

**Cardiovascular Technology-Invasive Associate of Applied Science Application Packet**  
**Moorhead Campus**  
**Fall 2019 Start**  
**Application Deadline: May 25, 2019**

Thank you for your interest in the Cardiovascular Technology-Invasive program at Minnesota State Community and Technical College. This program prepares the graduate to be a competent entry-level cardiovascular technologist in the cognitive (knowledge), psychomotor (skill) and affective (behavior) learning domains for invasive cardiovascular technology. Students will learn to assist physicians in diagnosing and treating cardiac, peripheral vascular, neurovascular and electrophysiological conditions using current technology, physiological and diagnostic equipment, and therapeutic procedures.

General education courses required for the Associate of Applied Science degree in Cardiovascular Technology-Invasive may be completed at any of the M State campuses or online. Students who are transferring in credits from another institution should allow up to six weeks for official transcript evaluation by M State.

Students who complete the M State application process and have graduated from high school or earned a GED certificate will be accepted to the college for general education courses. **Acceptance to M State is not a guarantee of admission into the Cardiovascular Technology-Invasive program. Admission to the program is based on competitive eligibility admission criteria as outlined in this packet.**

There are 15 available seats for each Cardiovascular Technology-Invasive program start. The Cardiovascular Technology program is a fall start only. In the case there are more eligible applicants than available seats, the 15 applicants with the highest number of GPA points in the prerequisite courses will be offered admission to the program. **Students may apply before all prerequisite courses are complete, but applications will not be reviewed until all prerequisite coursework is complete with a grade of C or higher.**

We are pleased you are considering M State, and we look forward to reviewing your application. Applicants (prospective and accepted) are responsible for understanding the information in this packet. Contact Leah Trontvet (last names A-K) at [leah.trontvet@minnesota.edu](mailto:leah.trontvet@minnesota.edu) or Kristin Nelson (last names L-Z) at [kristin.nelson@minnesota.edu](mailto:kristin.nelson@minnesota.edu) with any questions. Program curriculum information can be found at <http://www.minnesota.edu/programs/cardiovascular-technology-invasive/>.

**All Cardiovascular Technology admissions correspondence is by email.** All accept/wait-list/deny notifications will be sent to the applicant's M State email address. Applicants have five business days to respond "I accept." If an applicant fails to respond, their seat will be offered to the first candidate on the wait list.



<p><b>GPA/Admission Prerequisite Requirements</b></p>	<p>Applicants must earn a C grade or better <b>and</b> a cumulative GPA of 2.5 or higher in the program <b>prerequisite courses</b>:</p> <ul style="list-style-type: none"> <li>• BIOL2260 Anatomy and Physiology I Lecture</li> <li>• BIOL2261 Anatomy and Physiology I Lab</li> <li>• BIOL2267 Medical Microbiology Lecture</li> <li>• BIOL2268 Medical Microbiology Lab</li> <li>• CVRI1100 Cardiovascular Technology Survey</li> <li>• COMM1130 Small Group Communication</li> <li>• MATH1114 College Algebra</li> </ul> <p>When there are more eligible applicants than available seats, the 15 applicants with the highest GPA points in the prerequisite courses will be offered admission to the program.</p>
<p><b>Complete Online Cardiovascular-Invasive Program Application</b></p>	<p>The Cardiovascular Technology program application must be submitted for an applicant to be considered for acceptance to the program. The online application is available September 1 at <a href="http://www.minnesota.edu/programs/cardiovascular-technology-invasive/">http://www.minnesota.edu/programs/cardiovascular-technology-invasive/</a>.</p> <p>The application deadline for Fall 2019 is <b>May 25, 2019</b>. Applicants who meet all requirements for admission will have the greatest chance of being admitted into the program. Students are encouraged to submit the program application even if they are in the process of meeting all of the requirements for admission to the program. Applications will only be reviewed once all prerequisite coursework is complete. If the deadline has passed, check <a href="http://www.minnesota.edu/programs/cardiovascular-technology-invasive/">www.minnesota.edu/programs/cardiovascular-technology-invasive/</a> to see if applications are still being accepted.</p>
<p><b>Selection of Candidates</b></p>	<p>Students must have completed all math, English and admission prerequisite coursework, meeting the GPA minimums as outlined in this packet. Each prerequisite course is awarded points by earned letter grade (A=4 pts, B =3 pts, C=2 pts).</p> <p>In the case there are more applicants than available seats, applicants will be ranked by GPA points, and the top 15 will be admitted. If the applicant does not accept their seat, it will be offered to the first person on the wait list.</p> <p>If seats are available after the application deadline review, a secondary deadline will be posted and applications will be reviewed after summer term.</p>
<p><b>Acceptance</b></p>	<p>Applications submitted by the application deadline will be processed within 15 business days. Applicants have five business days to respond to the acceptance email and indicate that they are accepting their seat. If the applicant fails to reply or turns down their seat, it will be offered to the first candidate on the wait list.</p> <p>All Cardiovascular Technology-Invasive admissions correspondence is by email. All accept/wait-list/deny notifications will be sent to the applicant's M State email address only.</p>

