited by the Commission on Accreditation of Allied Health Education Programs ([www.caahep.org](http://www.caahep.org)) upon the recommendation of the Accreditation Committee for Educational Programs for Diagnostic Medical Sonography (JRC-DMS). Our program is accredited for the general (Abdominal Extended & OB/Gyn), vascular and adult echocardiography concentrations.**

The mission of the Diagnostic Medical Sonography Concentration at Ivy Tech Community College, Terre Haute is to provide a competency based educational experience that reflects the accepted standards of the profession and provides students with the knowledge, skills, and attitudes necessary to enter the workforce as an entry-level sonographer.

Sonography is truly an exciting field in healthcare; it is growing and changing every year. We want to help you with your goals to become a part of this healthcare team. Please carefully read through all the information in this packet. This application packet is the most current and replaces any other previously printed application packet.

# Diagnostic Medical Sonography

## **DEGREE AVAILABLE:**

Associate Applied of Science

## **CONCENTRATIONS AVAILABLE:**

General (Abdominal Extended and OB/Gyn Sonography)

Vascular Sonography

Cardiac Sonography

## **ACCREDITATION:**

The Ivy Tech Community College (**Terre Haute**) Diagnostic Medical Sonography program is accredited by the Commission on Accreditation of Allied Health Education Programs ([www.caahep.org](http://www.caahep.org)) upon the recommendation of the Accreditation Committee for Educational Programs for Diagnostic Medical Sonography (JRC-DMS). The program is accredited in the general (Abdominal Extended and OB/Gyn), vascular and adult echocardiography concentration. Accreditation status can be found at <http://www.caahep.org/Find-An-Accredited-Program/>.

## **CAAHEP**

25400 US HWY 19 North, Suite 158,  
Clearwater, FL 33763, Phone 727-210-  
2350 Fax- 727-210-2354  
[Caahep.org](http://Caahep.org)

## **JRC-DMS**

6021 University Boulevard, Suite  
500Ellicott City, MD 21043, 443-973-3251  
(phone) | 866-738-3444 (fax)  
[JRCDMS.org](http://JRCDMS.org)

Ultrasonography, commonly called sonography, is a diagnostic medical procedure that uses high frequency sound waves (ultrasound) to produce dynamic images of organs, tissues, or blood flow inside the body.

*Diagnostic medical sonographers* operate special equipment to direct high frequency sound waves into areas of the patient's body, which then collects reflected echoes and forms an image that may be videotaped, transmitted, or photographed for interpretation and diagnosis by a physician. Sonographers may be on their feet for long periods of time and may have to lift or turn patients.

Diagnostic medical sonographers may specialize in multiple areas of sonography such as abdominal, obstetric, gynecologic, vascular, and cardiac.

Each concentration consists of a curriculum that includes patient care, sonographic technique, positioning, physics, pathology, pathophysiology, and ethics (complete list is in this packet). Clinical practice and supplemental instruction are provided at approved clinical sites.

The Diagnostic Medical Sonography Program is a select admit program with limited enrollment based on clinical space availability. Once accepted, it is a **full-time** program with the students rotating to the clinical sites with didactic instruction at Ivy Tech Community College.

For some health programs, you may not be eligible to be licensed or certified if you have been convicted of a felony. Please check with the Program Chair if you have questions concerning this before enrolling in the program.

## Accreditation

The Ivy Tech Diagnostic Medical Sonography Program is accredited by the Commission on Accreditation of Allied Health Education Programs ([www.caahep.org](http://www.caahep.org)) upon the recommendation of the Accreditation Committee for Educational Programs for Diagnostic Medical Sonography (JRC-DMS). This means, we uphold the standards and rules set forth for the education of the profession of sonography. We take pride in the fact that we have earned the accreditation because this ensures we offer quality education of the profession while maintaining fair and equitable standards.

**Having earned accreditation means the program meets the standards set by the accrediting body and profession and enables students and graduates the ability to apply to take registry exams upon graduation or before graduation if desired. This and dedicated hard work can open more potential job opportunities.**

## Mission and Goals

### Diagnostic Medical Sonography Program Mission Statement

The mission of the Diagnostic Medical Sonography Concentration at Ivy Tech Community College Terre Haute Campus is to provide a competency based educational experience that reflects the accepted standards of the profession and provides students with the knowledge, skills, and attitudes necessary to succeed as sonographers.

## Program Goals

According to JRC-DMS standards we set forth the following goals for the Program:

To prepare competent entry-level sonographers in the cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains for the following concentrations\*:

- Abdominal sonography - Extended
- Obstetrics and gynecology sonography
- Adult cardiac sonography
- Vascular sonography.

\*Concentrations are individual and are separate program with the exception of Abdominal Extended and Obstetrics and gynecology, which are combined.

## INFORMATION YOU SHOULD KNOW BEFORE APPLYING

The Diagnostic Medical Sonography Program is based out of Terre Haute; however, clinical sites are available in many different regions of the state to include but not limited to: Indianapolis, Bloomington, Sellersburg, Louisville, Kentucky, and some Illinois sites. This will mean class is in Terre Haute but clinicals may be closer to your home area. In this process you will be required to travel to Terre Haute for the initial labs in the first 8 weeks of the program but then only one day per week for class after that. We currently have a clinical instructor in the Louisville, Kentucky area that also aids in labs for the program for students from that area.

