



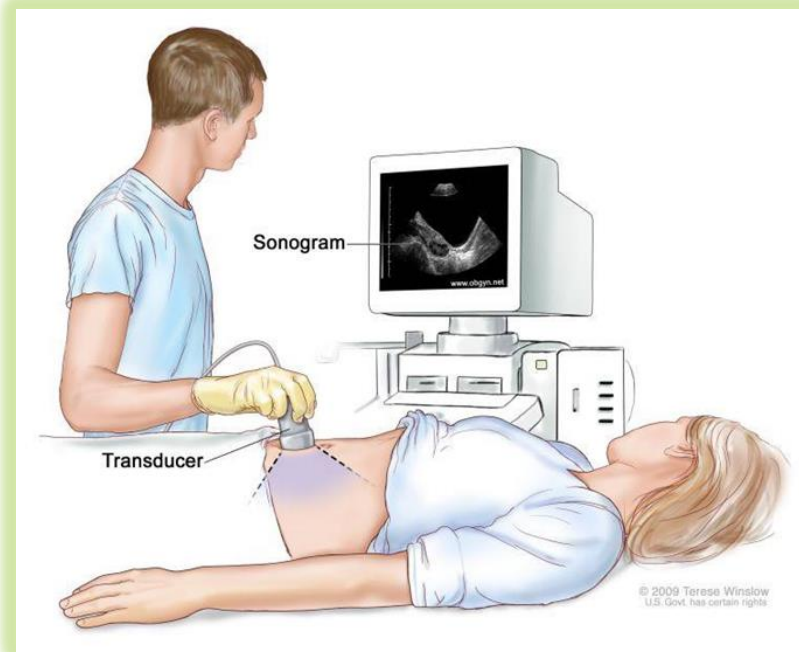
# College of DuPage

## Diagnostic Medical Imaging Sonography (DMIS) Programs Advising Session



# What is Ultrasound/Sonography?

- Clinical discipline.
- Use of equipment that produces sound waves which are converted into images of human anatomy.
- Medical interpretation and diagnosis by a Radiologist.
- Sonography programs at COD prepare students for entry-level positions in Sonography.