### Additional Requirements

<p><b>CPR</b></p>	<p>Students must provide official documentation of American Heart Association BLS CPR/AED (Healthcare Providers) certification upon the start of CVRI1100. Certification must stay current throughout the program.</p> <p>Students are to upload documents to the Student Passport system.</p>
<p><b>Minnesota Department of Health Background Study</b></p>	<p>Students will complete a Minnesota Department of Health background check the first day of CVRI 1100. The cost of the background study is included in the course fees and cannot be refunded if the course is dropped.</p> <p>Accepted students who choose not to complete the background study or who do not clear may not be permitted to attend clinical experiences or service learning opportunities. In such cases, the college cannot guarantee alternative learning opportunities, which ultimately will affect the students' ability to complete the program.</p> <p>Students are to upload documents to the Student Passport system.</p>
<p><b>National Background Check</b></p>	<p>Students are required to have a cleared National Background Check during the first day of their CVRI1100 course. This will need to be completed even if they have completed a National Background Check for employment. National Background Checks are completed through a third-party vendor. Instructions and codes will provided via official M State email from Joel Hoffman. The cost of the background study is included in the course fees and cannot be refunded if the course is dropped.</p> <p>Students who choose not to complete the background study or who do not clear may not be permitted to attend clinical experiences or service learning opportunities. In such cases, the college cannot guarantee alternative learning opportunities, which ultimately will affect the students' ability to complete the program.</p> <p>Students are to upload documents to the Student Passport system.</p>
<p><b>Health Forms</b></p>	<p>Students are required to complete the Health Division Health Form two weeks prior to the start of CVRI1100.</p> <p>Students are to upload documents to the Student Passport system.</p>
<p><b>Laptop Computer</b></p>	<p>The Cardiovascular Technology-Invasive program requires students to have a laptop computer. The cost will be in addition to the cost of tuition, fees and books.</p> <p>The required computer specifications can be found at <a href="http://www.minnesota.edu/programs_majors.php?prog_code=840&amp;laptop_info=true">http://www.minnesota.edu/programs_majors.php?prog_code=840&amp;laptop_info=true</a>.</p>
<p><b>Additional Program Requirements</b></p>	<ol style="list-style-type: none"> <li>1. Purchase of program-specific uniform (one set incurred through course fees, additional set \$100)</li> <li>2. Travel to tristate area clinical sites including locations at: Fargo Sanford, Fargo Essentia, Altru Grand Forks and Bemidji Sanford</li> <li>3. Advanced Cardiac Life Support certification (\$315)</li> <li>4. Purchase of program lead vests (\$500)</li> </ol>
<p><b>Student Passport</b></p>	<p>Health forms, supporting documentation and American Heart Association BLS CPR/AED (Healthcare Providers) documentation are required to be uploaded to the Student Passport system. Information on Student Passport will be sent to all students enrolled in CVRI 1100.</p>

**CARDIOVASCULAR TECHNOLOGY – INVASIVE  
ASSOCIATE OF APPLIED SCIENCE (AAS) – 60 CREDITS**

**Developmental Courses (if needed):**

MATH 0055	Foundations of Mathematics	2	2/0/0
MATH 0085	Elementary Algebra I	2	2/0/0
MATH 0095	Elementary Algebra II	2	2/0/0
MATH 1020	Intermediate Algebra	3	3/0/0
ENGL 0091	English Foundations	3	3/0/0
ENGL 0097	English Strategies	3	3/0/0
ELL 0050/0060/1060/1080			