**This information is for the program based out of Terre Haute.**

## Are you right for this program and profession?

This profession is the most operator dependent of all imaging professions and many healthcare professions in general. The sonographer is **responsible** for acquiring the needed images for physicians to make accurate diagnoses of patient conditions. If a sonographer does not accurately image pathology, the doctor may never see or know about the pathology, which in turn could be tragic for the patient. Sonographers often are the first and only people to see a life-threatening condition and must take the responsibility to handle the information correctly, to have the patient treated in a timely manner. **The sonographer must know all anatomy and physiology to know if something is wrong and must handle the process in documenting the pathology to be accurately interpreted by the physician.** Sonographers have the ability to make something normal look abnormal or something abnormal look normal and therefore the responsibility to ensure image accuracy. Ethics in all work and extreme responsibility is part of this profession.

**This is not an easy profession.** Sonographers also deal with a great number of **bodily fluids and tissues, with wounds, biopsies, and sick individuals.** There is also a great amount of physical strain on the body from long periods of standing, bending, pulling, and moving equipment and patients. Sonography also involves many emotions and often heartache that is difficult to cope with. A sonographer must be able to relay compassion and be empathic in difficult situations. The profession and workplace can be stressful due to workload and being on-call for multiple hours with little sleep. There are many challenges and responsibilities in this profession.

These are but a few of the considerations regarding this profession. With all of this being said, some may question why anyone would want to do this profession. For those who encompass the wonder of the science, find joy in continual, life-long learning, love challenges, and embrace the ability to help others and provide a needed service to patients, this is the BEST career in the world!

## Application due date and program start

Applications are submitted online. The dates the application will be twice a year and will be posted on the sonography page.

**The program will begin a cardiac cohort every fall with applications due in the spring of each year.**

**The program will begin a general (Abdominal Extended &OB/Gyn) and vascular (Vascular is as the community need is reported) cohort every spring with applications due in the fall of each year.**

The exact dates the application will be open will vary each year, but the dates will be posted in the application user guide. (link below)

## SONOGRAPHY PAGE

<https://www.ivytech.edu/programs/all-academic-programs/school-of-health-sciences/diagnostic-medical-sonography/>

## APPLICATION USER GUIDE CAN BE FOUND AT THE LINK BELOW:

[https://docs.google.com/document/d/e/2PACX-1vSsGihDqzc1ZibAkOTHUcbXFRfDxTsNnQYy-gn0OwYfXXneTHbdrGi8OCWzpV1p\\_w/pub](https://docs.google.com/document/d/e/2PACX-1vSsGihDqzc1ZibAkOTHUcbXFRfDxTsNnQYy-gn0OwYfXXneTHbdrGi8OCWzpV1p_w/pub)

## How the program is structured and scheduled

The Diagnostic Medical Sonography Program is a **full-time program** and will run over four continuous semesters, summer included.

The program is a blended program. While there are many online assignments, sonography is a **hands-on profession and therefore requires a hands-on education** and an on-campus presence.

Prerequisite classes can be taken online or from any campus, if preferred.

If accepted into the program, the first semester (8 weeks) and the first four weeks of the second eight-week term is spent in intensive labs to prepare you for clinicals. The labs will take about 20-25 hours and class is one additional day per week. The second eight-week term lab the first four weeks and clinicals the second four weeks and class one day per week. Spring, fall, and summer semesters have clinicals three days per week and class one day per week.

### The sonography program is a select admit program

Program acceptance is based on points earned. The top point earning students are determined through the points from grades in certain prerequisite classes and the USA exam score. The point earning classes are Anatomy and Physiology I & II, Math 123, DMSI 121, and English 111.

You must have all classes that are counted for points successfully completed by the end of the 8-week term that the application is submitted in.

### Radiation physics course – DMSI 121

One of the prerequisite classes that need to be completed is the radiation physics course. This is a course that counts for points on the application. This course is only offered as an online option for the sonography prerequisite. To become registered for this course, you must have completed Math 123 or be enrolled in the math class the same semester as the enrollment of the DMSI 121 class. Also, contact our advising center and Amber Harnack or Jennafer Grasfeder **from your IVY TECH email and include your C number** with a request to be enrolled in the class [aharnack@ivytech.edu](mailto:aharnack@ivytech.edu) or [jgrasfeder@ivytech.edu](mailto:jgrasfeder@ivytech.edu).

### Concentrations offered:

Currently we begin an adult cardiac concentration each fall and a general (Abdominal Extended and OB/Gyn) concentration each spring. Vascular is as the community need is reported.

We want graduates to have the ability to obtain employment in the field in which they studied and also meet the needs of the healthcare community. The concentration being offered each year is determined through assessment of the area employment needs. This process involves surveys and contact of facilities that employ individuals of the profession.

### USA Examination:

The USA examination is an examination of intrinsic skills such as logic and reasoning, hand-eye coordination, visual and spatial resolution. **This is not like the TEAS or HESI examination**; it is an evaluation of skills more than book or memorized knowledge. The scoring is based on an algorithm developed by the creator of the test. Each category is weighted and then combined into one overall or

“combined score.” The score can range from a negative 60 to a positive 50. Points for the application are only earned on positive scores.