# What Do Sonographers Scan?

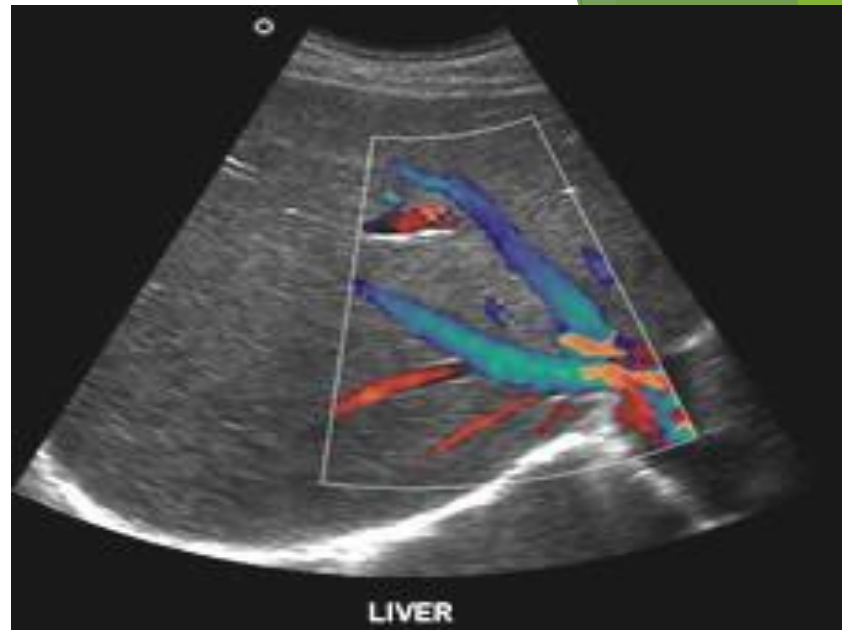
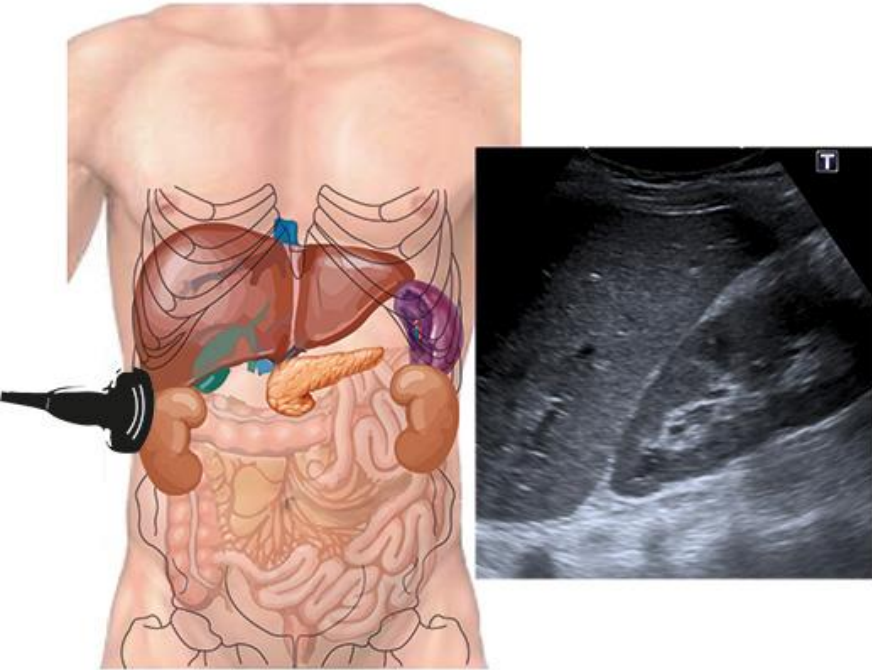
Sonography Lab at COD

- Liver
- Gallbladder
- Pancreas
- Spleen
- Kidneys
- Uterus/Ovaries
- Testicles
- Thyroid
- Obstetrics
- Breast
- Arteries/Veins
- Pediatric Hips/Spine
- Neonate Heads
- Assist with Biopsies/Aspirations



