2017-2018

Biomedical Technology

Associate of Science (AS) Degree

Program Requirements 13
Additional Requirements 17
General Education/MnTC 30
Total Credits 60

Program Information

This program prepares students for entry-level positions in biomedical companies or for transfer to four-year colleges. For assistance in program planning, or to explore additional transfer options, students should schedule a time to meet with an academic advisor. This degree may transfer in part or in its entirety to baccalaureate institutions. Students should meet with a representative of the transfer institution when planning their program. The Biomedical Technology degree provides a solid foundation in science and technology as well as proficiency in problem solving, critical analysis, oral and written communication, and interpersonal skills. For additional information about our biomedical programs, visit our website at: http://www.anokaramsey.edu/BMED.

Program Goals

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

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

Developmental Courses

Some students may need preparatory courses in the areas of English, reading, or mathematics. Courses numbered below 1000 will not apply toward this degree.

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 60 semester credits in courses numbered 1000 or above.
- A minimum cumulative grade point average (GPA) of 2.0 in courses numbered 1000 or above at ARCC.
- Satisfy residency requirements. See page 27.
- A minimum grade of C must be earned in all program requirements.
- All BMED requirements must be completed at ARCC.
- Completion of specific degree requirements.
- To receive your diploma, you must apply to graduate.
- 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: 17 credits

- ☐ BIOL 1102 Medical Terminology 2
- ☐ BIOL 1104 The Human Body--Structure and Function 4
- ☐ BMED 2520♦ Technical Writing for Regulated Industries 3

OR

- ☐ ENGL 1104 Technical Writing 3
- ☐ CAOR 1102 Career Development 2

Electives

Select a minimum of 6 credits from the following:

- ☐ BIOL 2201♦ Microbiology 4
- ☐ BUS 1101 Introduction to Business 3
- ☐ BUS 1103 Human Relations in the Workplace 3

General Education/MnTC Requirements: 30 credits

Complete at least 30 credits in courses from the Minnesota Transfer Curriculum (MnTC), including all courses listed. You must complete at least one course in six of the ten goal areas. One course may satisfy more than one goal area, but the course credits may be counted only once.

- ☐ 1. Communication
  - ☐ ENGL 1120♦ ***OR*** ENGL 1121♦ 4
  - ☐ CMST 1110 ***OR*** CMST 2215 ***OR*** CMST 2220 3
- ☐ 2. Critical Thinking
- ☐ 3. Natural Science
  - ☐ BIOL 1106 4
  - ☐ CHEM 1061♦ 4
- ☐ 4. Mathematical/Logical Reasoning
  - ☐ MATH 1200♦ 3
  - ☐ MATH 1114♦ ***OR*** MATH 1201♦ 4
- ☐ 5. History/Social/Behavioral Sciences
  (Select one Psychology or Sociology course) 3-4
- ☐ 6. Humanities/Fine Arts
- ☐ 7. Human Diversity
- ☐ 8. Global Perspective
- ☐ 9. Ethical/Civic Responsibility
- ☐ 10. People and the Environment

♦ ***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.

(continued)

Biomedical Technology

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.

1st YEAR

Fall Semester		Spring Semester	
BMED 1100	2	BMED 1102	2
BMED 2100	3	BMED 2200	3
Gen. Ed. or Electives	9-11	Gen. Ed. or Electives	9-11
TOTAL	**14-16**	**TOTAL**	**14-16**

2nd YEAR

Fall Semester		Spring Semester	
BMED 2520 or ENGL 1104	3	BIOL 1104	4
BMED 2300	3	Gen. Ed. or Electives	10-12
BMED 2600	2	**TOTAL**	**14-16**
Gen. Ed. or Electives	6-8		
TOTAL	**14-16**		

♦ ***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.