Every application pool will have a different testing average range. If you score a negative score, this does not mean that you do not have a chance of being accepted into the program. We take the top total point applicants and if the applicant pool has lower score averages, then even negative scores have the ability to be accepted. If you do have a negative score and you are accepted into the program, you will need to understand that you may have to work harder than others to be successful. The scores may indicate the areas you may struggle in which then would tell you where you may need to put extra effort.

When applying for the exam, you must have your “C” number. Please note, the second digit in the student number is a zero, not the letter “O.”

## **Previous degrees and college credits (Transfer Credits)**

If you have college credits or even a degree already but are interested in applying for the program, you may be able to transfer prerequisite courses already taken into Ivy Tech.

You will need to apply to Ivy Tech – the college- and once accepted you will be given a “C” number. When you have the “C” number, you can have your OFFICIAL\* transcripts sent to Ivy Tech for evaluation to see which courses will transfer.

Any courses sought for transfer must come from a regionally accredited institution and transcripts must be official.

\*Official transcripts means that it has been sent from the educational institution to Ivy Tech and you have not handled the document in any way. This can also be done by the original school sending the transcripts electronically to Ivy Tech. **You can have your transcripts sent via email from the issuing institution to [transcripts@ivytech.edu](mailto:transcripts@ivytech.edu)** If you choose to pick them up from the issuing school they must be brought to Ivy Tech in an envelope sealed by the issuing institution. If the seal is broken, the transcripts are not considered official.

## **Criminal Background Checks and Drug Testing Information**

In order to participate at the clinical sites, CRIMINAL BACKGROUND CHECKS and DRUG TESTING\*\*\* must be performed and the results must be satisfactory to the clinical sites to complete this portion of the coursework. Although personal information will be kept confidential, names and results of background checks, whether positive or negative, may be shared with any affiliating clinical site for the Diagnostic Medical Sonography Program in order to determine clinical eligibility. Some clinical sites may require you to show your criminal background check results to them.

As per College policy, if clinical site placement of the student is not successful, ***“...the student will be notified that s/he may not enroll in clinical courses and any co-requisite courses. In most cases, this will mean that the student will not be able to progress in the program and will therefore not be able to complete the courses required for graduation.”*** Any existing clinical affiliate appeal processes will be shared with the student. The student is then responsible for managing their appeal directly with the clinical affiliate.



## Ethics Eligibility

Completion of a criminal background check and drug screening for a Health Sciences program does not ensure eligibility for licensure, credentialing, or future employment.

If you should have a criminal matter in your past after you have reached age 18, whether it is recent or not, you must contact the following credentialing body for eligibility that pertains to you:

American Registry of Radiologic Technologists at 651-687-0048

American Registry of Diagnostic Medical Sonographers at 800-541-9754

Cardiovascular Credentialing International at 800-326-0268

## Random Drug Testing

Clinical affiliates can conduct additional background checks and drug screenings (including random drug screenings during clinical) at their discretion. These tests may be at the expense of the student.

*\*\*\*Additional criminal background checks and/or drug screenings will be required in programs for students enrolled in clinical courses more than 12 months.*

*Students who are not continuously enrolled in a program until completion may be required to complete additional checks upon re-entry to a program or admission to a different program in the School of Health Sciences or School of Nursing. Clinical sites or the College may request additional background checks or drug screenings at their discretion.\*\*\**

## Certification/ Licensing Disclosure

Ivy Tech Community College – Terre Haute campus cannot guarantee that any student will pass a certification or licensing exam. Your success will be determined by several factors beyond the instruction you are given in the classroom including your test-taking skills, your willingness to study outside of class, and your satisfactory completion of appropriate practice exams. Certification and licensure exam questions are drawn from databases of hundreds of possible questions; therefore, a thorough understanding of the subject matter is required. The goal of Ivy Tech in providing a certification exam studies class is to assist you in understanding the material sufficiently to provide a firm foundation for your studies as you prepare for the exam.

## Program Costs

- **In-State Tuition** is presently \$170.07 per credit hour. The Diagnostic Medical Sonography Program is 67 credits total so tuition would approximately be \$11,394.69.
  - Please see <https://www.ivytech.edu/tuition-aid/tuition-fees/> for the most current tuition information.
- **Books** costs vary by course. The average cost for sonography books is \$17.00 per credit hour.
- **Consumable fees** \$240.00; this includes supplies for certain courses like lab supplies.
- **Travel** students are also required to go to clinical 2-3 times a week. This means there will be travel expenses for gas and wear-and-tear on vehicles.
- **Uniforms** would include two sets of scrubs, lab coats and shoes (scrubs and lab coats must have the Ivy Tech logo and must be purchase through the bookstore.) Cost will vary.