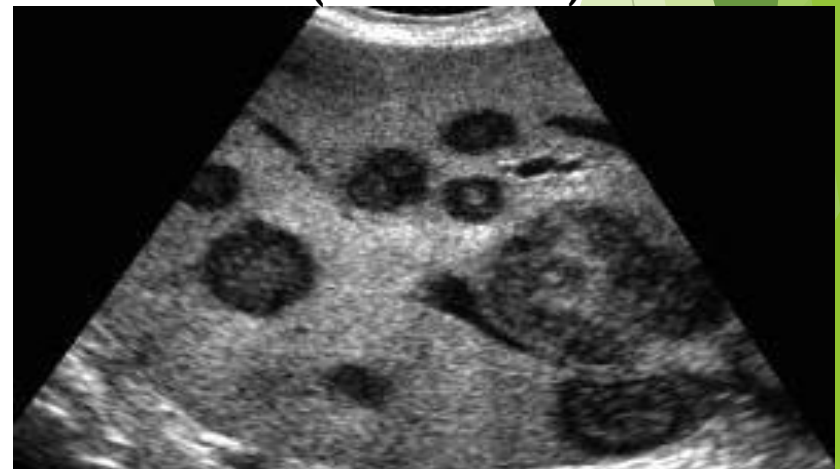
# KIDNEYS/LIVER

## Scanning Approach/View



Color Doppler of Hepatic Veins

## Liver Masses (Dark Areas)



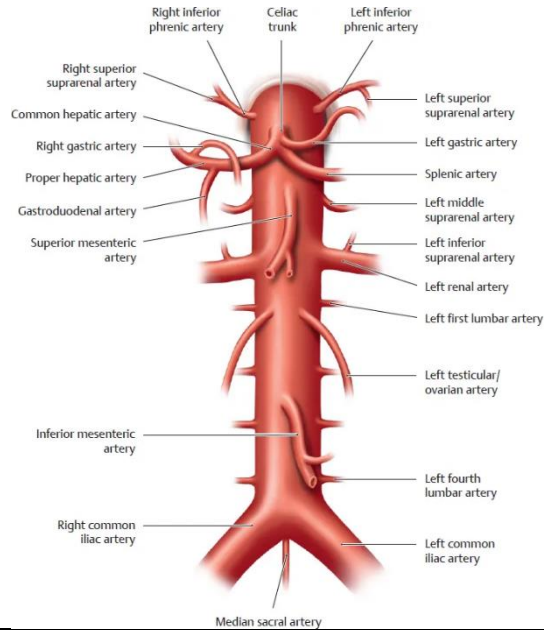
## Images of a Kidney

### Longitudinal & Transverse Scan Plane

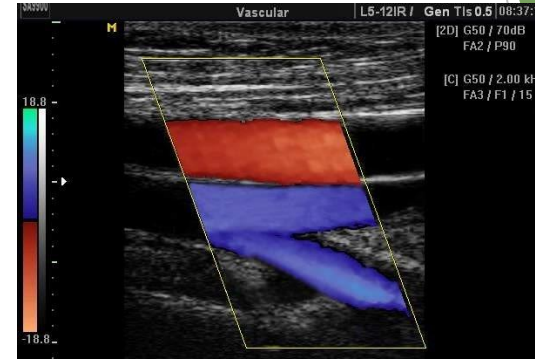


# Vascular Sonography

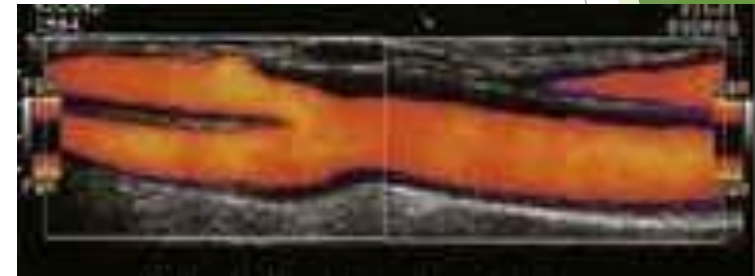
