

Biomedical Technologist

Associate in Science Degree

2008-2009

Program Core Requirements	15
Additional Career Requirements	15
General Education	30
Wellness Requirement	2
Total Credits	62

Program Information: This program prepares students for entry-level positions in biomedical companies or for transfer to four-year colleges, including St. Cloud State, Minnesota State University-Moorhead, and Minnesota State University-Mankato. The Biomedical Technologist 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. "Hands-on" learning is a key component, including a field experience with a local biomedical company. For additional information about our biomedical programs, visit our Web site at <http://www.AnokaRamsey.edu>.

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; 6) demonstrate application of classroom knowledge to industry field experience.

Program Admission: To apply for admission to one of the Biomedical (BMED) Programs, submit the Application for Biomedical Programs to the Records and Registration Office. Applications are available in Counseling and Advising Services or the Records and Registration Offices on either campus. All BMED Program Core courses are offered at the Coon Rapids Campus. BMED Program Core courses are also offered at Inver Hills and Normandale Community College.

General Information: College-level competence in English, writing, mathematics, and computer competency should be acquired before entering the BMED programs.

Developmental Courses: Some students may need preparatory courses in the areas of English or mathematics. Courses numbered below 1000 will not apply toward the AS degree.

Program Core Requirements	15 credits	General Education Requirements	30 credits
BMED 1100 Introduction to Biomedical Devices/Industry	2	Complete at least 30 credits in courses from the Minnesota Transfer Curriculum, <u>including all courses listed</u> . You must complete at least one course in six of the ten emphasis areas. You may select courses that meet more than one emphasis area.	
BMED 2100 Design & Manufacturing in the Medical Device Industry	3	1. Communication	
BMED 2200 Introduction to Medical Device Regulations and Ethics	3	ENGL 1121♦ College Writing and Critical Reading	4
BMED 2300 Introduction to Quality Assurance	3	SPCH 1110, 2215 or 2220	3
BMED 2297* Field Experience & Seminar	4	2. Critical Thinking	
Additional Career Requirements	15 credits	3. Natural Science	
BIOL 1102 Medical Terminology	2	BIOL 1106♦ Principles of Biology	4
BIOL 1104 The Human Body	4	CHEM 1061♦ Principles of Chemistry I	4
ENGL 1104♦ Technical Writing	3	4. Mathematical/Logical Reasoning	
Electives: Select a minimum of 6 credits from the following:		MATH 1200 College Algebra I	3
BIOL 2201♦ Microbiology	4	MATH 1201 College Algebra II and Trigonometry OR	3-4
BUS 1101 Introduction to Business	3	MATH 1110 Introductory Statistics I	
BUS 1103 Human Relations in the Workplace	3	5. History/Social/Behavioral Sciences	3-4
CAOR 1102 Career Development	2	Select one Psychology or Sociology course	
		6. Humanities/Fine Arts	
		7. Human Diversity	
		8. Global Perspective	
		9. Ethical/Civic Responsibility	
		10. People and the Environment	
		Wellness	2 credits
		Select any HPER course(s) totaling at least 2 credits.	
		♦ Course has a prerequisite.	
		*BMED 2297 Recommended that all biomedical courses be completed prior to taking BMED 2297 Field Experience & Seminar. Permission of Program Director required.	

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.

<u>First Year</u>				<u>Second Year</u>			
Fall Semester		Spring Semester		Fall Semester		Spring Semester	
BMED 1100	2	BIOL 1102	2	ENGL 1104	3	BIOL 1104	4
BMED 2200	3	BMED 2100	3	BMED 2300	3	BMED 2297	4
General Ed. or Electives	<u>9-11</u>	General Ed. or Electives	<u>9-11</u>	General Ed. or Electives	<u>8-10</u>	General Ed. or Electives	<u>6-8</u>
Total	14-16	Total	14-16	Total	14-16	Total	14-16