- **Criminal Background Check and Drug Screening** Initial check (Estimated) = \$135; Annual re-check (Estimated) = \$95.
- **Physical, Immunizations, and Healthcare Provider CPR** Cost will vary.
- **\*\*\*\*\*ALL ITEMS AND COST ARE ESTIMATES AND ARE SUBJECT TO CHANGE\*\*\*\*\***

## Program Calendar

The program follows the same academic calendar as Ivy Tech Community, Terre Haute. To view the most current academic calendar please go to <https://www.ivytech.edu/calendar/index.html>

## Sonography Clinical Rotations

Students will be required to rotate to different hospitals and clinics for the clinical portion of their education. Students will be assigned locations before each clinical rotation begins. **Proximity to a clinical site does not guarantee rotation to that site.** Clinical site availability may vary according to the concentration being offered and per semester. Clinical sites are located throughout the state of Indiana, Illinois, and Kentucky.

Each student is required to rotate to clinical sites that may be over an hour and half away from your home, regardless of what gas prices may be. This is necessary to ensure every student has the opportunity to participate in an equitable educational experience covering a broad range of required clinical procedures. There are no exceptions to this rule. Students may be placed at any of these sites to complete clinical requirements for the program.

The clinical coordinator and program director will determine the clinical assignments. No student input will be accepted, unless there is a legal issue that the program must be made aware of between the student and a particular site.

## What order is the program sequenced?

If accepted, the program runs continuously through four semesters. The prerequisite courses may be taken from any Ivy Tech campus or online. If these courses have been taken previously from another college, you must submit your official transcripts for evaluation to know what courses must be taken for application.

The order of the program and the prerequisite courses are listed in the grid.

| PREREQUISITE COURSES                                    |  |
|---|--|
| *Required to apply to program and point earning courses | Required to graduate-it is recommended to complete before beginning of the program |
| APHY 101 – Anatomy & Physiology I *                     | COMM 101 – Speech or<br>COMM102 – Interpersonal Communication                      |
| MATH 123- Quantitative Reasoning*                       | PSYC 101 – General Psychology or SOCI 111 – Principles of Sociology                |
| ENGL 111 – English Composition *                        | IVYT 112 - Student Success Elective  |
| DMSI 121 – Basic Radiation Physics *                    |  |
| APHY 102 – Anatomy & Physiology II *                    |  |

| <b>PROGRAM COURSES (not in order of occurrence)</b>              |  |   |
|--|--|---|
| <b>GENERAL<br/>(Abdominal Extended and OB/Gyn)</b>               | <b>CARDIAC</b>   | <b>Vascular</b>   |
| DMSI 108-Abdominal Sonography I and Clinical Orientation Lab     | DMSI 112 Ultrasound Physics I                                | DMSI 112 Ultrasound Physics I                                   |
| DMSI 109-Abdominal Sonography II and Clinical Orientation Lab II | DMSI 123 Ultrasound Physics II                               | DMSI 123 Ultrasound Physics II                                  |
| DMSI 112 Ultrasound Physics I                                    | DMSI 127 Ultrasound Physics III                              | DMSI 127 Ultrasound Physics III                                 |
| DMSI 115- General Sonography Lab                                 | DMSI-130 Ultrasound Physics IV                               | DMSI-130 Ultrasound Physics IV                                  |
| DMSI 118- General Sonography Clinical Orientation and Lab I      | DMSI 135-Cardiac Sonography I and Clinical Orientation Lab   | DMSI 141 Hemodynamics and EKG I                                 |
| DMSI 120- Abdominal Sonography III and Lab                       | DMSI 136-Cardiac Sonography II and Lab II                    | DMSI 149-Vascular Sonography I and Clinical Orientation Lab     |
| DMSI 122- OB/ Gyn Sonography I and Lab                           | DMSI 137- Cardiac Sonography Lab                             | DMSI 151-Vascular Sonography II and Clinical Orientation Lab II |
| DMSI 123 Ultrasound Physics II                                   | DMSI 138- Cardiac Sonography Lab and Clinical Orientation I  | DMSI 152- Vascular Sonography Lab                               |
| DMSI 124 General Sonography Clinical II                          | DMSI 139- Cardiac Sonography III and Lab                     | DMSI 153- Vascular Sonography Clinical Orientation and Lab I    |
| DMSI 125 Abdominal Sonography IV and Lab                         | DMSI 140 Cardiac Sonography IV and Lab                       | DMSI 154- Vascular Sonography III and Lab                       |
| DMSI 126 OB/GYN Sonography II and Lab                            | DMSI 141- Hemodynamics                                       | DMSI 155 Vascular Sonography Clinical II                        |
| DMSI 127 Ultrasound Physics III                                  | DMSI 142 Cardiac Sonography Clinical II                      | DMSI 156 Vascular Sonography IV Lab                             |
| DMSI 128 General Sonography Clinical III                         | DMSI 143 Cardiac Sonography Clinical III                     | DMSI 157 Vascular Sonography Clinical III                       |
| DMSI 129 OB/Gyn Sonography IV and Lab                            | DMSI 144 Cardiac Sonography V and Lab                        | DMSI 158 Vascular Sonography Clinical IV                        |
| DMSI-130 Ultrasound Physics IV                                   | DMSI 145 Cardiac Sonography Clinical IV                      | DMSI 159 Vascular Sonography IV and Lab                         |
| DMSI 131 General Sonography Clinical IV                          | DMSI 146- Cardiac Sonography Clinical V                      | DMSI 161 Vascular Sonography V and Lab                          |
| DMSI 132- OB/Gyn Sonography IV and Lab                           | DMSI 147- Cardiac Sonography VI                              | DMSI 162- Vascular Sonography Clinical V                        |
| DMSI 133- General Sonography Clinical V                          | DMSI 148 Cardiac Sonography Clinical VI                      | DMSI 163 Vascular Sonography Clinical VI                        |
| DMSI 134-General Sonography Clinical VI                          | DMSI 164 EKG & Hemodynamics II                               | DMSI 164 EKG & Hemodynamics II                                  |
| DMSI 165- Sonography Orientation and Patient Care                | DMSI 165- Sonography Orientation and Patient Care            | DMSI 165- Sonography Orientation and Patient Care               |
| DMSI 166-Sonography Patient Care and Cross-Sectional Anatomy     | DMSI 166-Sonography Patient Care and Cross-Sectional Anatomy | DMSI 166-Sonography Patient Care and Cross-Sectional Anatomy    |
| DMSI 293-Sonography Exam Review                                  | DMSI 293-Sonography Exam Review                              | DMSI 293-Sonography Exam Review                                 |
| DMSI 294-Sonography Exam Review                                  | DMSI 294-Sonography Exam Review                              | DMSI 294-Sonography Exam Review                                 |