## Abdominal Aorta



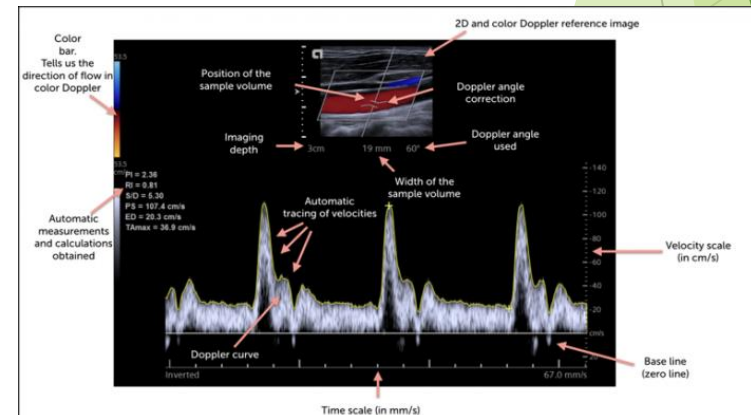
## Femoral Vein & Artery



## Carotid Artery

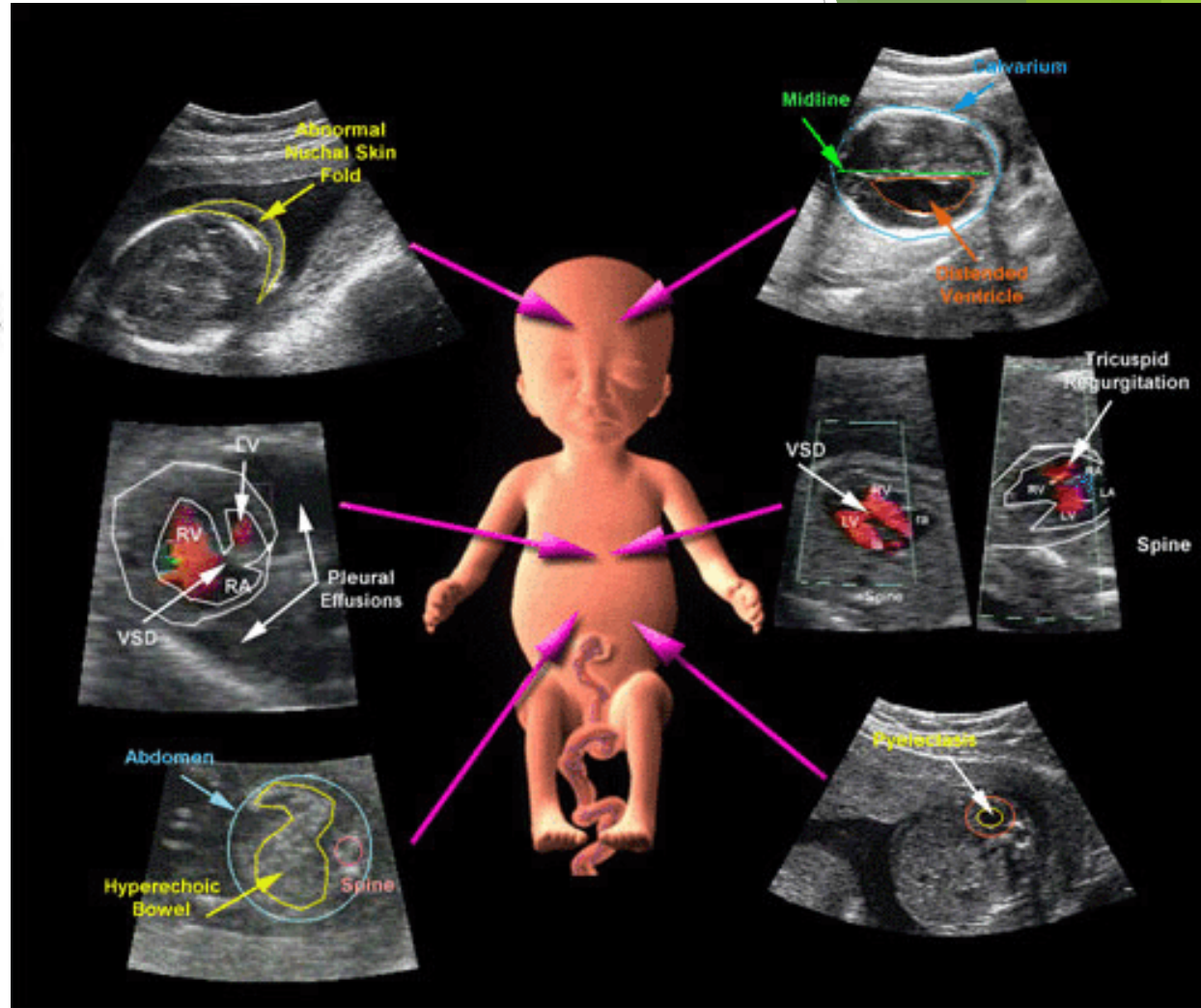


## Pulsed Wave Doppler



# OBSTETRICS

Transabdominal Fetal Ultrasound



# Earning Your Sonographer Credentials

(\*Because the certificate(s) or degree alone is not enough!)