**All pre-CVRI courses must be completed prior to beginning any courses in the core Cardiovascular Technology -Invasive program and must also have a GPA of 2.5 in the pre-CVRI courses.**

**CURRICULUM DESCRIPTION**

<b><u>Pre-CVRI Courses:</u></b>		<b><u>CREDITS</u></b>	<b><u>LECTURE/LAB/C</u></b>
BIOL 2260	Anatomy & Physiology I Lecture	3	3/0/0
BIOL 2261	Anatomy & Physiology I Lab	1	0/1/0
BIOL 2267	Medical Microbiology Lecture	3	3/0/0
BIOL 2268	Medical microbiology Lab	1	0/1/0
COMM 1130	Small Group Communication	3	3/0/0
CVRI 1100	Cardiovascular Technology Survey	2	2/0/0
MATH 1114	College Algebra	4	4/0/0
<b><u>1<sup>st</sup> Semester:</u></b>			
BIOL 2262	Anatomy & Physiology II Lecture	3	3/0/0
BIOL 2263	Anatomy & Physiology II Lab	1	0/1/0
CVRI 1105	Introduction to Cardiovascular Tech.	2	2/0/0
CVRI 1110	Cardiovascular Anatomy & Physiology	3	3/0/0
CVRI 1120	Principles of Patient Care	4	4/0/0
CVRI 1130	Cardiovascular Technology I	3	3/0/0
<b><u>2<sup>nd</sup> Semester:</u></b>			
CVRI 1136	Cardiovascular Technology Clinical	2	0/0/2
CVRI 2130	Cardiovascular Technology II	5	5/0/0
CVRI 2141	Pharmacology for Cardiovascular Tech.	2	2/0/0
CVRI 2145	Intravenous Therapy	1	1/0/0
CVRI 2250	Radiation Safety	2	2/0/0
<b><u>3<sup>rd</sup> Semester:</u></b>			
CVRI 2262	Cardiovascular Technology Practicum I	5	0/0/5
CVRI 2263	Cardiovascular Technology Practicum II	5	0/0/5
CVRI 2264	Cardiovascular Technology Practicum III	5	0/0/5

**CARDIOVASCULAR TECHNOLOGY-INVASIVE PROGRAM APPLICATION ASSESSMENT  
(to be completed by the CVRI selection committee)**

Applicants of the Cardiovascular Technology-Invasive program will be awarded points for the courses listed below. The 15 applicants with the highest number of points will be selected for admission to the CVRI program. To be awarded points for a course, applicants must have completed the course with a grade of C or better prior to the **May 25** application deadline. The selection committee will use the highest grade for any repeated courses. Applicants who have completed prerequisite courses at another postsecondary institution must have their official transcripts evaluated by M State by the application deadline to be used for their application. All science courses must be completed within the last five years. In the case of one or more ties, an earned grade in BIOL2262-Anatomy and Physiology II lecture will be used to break the tie.

**You may apply before all of the prerequisite courses are completed, but your application will not be reviewed until all prerequisite coursework is complete with a grade of C or higher.** If spots are still available, a secondary review will take place once summer term ends

College Grade Points: A=4 points, B=3 points, C=2 points, IP=In Progress/No points, N=No attempt on record

COURSE	COURSE TITLE	CREDIT WEIGHT x GRADE =	POINTS
CVRI1100	Cardiovascular Technology I	2 x _____	_____
BIOL2260	Human Anatomy and Physiology I lecture	3 x _____	_____
BIOL2261	Human Anatomy and Physiology I lab	2 x _____	_____
BIOL2267	Medical Microbiology lecture	3 x _____	_____
BIOL2268	Medical Microbiology lab	2 x _____	_____
COMM1130	Small Group Communication	3 x _____	_____
MATH1114	College Algebra	3 x _____	_____
Earned prerequisite GPA (must be 2.5 or higher to be admitted; includes all earned prerequisite grades):			_____

**BONUS POINTS**

Cumulative M State GPA of 3.5 or higher	2 points possible	_____
Cumulative M State GPA of 3.0 or higher	1 point possible	_____

**TIE-BREAKER**

The following will be calculated ONLY in the case a tie-breaker is needed (whichever is not used above):

BIOL2262	Human Anatomy and Physiology II lecture	3 x _____	_____
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**TOTAL POINTS:** \_\_\_\_\_

FOR OFFICE USE ONLY	Initials	Date
Review A:		
Review B:		