## Diagnostic Medical Sonography

### ***\*PHYSICAL DEMANDS AND REQUIREMENTS***

Sonography is a challenge on many aspects. While most think about the very important visual component, there are many physical demands that are often not considered. Below are the minimum physical requirements and all can be found at <https://www.onetonline.org/link/summary/29-2032.00>

- **Standing** - Standing is required 95-100% of the time throughout the assigned clinical hours. Essentially, the position cannot be performed without the ability to stand for long periods of time.

- **Walking** - Walking is required 90-100% of the time during the course of the assigned clinical hours.
- **Climbing** - Climbing is not required except for stairs.
- **Pushing** - Pushing is required for moving the patients to and from the x-ray table.
- **Pulling** - Pulling is required for both short and long durations when moving patients onto tables and when transporting to and from units. Imaging equipment may include tubes, monitors, or portables requiring significant physical exertion.
- **Lifting** – Up to 50 lbs. Most significant: must be able to assist patient to and from exam table.
- **Carrying** - Students consistently carry equipment and other supplies. See lifting.
- **Exposure to Disease** - On a daily basis, involves caring for the patients with known and potential infections.
- **Handling Repulsive Tasks** - Involves handling and disposing of body secretions, blood, stool, etc. The general cleaning and maintenance of an incontinent patient is not uncommon.
- **Working in Confined Places** - Confined places included the processing darkroom, which is frequently used each day, each time being 1-5 minutes in duration. Must be able to work around constantly running water.
- **Exposure to Potentially Harmful Radiation** - Daily contact with radiation producing devices.
- **Visual** –20/100 vision, correctable (with glasses or contacts) to 20/30 in one eye or 20/100 vision correctable (with glasses or contacts) to 20/40 in both eyes. Students must be able to distinguish colors.
- **Auditory and Speech** – Student must be able to respond to auditory codes, phones, equipment noise, and/or verbal expressions from patients and physicians for proper patient care. The student must be able to verbally communicate medical information to the patient, staff, physicians, and general public.

\* If you do not meet these requirements, check with the disability representative at your campus for additional assistance.

If accepted into the program, you will be required to have a physical that will evaluate for certain functions. The list is on the following page.

# Diagnostic Medical Sonography

## PHYSICAL DEMANDS AND REQUIREMENTS

Frequency: 0 = Occasionally (1-33%) F= Frequently (34-66%) C= Constantly (67-100%)