## American Registry of Diagnostic Medical Sonographers (ARDMS)

CREDENTIAL EARNED	EXAMINATION NEEDED	CORRESPONDING SPECIALTY EXAMINATION
<b>RDMS®</b> Registered Diagnostic Medical Sonographer	<b>SPI</b> Sonography Principles & Instrumentation Examination	Abdomen (AB) Examination
		Breast (BR) Examination
		+ Fetal Echocardiography (FE) Examination
		Obstetrics & Gynecology (OB/GYN) Examination
		Pediatric Sonography (PS) Examination
<b>RDCS®</b> Registered Diagnostic Cardiac Sonographer	<b>SPI</b> Sonography Principles & Instrumentation Examination	Adult Echocardiography (AE) Examination
		+ Fetal Echocardiography (FE) Examination
		Pediatric Echocardiography (PE) Examination
<b>RVT®</b> Registered Vascular Technologist	<b>SPI</b> Sonography Principles & Instrumentation Examination	+ Vascular Technology (VT) Examination
<b>RMSKS™</b> Registered Musculoskeletal Sonographer	<b>SPI</b> Sonography Principles & Instrumentation Examination	+ Musculoskeletal Sonographer (MSKS) Examination

### COD DMIS =

- \* Abdomen – RDMS (AB)
- \* Obstetrics/Gynecology - RDMS (OB/GYN)
- \* Vascular Technology - RVT
- \* SPI Principles & Instrumentation
- \* *Breast = Trained but not eligible for exam*

# Programs & Application Requirements

## CERTIFICATES

General (Advanced Certificate) 18 months

- \*Training in Abdomen & Obstetrics/Gynecology Sonography
- \*Must already be a currently licensed healthcare professional with a completed associates degree in either Radiology, Nursing, Physical Therapy, etc.
- \*PLUS – Possible Prerequisite Coursework

Vascular (Vascular Technology Certificate) 6 months

- \*Training in Vascular Sonography
- \*Must already be a currently registered Sonographer in either Obstetrics/Gynecology (RDMS), Abdomen/Superficial Structures (RDMS), or Echocardiography (RDCS)
- \*PLUS – Possible Prerequisite Coursework

## DMIS AAS DEGREE (Vast Majority of Applicants)

2 years not including prerequisites

- \*Training in Abdomen & Obstetrics/Gynecology & Vascular Sonography
- \*Must be a HS/GED graduate, and complete specific general education prerequisites PLUS, courses specific to sonography that can only be taken at COD

\*See admission packets for more information:

Link: [Sonography Program | College of DuPage \(cod.edu\)](https://www.cod.edu/sonography)



# So...

▶ **COD Advanced Certificate makes you eligible for:**

SPI, Abdomen & Obstetrics/Gynecology Exams

= Jimmy Page, RDMS

▶ **COD Vascular Certificate makes you eligible for:**

SPI & Vascular Technology Exams

= Taylor Swift, RVT

\*These days employers want you to know it all!

(so, you would 100% want to take both certificates to become RDMS, RVT !!)

▶ **COD AAS Degree makes you eligible for:**

SPI, Abdomen, Obstetrics/Gynecology, & Vascular Technology Exams

= Patrick Kane, RDMS & RVT

\*Breast (*Trained but not eligible for the exam.*)

# AAS Degree Prerequisites

Completion required by end of Spring semester preceding Fall program start.

<b>COURSE #</b>	<b>COURSE TITLE</b>	<b>GRADE REQUIRED</b>
ENGLISH 1101	English Composition I	“C” or higher
SPEECH 1100 or 1120 (or equivalent)	Fund. Speech Communication Small-Group Communication	“B” or higher
ANAT 1552 or 1572*	Human Anatomy & Physiology II or Human A & P with Cadaver II	‘B’ or higher
<i>*Prerequisite: A&amp;P 1551 or 1571 with a grade of ‘B’ or higher</i>		
HUMANITIES	Any Humanities Course	‘C’ or higher
PSYCH 1100 (or equivalent)	General Psychology	‘C’ or higher
HLTHS 1110*	Biomedical Terminology	‘B’ or higher
*MATH 1120	Mathematical Foundations for DMIS	‘B’ or higher
<b>OR</b> Algebra/Statistics/or higher <b>AND</b> Gen. Physics or Radiographic Physics		‘B’ or higher
*DMIS 1110	Basic Patient Care Skills for Sonographers	‘B’ or higher
*DMIS 1105	Intro to Pathophysiology for Sonographers	‘B’ or higher

