



# Cardiovascular Technology (Echocardiography or Invasive)

**ASSOCIATE DEGREE**

Program Code: 10-521-1

## Downtown Milwaukee Campus

Students begin with general cardiovascular technology (CVT) coursework and then study either the invasive CVT (Cardiac Cath Lab) or noninvasive CVT (echocardiography) subspecialty. Completing this program fulfills prerequisites to take the Registered Cardiovascular Invasive Specialist exam, or Registered Cardiac Sonographer (CCI) or Registered Diagnostic Cardiac Sonographer (ARDMS) exam.



[matc.edu/academic\\_programs/pathways](https://matc.edu/academic_programs/pathways)

You can earn the EKG Technician certificate on your way to completing this associate degree.

## Program Learning Outcomes

- Explain diagnostic procedures and provide support to patients
- Ability to perform diagnostic imaging including transthoracic echocardiogram, transesophageal echocardiogram and a stress echocardiogram
- Assist the invasive cardiologist in the diagnosis and corrective intervention of cardiac procedures
- Apply sterile technique in preparing and handling of instruments
- Prepare the cath lab by aseptic technique

## Admission Requirements

High school diploma or GED, one year of high school biology, chemistry and algebra required. This program admits students through petition selection process. See program's webpage at [matc.edu](https://matc.edu).

 **MILWAUKEE AREA Technical College**  
School of HEALTH SCIENCES

## TECHNICAL STUDIES

- (2) **CVTECH-102** Introduction to Cardiovascular Technology ‡ ^ .....2
- (2) **CVTECH-110** EKG Analysis ‡ ^ .....2
- (2) **CVTECH-115** Essentials of Cardiovascular Care 1 ‡ ^ ..4
- (2) **CVTECH-117** Invasive CVT Fundamentals 1 ‡ .....4
- (2) **CVTECH-118** Introduction to Echocardiography ‡ .....3

### ECHOCARDIOGRAPHY CVT STUDENTS TAKE:

- (5) **CVTECH-121** Echocardiography Clinical Procedures ‡ ..2
- (3) **CVTECH-142** Echocardiography Case Review ‡ .....3
- (3) **CVTECH-140** Echocardiography Instrumentation ‡ ....4
- (3) **CVTECH-144** Advanced Echocardiography Practicum ‡ .....3
- (3) **CVTECH-145** Echocardiography Fundamentals ‡ .....4
- (3) **CVTECH-149** Echocardiography Clinical Experience 1 ‡ .....2
- (4) **CVTECH-143** Ultrasound Principles and Physics ‡ .....3
- (4) **CVTECH-195** Echocardiography Clinical Seminar ‡ .....2
- (4) **CVTECH-196** Echocardiography Clinical Experience 2 ‡ .....4
- (4) **CVTECH-197** Echocardiography Clinical Experience 3 ‡ .....4

### INVASIVE CVT STUDENTS TAKE:

- (5) **CVTECH-120** Invasive CVT Clinical Procedures ‡ .....2
- (3) **CVTECH-132** Physics of Medicine ‡ .....3
- (3) **CVTECH-134** Cardiovascular Hemodynamics ‡ .....3
- (3) **CVTECH-135** Essentials of Cardiovascular Care 2 ‡ .....4
- (3) **CVTECH-137** Invasive CVT Fundamentals 2 ‡ .....4
- (3) **CVTECH-139** Invasive CVT Clinical Experience 1 ‡ .....2
- (4) **CVTECH-133** Cardiovascular Agents ‡ .....3
- (4) **CVTECH-185** Invasive CVT Clinical Seminar ‡ .....2
- (4) **CVTECH-186** Invasive CVT Clinical Experience 2 ‡ .....4
- (4) **CVTECH-187** Invasive CVT Clinical Experience 3 ‡ .....4

## GENERAL STUDIES

- ECON-195** Economics .....3  
(or) Any 200-series ECON course
- ENG-151** Communication Skills 1 ‡ .....3
- (&) **ENG-152** Communication Skills 2 ‡ .....3  
(or) ENG-201‡ and any 200-series ENG or SPEECH course
- MATH-189** Introductory Statistics .....3  
(or) MATH-260 Basic Statistics ‡
- NATSCI-197** Microbiology \* ^ .....4
- PSYCH-199** Psychology of Human Relations .....3  
(or) Any 200-series PSYCH course
- SOCSCI-197** Contemporary American Society .....3  
(or) SOCSCI-210 Death and Dying
- ELECTIVES** (Two credits needed) .....2

**TOTAL CREDITS: 70**

## Credits

**For complete information, go to [matc.edu/health\\_sciences](http://matc.edu/health_sciences)**

To apply for financial aid, visit [fafsa.gov](http://fafsa.gov)  
School Code: 003866

( ) Semester order for full-time students.

S = Summer.

‡ Prerequisite required.

^ Counts toward earning the EKG Technician certificate.

\* Cardiovascular Technology students are not required to take NATSCI-177/179 or 201/202 as prerequisites to NATSCI-197; go to INFOne. [matc.edu](http://matc.edu) and submit a waiver indicating you are a CVT student.

Program curriculum requirements are subject to change.

This Associate in Applied Science program will transfer to one or more four-year institutions.

**Current MATC students should consult their Academic Program Plan for specific curriculum requirements.**

This program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP), 1361 Park Street, Clearwater, FL 33756; 727-210-2350; [www.caahep.org](http://www.caahep.org).

Accreditation is based upon a recommendation by the Joint Review Committee (JRC-CVT).

Both invasive and echocardiography portions are accredited.



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[matc.edu](http://matc.edu) or 414-297-MATC  
Wisconsin Relay System 711

### Downtown Milwaukee Campus

700 West State Street

### Mequon Campus

5555 West Highland Road

### Oak Creek Campus

6665 South Howell Avenue

### West Allis Campus

1200 South 71st Street

### MATC Education Center at Walker's Square

816 West National Avenue, Milwaukee