| Function                  | Program-Specific Examples   | Program-Specific Examples |
|---------------------------|---|---------------------------|
| <b>Gross Motor Skills</b> | <ul style="list-style-type: none"> <li>• Move within confined spaces</li> <li>• Sit and maintain balance</li> <li>• Stand and maintain balance</li> <li>• Reach above shoulders (e.g., put away supplies)</li> <li>• Reach below waist (e.g., plug electrical appliance into wall outlets)</li> </ul>   | <b>F</b>                  |
| <b>Fine Motor Skills</b>  | <ul style="list-style-type: none"> <li>• Pick up objects with hands</li> <li>• Grasp small objects with hands (e.g., syringe, pencil)</li> <li>• Write with pen or pencil</li> <li>• Key/type (e.g., use a computer)</li> <li>• Pinch/pick or otherwise work with fingers (e.g., manipulate a syringe)</li> <li>• Twist (e.g., turn objects/knobs using hands)</li> <li>• Squeeze with hand (e.g., blood pressure cuff)</li> </ul>  | <b>C</b>                  |
| <b>Physical Endurance</b> | <ul style="list-style-type: none"> <li>• Stand (e.g., at client side during minor or therapeutic procedure)</li> <li>• Sustain repetitive movements (e.g., CPR)</li> <li>• Maintain physical tolerance (e.g., work entire shift)</li> </ul>   | <b>C</b>                  |
| <b>Physical Strength</b>  | <ul style="list-style-type: none"> <li>• Push and pull 50 pounds (e.g., position clients)</li> <li>• Support 50 pounds (e.g., ambulate client)</li> <li>• Lift 50-100 pounds (e.g., pick up a child, transfer patient)</li> <li>• Move light objects weighing up to 10 pounds</li> <li>• Move heavy objects weighing from 25 to 100 pounds</li> <li>• Defend self against combative client</li> <li>• Use upper body strength (e.g., perform CPR, restrain a client)</li> <li>• Squeeze with hands (e.g., operate fire extinguisher)</li> </ul> | <b>F</b>                  |
| <b>Mobility</b>           | <ul style="list-style-type: none"> <li>• Twist</li> <li>• Bend</li> <li>• Stoop/squat</li> <li>• Move quickly (e.g., response to an emergency)</li> <li>• Climb (e.g., ladders/stools/stairs)</li> <li>• Walk</li> </ul>  | <b>F</b>                  |
| <b>Hearing</b>            | <ul style="list-style-type: none"> <li>• Hear normal speaking level sounds (e.g., person-to-person interview)</li> <li>• Hear faint voices</li> <li>• Hear faint body sounds (e.g., blood pressure sounds)</li> <li>• Hear in situations when not able to see lips (e.g., when masks are used)</li> <li>• Hear auditory alarms (e.g., monitors, fire alarms)</li> </ul>   | <b>C</b>                  |
| <b>Visual</b>             | <ul style="list-style-type: none"> <li>• See objects up to 20 inches away (e.g., information on a computer screen, skin conditions)</li> <li>• See objects up to 20 feet away (e.g., patient in a room)</li> <li>• See objects more than 20 feet away [e.g., client at end of hall]</li> <li>• Use depth perception</li> <li>• Use peripheral vision</li> <li>• Distinguish color (e.g., color codes on supplies, charts, bed)</li> <li>• Distinguish color intensity (e.g., flushed skin, skin paleness)</li> </ul>                            | <b>C</b>                  |
| <b>Tactile</b>            | <ul style="list-style-type: none"> <li>• Feel vibrations (e.g., palpate pulses)</li> <li>• Detect temperature (e.g., skin, solutions)</li> <li>• Feel differences in surface characteristics (e.g., skin turgor, rashes)</li> <li>• Feel differences in sizes, shapes (e.g., palpate vein, identify body landmarks)</li> <li>• Detect environmental temperature (e.g., check for drafts)</li> </ul>   | <b>F</b>                  |
| <b>Smell</b>              | <ul style="list-style-type: none"> <li>• Detect odors from client (e.g., foul smelling drainage, alcohol breath, etc.)</li> <li>• Detect smoke</li> <li>• Detect gases or noxious smells</li> </ul>   | <b>F</b>                  |
| <b>Reading</b>            | <ul style="list-style-type: none"> <li>• Read and understand written documents (e.g., policies, protocols)</li> </ul>   | <b>F</b>                  |

| Function  | Program-Specific Examples  | Program-Specific Examples |
|---|--|---------------------------|
| <b>Arithmetic Competence</b>                        | <ul style="list-style-type: none"> <li>• Read and understand columns of writing (flow sheet, charts)               <ul style="list-style-type: none"> <li>• Read digital displays</li> <li>• Read graphic printouts (e.g., EKG)</li> <li>• Calibrate equipment</li> </ul> </li> <li>• Convert numbers to and/or from the Metric System               <ul style="list-style-type: none"> <li>• Read graphs (e.g., vital sign sheets)                   <ul style="list-style-type: none"> <li>• Tell time</li> </ul> </li> </ul> </li> <li>• Measure time (e.g., count duration of contractions, etc.)               <ul style="list-style-type: none"> <li>• Count rates (e.g., pulse)                   <ul style="list-style-type: none"> <li>• Use measuring tools (e.g., thermometer)</li> </ul> </li> </ul> </li> <li>• Read measurement marks (e.g., measurement tapes, scales, etc.)               <ul style="list-style-type: none"> <li>• Add, subtract, multiply, and/or divide whole numbers                   <ul style="list-style-type: none"> <li>• Compute fractions (e.g., medication dosages)                       <ul style="list-style-type: none"> <li>• Use a calculator</li> </ul> </li> </ul> </li> <li>• Write numbers in records</li> </ul> </li> </ul> | <b>C</b>                  |
| <b>Emotional Stability And Interpersonal Skills</b> | <ul style="list-style-type: none"> <li>• Establish therapeutic boundaries</li> <li>• Provide patient with emotional support</li> <li>• Adapt to changing environment/stress</li> <li>• Deal with the unexpected (e.g., client going bad, crisis)               <ul style="list-style-type: none"> <li>• Focus attention on task</li> <li>• Monitor own emotions</li> </ul> </li> <li>• Perform multiple responsibilities concurrently               <ul style="list-style-type: none"> <li>• Handle strong emotions (e.g., grief)                   <ul style="list-style-type: none"> <li>• Negotiate interpersonal conflict</li> <li>• Respect differences in clients</li> <li>• Establish rapport with clients</li> </ul> </li> <li>• Establish rapport with co-workers</li> </ul> </li> </ul>  | <b>C</b>                  |
| <b>Communication Skills</b>                         | <ul style="list-style-type: none"> <li>• Teach (e.g., client/family about health care)               <ul style="list-style-type: none"> <li>• Explain procedures</li> </ul> </li> <li>• Give oral reports (e.g., report on client's condition to others)</li> <li>• Interact with others (e.g., health care workers)               <ul style="list-style-type: none"> <li>• Speak on the telephone                   <ul style="list-style-type: none"> <li>• Influence people</li> <li>• Direct activities of others</li> </ul> </li> </ul> </li> <li>• Convey information through writing [e.g., progress notes)</li> </ul>  | <b>C</b>                  |
| <b>Critical Thinking</b>                            | <ul style="list-style-type: none"> <li>• Identify cause-effect relationships</li> <li>• Plan/control activities for others</li> <li>• Synthesize knowledge and skills               <ul style="list-style-type: none"> <li>• Sequence information</li> </ul> </li> </ul>   | <b>C</b>                  |
| <b>Analytical Thinking</b>                          | <ul style="list-style-type: none"> <li>• Transfer knowledge from one situation to another</li> <li>• Process information</li> <li>• Problem solves</li> <li>• Use long term memory</li> <li>• Evaluate outcomes</li> <li>• Prioritize tasks</li> <li>• Use short term memory</li> </ul>  | <b>F</b>                  |

