

# **Biomedical Engineering Technology Program**

**Information and Application Packet 2023-2024** 

#### **PROGRAM DESCRIPTION**

The Biomedical Engineering Technology (BMET) Program will prepare the student to maintain and repair medical equipment in hospitals, labs, and industry. A Biomedical Engineering Technician tests, adjusts, and repairs biomedical or electromechanical equipment used in medical therapy, diagnosis, and research. Please note the following:

- Biomedical Engineering Technology courses are offered primarily at the MEC- Manufacturing and Engineering Center in the evenings.
- The Biomedical Technology program requires that students complete two internships. Both internships take place
  off-campus and require a minimum of twenty-four (24) hours each week.
- Students who satisfactorily complete all program/college requirements qualify for an Associate of Applied Science Degree.
- The BMET Program meets the educational requirement for graduates seeking certification by the Board of Examiners for Biomedical Equipment Technicians, operating under the direction of the United States Certification Commissions (USCC) and the Advancing Safety in Health Technology (AAMI) Credentials Institute.

#### **APPLICATION REQUIREMENTS**

The Biomedical Engineering Technology (BMET) requires an application (attached to the end of this packet). This program requires students to complete a specific list of requirements before being officially admitted into the program. Students are listed in a pre-program code while the application requirements are being met. The full program start date and implementation of program code may be dependent on space availability. To be admitted to the program the student must complete the following:

1. Apply to Schoolcraft College	Apply to Schoolcraft College on-line at www.schoolcraft.edu				
2. Transcripts	It is recommended you request official undergraduate transcripts from <u>all</u> colleges and universities previously attended. Transcripts must be sent directly from the issuing college or university to Schoolcraft College. To confirm that transcripts have been received, contact the Answer Center at 734-462-4426.				
3. Academic Advising and Assessment	This program requires minimum assessment levels or course work in the areas of math, reading and writing. Students should have placement scores (Computer Placement Test, ACT, or SAT) submitted prior to meeting with an academic advisor. Students with prior college-level work or a degree may be exempt from placement testing. The Computer Placement Test (CPT) is taken in the Testing Center. ACT or SAT scores must be less than three years old.  Contact the Academic Advising at 734-462-4429 to make an appointment.				
4. College Prerequisite Coursework	Complete BIOL 105 Complete ELECT 131 Basic Human Anatomy & Physiology with a grade of 3.0 or better. Complete ELECT 137 Complete ELECT 137 Complete ELECT 138 Complete ELECT 138 Complete ELECT 139 Complete ELECT 139 Complete ELECT 130 Complete ELECT 130 Complete ELECT 130 Complete ELECT 130 Complete ELECT 180 Complete ELECT 180 Complete ELECT 215 Complete ELECT 215 Complete ELECT 215 Complete ELECT 215 Complete ELECT 210 Complet				
5. Cumulative GPA	Attain a cumulative grade point average at Schoolcraft College of <u>2.5</u> or better.				
6. Apply to Biomedical Engineering Technology Program	Meet with a Schoolcraft academic advisor. Completion of all sections of this application with signatures from academic advisor is required to be accepted into the Biomedical Engineering Technology Program.  Submit the attached Biomedical Engineering Restricted Enrollment Form to the Registration Center.				

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#### OPEN/SUPPORTING COURSES

Admission to the Biomedical Engineering Technology Program is not necessary to register for the courses listed below. The following courses are open to all Schoolcraft students who have met the course prerequisite (see the College Catalog).

**ENG 101 English Composition 1** 

ENG 102 or 116 English Composition 2 or Technical Writing

**Humanities** See online Catalog for General Education Humanities (COMA 103 Fundamentals of Speech Recommended)

**MATH 102** Technical Mathematics

See online Catalog for Social Sciences Options **Social Sciences** (PSYCH 153 Human Relations Recommended)

2 Electives See online Catalog for BMET Program Elective

#### REGISTRATION PROCEDURE

After acceptance into the Biomedical Engineering Technology Program, BMET students require official authorization to register for BMET courses. Additional detailed information is available from the Occupational Program's Office (734-462-7020), located in the Manufacturing & Engineering Center (MEC), Room 200. An authorization to register is only issued upon completion of the following requirement:

■ Maintain a cumulative grade point average of 2.5 or better

## INTERNSHIP REQUIREMENT

Based on the location of your internship some or all of the following may be required:

- 1. Some internship sites may require physical exams and/or drug tests prior to selection for an internship. Physical and test expires after 12 months. Drug screens may need to be repeated throughout the program as required by internship locations. Marijuana use is prohibited.
- 2. Reference Check
- 3. Photo ID- Original and photocopy of your valid Driver's License or State ID or other photo ID, if neither is available.
- 4. Immunization- Documentation of Measles, Mumps, and Rubella (MMR) Immunization (if you were born after 1956), documentation of negative TB test within the past six months or a recent chest X-ray, and a Health/Medical Insurance card (if applicable). If needed, a TB test will be provided at the time of the interview. Covid-19 Vaccination or other vaccinations as required by federal, state, or clinical agency guidelines. NOTE: Subject to permitted internship site medical/religious exemptions.

Please note: Individuals who have a felony conviction in their past are likely to have difficulty securing employment in the Biomedical Technology field.

### ESTIMATE OF TUITION AND FEES

## BIOMEDICAL ENGINEERING TECHNOLOGY PROGRAM (Based on 68 Credits)

	Resident	Non-Resident	Out of State
Tuition:	\$9,180.00	\$13,192.00	\$18,224.00
Registration Fees:	\$264.00	\$264.00	\$264.00
Service Fee:	\$612.00	\$612.00	\$612.00
Instructional/Equipment Fees:	\$748.00	\$748.00	\$748.00
Infrastructure Fee:	\$612.00	\$612.00	\$612.00
Course and Learning Management Fee:	\$636.00	\$636.00	\$636.00
TOTAL:	\$12,052.00	\$16,064.00	\$21,096.00

The above figures are based on 2023-2024 rates and are subject to change. A Resident student is one whose legal residence is in the school districts of Clarenceville, Garden City, Livonia, Northville, Plymouth-Canton, or parts of Novi. All other students are Non-Residents or Out-of-State.

Estimate of tuition and fees does not include the cost of textbooks

#### NOTE

Requirements for admission to the Biomedical Engineering Technology Program are subject to change at any time. Please contact the Admissions and Welcome Center for updates of any applicable changes.

Phone: 734-462-4683 Fax: 734-462-4552 Email: admissions@schoolcraft.edu Web: www.schoolcraft.edu

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# **Biomedical Engineering Technology**

Restricted Enrollment Application 2023-2024

This application is required for the Biomedical Engineering Technology Program.

- 1) Are admitted to Schoolcraft College.
- 2) Review and meet all requirements on this application. Program requirements are subject to change.
- 3) Submit appropriate transcripts and complete assessment requirement unless exempt.
- 4) Meet with an academic advisor to review your progress toward meeting program requirements and to obtain appropriate signatures.
- 5) Completion of <u>all</u> sections of this application with signatures from an academic advisor is required to be accepted into the Biomedical Engineering Technology program and submit a Restricted Enrollment Program Change Form to the Registration Center. Applications are accepted on a continuous basis.

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	Last (Family Nar	me)		First	Middle	F	ormer (If Applicable)
Address							
	Number	Street	Apt.	City		State	Zip + 4 Digit Code
ay Phone	_(	)		_ Evening P	Phone	( )	
mail				Birth Date	)		
				_	_	M	onth / Day
Student Number			_ Social Sec	curity Number			
						L	ast 4 Digits

# THE ITEMS IN SECTION II ARE REQUIRED. MEET WITH AN ACADEMIC ADVISOR TO OBTAIN APPROPRIATE SIGNATURES BEFORE APPLYING TO THE PROGRAM.

**Part A: ASSESSMENT TESTING** Take an assessment test unless you are exempt (approved by an academic advisor. Assessment Test Scores are valid for up to three years.

		Academic Advisor	
Student:		Signature	Date
	has taken assessment test or $\Rightarrow$		
	is exempt from assessment.		