**\*These are only offered at COD. They are not offered Summer semester.**

**NOTE: The DMIS Program is undergoing revisions.**

**Please monitor the program admission packet for updates and/or modifications.**

# Program Schedules

## CERTIFICATES

### Advanced General Sonography Certificate Program

\*It is an 18-month certificate program.

\*The program is full-time on campus and at hospitals.

**1st semester** = (2) 12-hour days & evenings on campus

**2nd-4th semesters** = (2) 8-12-hour days & evenings on campus AND  
(3) 8.5 hour shifts per week at a hospital/clinic

### Vascular Sonography Certificate Program

\*It is a 6-month certificate program.

\*The program is mostly full-time on campus and at hospitals.

**1st semester** = (2) 8-12-hour days & evenings on campus AND (3) 8.5  
hour shifts per week at a hospital/clinic

**2nd semester** = (3) 8.5 hour shifts a week at a hospital/clinic

## DEGREE

### Sonography Degree Program

\*It is a 2-year degree program (not including prerequisites).

\*The program is full-time on campus and at hospitals.

**1st semester** = (2) 12-hour days & evenings on campus

**2nd -5th semesters** = (2) 8-12-hour days & evenings on campus AND  
(3) 8.5 hour shifts per week at a hospital/clinic

**6th semester** = (3) 8.5 hour shifts a week at a hospital/clinic

\*Clinical shifts will be days, nights and/or weekends, the hospital/clinic sets the schedule\*

# Where, How, When would I work

## Depends on.....

### **Type of Facility:**

Hospital, Free-Standing ER, Quick Care Clinic,  
Imaging Center, Obstetrics Office, Medical Clinic.

### **Type of Position:**

Full Time, Part Time, Registry

### **Facility Hours:**

Days, Nights, Overnight, Call, Weekends, Holidays

### **Pay:**

Depends on type of position – FT/PT/Registry, & Location.  
Starting pay is typically \$30-40. an hour in the Chicagoland  
area. U.S. Department of Labor, Occupational Outlook  
Handbook reports median as \$29.33 per hour (\$61k a year)

<https://www.bls.gov/ooh/healthcare/diagnostic-medical-sonographers.htm>



# Program Costs

Item	Estimated Cost
Non-Refundable College of DuPage Application	\$20.00
Non-Refundable Health Career Application Fee	\$50.00
HESI-A2 Admission Exam	\$60.00
In-District Tuition (77 credits) (variable tuition applies to Sonography classes) <ul style="list-style-type: none"> <li>&gt; 58 credits of DMIS courses x \$274/credit = \$15,892.00</li> <li>&gt; 27 credits of General Education courses x \$152/credit = \$4,104.00</li> </ul>	\$19,996.00
Uniform (approximate cost for 2 uniforms and 1 jacket)	\$130.00
Books (approximate cost to purchase new)	\$1,200.00
Course/Lab Fees (2 year malpractice insurance included)	\$1,922.00
Criminal Background Check ( <a href="#">see Health Requirement Packet for details (PDF)</a> )	\$72.99
Mandatory Drug Testing (\$33.99 per year) ( <a href="#">see Health Requirement Packet for details (PDF)</a> )	\$67.98
Medical Document Manager ( <a href="#">see Health Requirement Packet for details (PDF)</a> )	\$19.49
Health Requirements ( <a href="#">see Health Requirement Packet for details (PDF)</a> )	Varies
<b>Estimated Total</b>	<b>\$23,538.46 + Health Requirements</b>