**Diagnostic Medical Sonography**  
**APPLICATION AND SELECTION PROCESS**

**If You Are Planning to Apply to one of the Sonography Concentrations, PLEASE Read This Information Carefully**

The Sonography Program has a limited enrollment because of the limited number of clinical sites. Applications to the program and/or completion of prerequisite courses do not guarantee admission into the technical portion of the program. The number of students accepted into each cohort depends on the clinical availability. The numbers typically fall between 15-22.

# Diagnostic Medical Sonography

## Application Requirements:

1. *Apply to Ivy Tech Community College and have all transcripts sent accordingly.*
2. *Please refer to the application user guide linked on the sonography page.*

*Sonography page- <https://www.ivytech.edu/programs/all-academic-programs/school-of-health-sciences/diagnostic-medical-sonography/>*

*Application user guide- [https://docs.google.com/document/d/e/2PACX-](https://docs.google.com/document/d/e/2PACX-1vSsGIhDqzc1Z1bAkOTHUcbXFRfDxTsNnQYy-gn0OwYfXXneTHbdrGi8OCWzpV1p_w/pub)*

*[1vSsGIhDqzc1Z1bAkOTHUcbXFRfDxTsNnQYy-gn0OwYfXXneTHbdrGi8OCWzpV1p\\_w/pub](https://docs.google.com/document/d/e/2PACX-1vSsGIhDqzc1Z1bAkOTHUcbXFRfDxTsNnQYy-gn0OwYfXXneTHbdrGi8OCWzpV1p_w/pub)*

3. *Successfully complete the following five (5) prerequisite courses by the end of the 8 weeks of the semester you are applying in. These courses will be awarded points for the final grade received:*
  - APHY 101 – Anatomy and Physiology I
  - APHY 102 - Anatomy and Physiology II
  - ENGL 111 – English Composition
  - DMSI 121– Basic Radiation Physics
  - MATH 123 – Quantitative Reasoning
4. *Successfully complete all other prerequisites. The following courses need to be completed in order to graduate. We recommend these courses be completed before the beginning of the program as the program requirements are great and the time commitment is large. The grades in these courses are not used in calculations for student selection. These courses are as follows:*
  - PSYC 101 or SOCI 111 – Either Introduction to Psychology or Introduction to Sociology
  - COMM 101 or COMM 102 – Either Public Speaking or Interpersonal Communications
  - IVYT 112 - Student Success Elective
5. **Take the USA- Ultrasound Student Assessment – Link for instructions to schedule below.**  
[https://docs.google.com/document/d/1J-Oh\\_tw5RvZUI7xsFZExmipRI47x9LKHVOBB83ErM-g/edit](https://docs.google.com/document/d/1J-Oh_tw5RvZUI7xsFZExmipRI47x9LKHVOBB83ErM-g/edit)

### **PLEASE READ ALL OF THE INFORMATION BELOW ABOUT THE USA EXAM**

- **This is an examination of intrinsic skills that are essential for the sonography profession. There is **no studying required.****
- **The test will evaluate hand-eye coordination, logic, reasoning, visual and spatial resolution, and judgement as well as other areas.**
- **Students may take this exam only 1 time.**
- **When signing up for the exam, you must provide your “C” number. Please note, the second digit in the student number is a zero, not the letter “O.”**
- The student must pay the approved testing fee.
- There is no time limit for this test. Typical time for test completion ranges from 30 minutes to 2 hours.
- The “Combined Score” will be used as points on the application.
- In order to receive your score for the test, you must EMAIL- Jennafer Grasfeder. Email address is on page 18.

## Getting Accepted

The following is an explanation about the process of accepting students into the Ivy Tech Community College Diagnostic Medical Sonography program.

**Acceptance into the Program:** Acceptance into the Sonography Program at Ivy Tech Community College, Terre Haute is a competitive based on grades earned in the required five (5) general education courses and points awarded for the combined score of the USA exam. Tie breaker would be based then on GPA.

