

### Program Information

The Biomedical (BMED) Technology one-year certificate program prepares students for entry-level positions in the biomedical device and products industry. Graduates will work in manufacturing, product development and testing. Many of the courses transfer to four-year institutions. Classes include specific biomedical coursework, as well as writing, statistics, and a field experience with a biomedical company. For additional information about our biomedical programs, visit our website at: <http://www.anokaramsey.edu/BMED>.

### Program Goals

By completing this certificate, students will achieve the following learning goals:

1. Demonstrate an understanding of trends, size, and scope of the medical device industry;
2. Demonstrate proficiency in oral and written communication, interpersonal skills, and critical thinking/problem solving;
3. Demonstrate an understanding of the processes involved in the design, development and manufacture of medical devices;
4. Demonstrate knowledge of various regulations and agencies involved in regulatory processes specific to the medical device industry; and
5. Demonstrate application of classroom knowledge to industry field experience.

### General Information

College-level competence in English, writing, mathematics, and computer competency should be acquired before entering the BMED programs. All BMED program requirements are offered at the Coon Rapids Campus.

### Completion Requirements

- A minimum of 12 semester credits in courses numbered 1000 or above must be completed at ARCC.
- A minimum cumulative grade point average (GPA) of 2.0 in courses numbered 1000 or above at ARCC.
- A minimum grade of C must be earned in all program requirements.
- All program requirements must be completed at ARCC.
- All courses requirements must be complete before a certificate will be awarded.
- Students must complete a Certificate Application. Certificate Applications are available online, in the Office of Records & Registration, and in the Advising Center. Submit a completed form to the Office of Records & Registration.
- The requirements of this program are subject to change without notice.

### Program Requirements: 13 credits

- BMED 1100 Introduction to Biomedical Devices and Industry.. 2
- BMED 2100 Design and Manufacturing in the Medical Device Industry..... 3
- BMED 2200 Introduction to Medical Device Regulations/Ethics 3
- BMED 2300 Introduction to Quality Assurance..... 3
- BMED 2600 Fundamentals of Dimensional Metrology ..... 2

### Additional Requirements: 6 credits

- BIOL 1102 Medical Terminology ..... 2
- BIOL 1104 The Human Body–Structure and Function..... 4

### General Education/MnTC Requirements: 10-11 credits

- ENGL 1104 **OR** ENGL 1120 **♦ OR** ENGL 1121 **♦** ..... 3-4
- CMST 1110 **OR** CMST 2215 **OR** CMST 2220 ..... 3
- MATH 1114 **♦** ..... 4

For more information about our program graduation rates, the median debt of students who completed the program, and other important information, please visit the “Gainful Employment Disclosure Report” at: [http://www.minnstate.edu/admissions/ge/anokaramsey/GEDT\\_0152\\_8224\\_1/gedt.html](http://www.minnstate.edu/admissions/ge/anokaramsey/GEDT_0152_8224_1/gedt.html).

### Program Sequence:

The sequence that follows is suggested for full-time students. Part-time students will need more time to complete this program; many courses are offered in the evening.

	Fall Semester	Spring Semester
<b>1<sup>st</sup> YEAR</b>	BMED 1100 .....2	BIOL 1102.....2
	BMED 2300.....3	BMED 2200.....3
	BIOL 1104.....4	BMED 2600.....2
	BMED 2100.....3	MATH 1114 .....4
	ENGL 1104 or 1120/1121...3-4	CMST 1110, 2215, or 2220...3
	<b>TOTAL .....15-16</b>	<b>TOTAL ..... 14</b>

♦ Course has prerequisite - see course schedule or catalog description.

^ Course requires Instructor permission.

NOTE: You are encouraged to contact an academic advisor at 763-433-1230 for course planning assistance and information about transfer credit evaluation and transfer options.