# STANDARD SKILLS IN SONOGRAPHY

- ▶ To participate in the clinical education portion of the DMIS programs, the applicant must possess skills relevant to a sonography department. These technical standards are consistent with the duties of an entry-level sonographer. The student must have the ability to:
  - Lift and carry thirty pounds of weight.
  - Lift and transfer patients to and from wheelchairs, stretchers, beds, and imaging tables.
  - Move, adjust, and manipulate equipment to perform imaging studies.
  - Position patients for exams.
  - Respond appropriately to sounds such as the patient's voice and movements, at a normal conversational volume.
  - Review and evaluate recorded real time images to determine the quality of the image as well as demonstrate visual accuracy in differentiating subtle shades of grays used in sonographic imaging.
  - Respond appropriately to equipment signals such as sound and light.
  - Speak and write English fluently.
  - Manipulate necessary hospital equipment for patient care and patient imaging such as dials, switches, push buttons, and keyboards.
  - Stand and perform ultrasound exams for a prolonged period without scheduled breaks in a typical shift of 8-12 hours.
  - Manipulate a transducer with the right hand in a back-and-forth manner while maintaining balance as well as operating the machine controls with the left hand.
  - Communicate orally and in writing with the patient, doctors, and other personnel clearly and effectively.
  - Must be able to follow verbal and written directions.
  
- ▶ Other Skills Include:
  - Ability to view computer/ultrasound machine screens for extended periods.
  - Ability to deal with extremely ill patients.
  - Ability to make independent decisions using good judgment skills (as appropriate for level of education).
  - Ability to practice high quality patient care.
  - Ability to function with minimal assistance (as appropriate for level of education).
  - Exposure to hazardous chemicals, such as for probe and machine cleaning.
  - Recognition of needs and behaviors of a variety of age groups and abilities of patients treated.

# Important Information to Review

See links below:

- ▶ [Health Requirements Packet \(cod.edu\)](#)

Health Requirement Information (essential functions/technical standards for acceptance, drug testing, criminal background check, immunizations, etc.)

- ▶ [Policies and Procedures | College of DuPage \(cod.edu\)](#)

Policy for Professional Conduct

Statement on Transportation

Prohibition of Discrimination and Harassment

Student Diversity

Student Email

Statement on Medical Care and Health Insurance

Statement on Medical Malpractice Insurance

Citizenship/Visa Status

# How do I become part of this amazing field?



**Qualify** to apply to the program (by completing prerequisite classes and other application requirements)

\*Have a Plan B (We have more applicants than seats available)

**Apply** to the program

(Acceptance into the programs is Merit Score based)

**Complete** certificate or degree requirements & sit for exams (for RDMS and/or RVT)

**Start your career!**

On average 75% of our students are hired prior to graduation!





# WHAT DO I DO NEXT??

\*Follow the [Application Materials Checklist](#) in the **Admissions Packet** for the program that you qualify for: [www.cod.edu/sonography](http://www.cod.edu/sonography)

If you want to know how your courses could transfer to College of DuPage without applying? [Transferology](#) can show you if your courses will transfer in.

## \*New to COD?

- Apply to COD [Admissions | College of DuPage \(cod.edu\)](#)

- Get high school & any prior college transcripts sent to Records.

<https://www.cod.edu/records/index.aspx>

- Meet with a Health Science Advisor.

[https://www.cod.edu/student\\_life/resources/counseling/academic-advising/index.aspx](https://www.cod.edu/student_life/resources/counseling/academic-advising/index.aspx)

## \*Already a COD student?

Meet with a Health Science Advisor.

[https://www.cod.edu/student\\_life/resources/counseling/academic-advising/index.aspx](https://www.cod.edu/student_life/resources/counseling/academic-advising/index.aspx)

If COD is not going to work for you go to the CAAHEP website to find an ACCREDITED program! [www.caahep.org](http://www.caahep.org)



Questions? Please email:  
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[mckirdiem@cod.edu](mailto:mckirdiem@cod.edu)

**THANK  
YOU  
FOR  
YOUR TIME  
AND ATTENTION**

 **College of DuPage**