**Points for the Program:** For each final letter grade received in the five (5) prerequisites courses, the student will receive points according to the following scales:

**For APHY 101, 102, MATH 123, and DMSI 121 Courses**

A = 30points

B = 20points

C = 10points

D = 0 points

**For ENGL 111 Course**

A = 15 points

B = 10 points

C = 5 points

D = 0 points



## Frequently Asked Questions (FAQ)

### 1. *Is the program accredited and how many students do you accept every year?*

General (Abdominal Extended & OB/Gyn), Vascular and Adult Echocardiography concentrations are accredited by CAAHEP on the recommendation of the JRCEDMS. 15-22 Sonography students will be accepted. This is determined by clinical availability at the time of the program.

### 2. *How many applications do you receive?*

It varies from year to year, but average is around 100.

### 3. *Is there a waiting list?*

No, we do not use a waiting list. If an applicant is not selected, then he or she must reapply for the following cohort.

### 4. *What is your deadline for the application?*

The deadline is in the semester the online application is open. The dates are posted on the link from the sonography page in the application user guide.

**Sonography page-** <https://www.ivytech.edu/programs/all-academic-programs/school-of-health-sciences/diagnostic-medical-sonography/>

**Application user guide-** [https://docs.google.com/document/d/e/2PACX-1vSsGIhDqzc1ZiBAkOTHUcbXFRfDxTsNnQYy-gn0OwYfXXneTHbdrGi8OCWzpV1p\\_w/pub](https://docs.google.com/document/d/e/2PACX-1vSsGIhDqzc1ZiBAkOTHUcbXFRfDxTsNnQYy-gn0OwYfXXneTHbdrGi8OCWzpV1p_w/pub)

### 5. *Where do I take the USA exam?*

Currently the exam may be taken online currently. This test is remotely proctored. [https://docs.google.com/document/d/1J-Oh\\_tw5RvZUI7xsFZExmipRI47x9LKHVOBB83ErM-g/edit](https://docs.google.com/document/d/1J-Oh_tw5RvZUI7xsFZExmipRI47x9LKHVOBB83ErM-g/edit)

### 6. *How can I study for the USA exam?*

There is no study guide, therefore no studying is required. This is an exam of your personal qualities. These are qualities essential to the profession of sonography. Some of the qualities can be learned, some cannot and are completely inherent. There are some areas students may see a negative score in the raw cut score. This does not mean failure; it only identifies weaker areas in a particular quality.

### 7. *How are students selected?*

The selection process is decided by a point system. Points are awarded for the following:

- Final grades of the following: APHY 101 & 102 – Anatomy and Physiology I & II, ENGL 111 – English Composition, MATH 123– Quantitative Reasoning, DMSI 121- Basic Radiation Physics.
- Combined score using the USA exam.
- The top points earning students are offered positions. If a student declines their position, then it is offered to the next highest point earner.

### 8. *What do I do if I have already completed a college degree?*

Have your official college transcripts sent to Terre Haute Ivy Tech to be evaluated. The evaluation will determine what classes will transfer and what additional courses need to be completed. If you are attending another Ivy Tech, please request official transcripts from other colleges to be sent to your home campus for evaluation before turning in your application materials.

### 10. *When are students selected? How will I know if I am accepted?*

The selection process will be notified through your Ivy Tech email. Make sure the Ivy tech email address you submit on the application is valid and one you will check often.

### 11. *What do I need to do if I am accepted?*

If you are accepted, you will need to do the following:

- If you are accepted, you must accept the acceptance email within 48hrs.
- Attend required orientation.
- Have current immunizations verified by a medical doctor.
- MMR, Varicella, Hepatitis B, Influenza, Tdap
- Have current 2-Step TB skin test.
- COVID vaccine- proof of vaccine or approved declination (once accepted into program)
- Have current eye exam.

- Have current Healthcare Provider CPR certification.
- Submit to a criminal background check and drug screen.
- Required to travel to the various clinical sites.

*Details regarding the above will be discussed at the required orientation.*

**12. What happens if I am not accepted?**

If the student is not accepted into the program, the student may...

- Reapply the following year.
- Students must submit a new application.
- Consult with your advisor for other programs that you may complete or be eligible to pursue.
- Discuss with your Program Faculty Advisor on areas that need to be improved.
- Discuss with your Program Faculty Advisor an alternate plan.

**13. What will I learn in the Program?**

Sonography – The program is designed to prepare students to perform Sonographic procedures. Students may be introduced to other imaging modalities but will not learn how to do those medical procedures.

**14. Can I work and be in the program?**

You can but we do not recommend it. The regular hours of attending class and going to clinical and or lab range from 20-25 hours a week depending on the semester, and you still need study time on top of that. Summer semester requires more hours in that clinicals are 3 days per week.

**15. What if my criminal background check or drug screens comes back positive?**

The student may or may not be able to complete the program clinical portion of the program. The clinical portion is a requirement for graduation. We strongly encourage you to inform the program chair of any possible issues that may show up on your background check or drug screen.

**16. Are all Sonography concentrations offered at the same time?**

No. We alternate the concentrations. If you are interested in a specific concentration, please contact the program for more information.

**Contact --- for more information.**

**If the questions are included in this packet, you will be referred back to this packet.**

**Program Personnel**

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