Minimum Scores:	CPT	NGA	ACT	SAT (March 2016)	Overall HS GPA
English/Writing	71 +	250	18 +	25+	1.8+
Reading	70 +	250	18 +	25+	1.8+
Math	78 +	AR=270 or QRAS=250	19 +	25+	2.8+

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		Test Score or	Academic Advisor	
Student:		Course	Signature	Date
	has successfully completed ENG or higher with a <u>2.0/C</u> or better			
	has successfully completed COLLS 3 or higher with a <u>2.0/C</u> or better	5		
	has successfully completed MATH 3 or higher with a <u>2.0/C</u> or better			
	lent. Complete Basic Human Ar lent college course to satisfy thi		gy with a grade of 3.0.	/B or better.
Student:			Academic Adviso	or Date
	ed BIOL 105	completed	Signature	Date
(3.0/B or better) or ⇒				
	with a grade of			
				l .
Part D: ELECT 131 Complet	e Basic Measurement & Report	ting Skills or equiva	alent (pending testing)	with a grade
of 2.5 or better within 5 years	of application to the program.			
Student:			Academic Advis Signature	or Date
☐ has successfully complete		completed	Signature	
	\	completed	Signature -	
□ has successfully complete ELECT 131 (2.5/C or bette	er) or ⇒ at		Signature -	
□ has successfully complete ELECT 131 (2.5/C or bette Semester	er) or ⇒ at with a grade of		Signature -	
□ has successfully complete ELECT 131 (2.5/C or bette	at with a grade of □ has successfully p	passed Schoolcraft	Signature -	
□ has successfully complete ELECT 131 (2.5/C or bette Semester	er) or ⇒ at with a grade of	passed Schoolcraft	Signature -	
has successfully complete ELECT 131 (2.5/C or bette  Semester  Grade	er) or ⇒ at with a grade of □ has successfully p College electroni e DC Circuits & Mathematical N	passed Schoolcraft c exam	Signature	Date
has successfully complete ELECT 131 (2.5/C or bette Semester Grade Part E: ELECT 137 Complete of 2.5 or better within 5 years	er) or ⇒ at with a grade of □ has successfully p College electroni e DC Circuits & Mathematical N	passed Schoolcraft c exam	Signature  Signature  Academic Advisor	Date  with a grade
has successfully complete ELECT 131 (2.5/C or bette Semester  Grade  Part E: ELECT 137 Complete	er) or ⇒ atwith a grade of  with a grade of  has successfully properties and the college electronic ended by the college electronic ended electronic electronic ended electronic electron	passed Schoolcraft c exam Modeling or equival	Signature  Signature  Academic Advisor Signature	Date
has successfully complete ELECT 131 (2.5/C or bette Semester Grade  Part E: ELECT 137 Complete of 2.5 or better within 5 years  Student:	er) or ⇒ at with a grade of has successfully processed to the program.  The process of the program of application to the program.  The process of the program of the program of the program of the program of the program.	passed Schoolcraft c exam  Modeling or equival	Signature  Signature  Academic Advisor Signature	Date  with a grade
□ has successfully complete ELECT 131 (2.5/C or bette  Semester  Grade  Part E: ELECT 137 Complete of 2.5 or better within 5 years  Student: □ has successfully complete ELECT 137 (2.5 or better)	er) or ⇒ at	passed Schoolcraft c exam  Modeling or equival completed	Signature  Signature  Academic Advisor Signature	Date  with a grade
□ has successfully complete ELECT 131 (2.5/C or bette  Semester  Grade  Part E: ELECT 137 Complete of 2.5 or better within 5 years  Student: □ has successfully complete ELECT 137 (2.5 or better)  Semester	er) or ⇒ at	passed Schoolcraft c exam Modeling or equival	Signature  Signature  Academic Advisor Signature	Date  with a grade
□ has successfully complete ELECT 131 (2.5/C or bette  Semester  Grade  Part E: ELECT 137 Complete of 2.5 or better within 5 years  Student: □ has successfully complete ELECT 137 (2.5 or better)	er) or ⇒ at	passed Schoolcraft c exam  Modeling or equival completed	Signature  Signature  Academic Advisor Signature	Date  with a grade
□ has successfully complete ELECT 131 (2.5/C or bette  Semester  Grade  Part E: ELECT 137 Complete of 2.5 or better within 5 years  Student: □ has successfully complete ELECT 137 (2.5 or better)  Semester	er) or ⇒ at	passed Schoolcraft c exam  Modeling or equival completed	Signature  Signature  Academic Advisor Signature	Date  with a grade
□ has successfully complete ELECT 131 (2.5/C or bette  Semester  Grade  Part E: ELECT 137 Complete of 2.5 or better within 5 years  Student: □ has successfully complete ELECT 137 (2.5 or better)  Semester	er) or ⇒ at	passed Schoolcraft c exam  Modeling or equival completed	Signature  Signature  Academic Advisor Signature	Date  with a grade

Part B: PROFICIENCY Attain the minimum Assessment Scores listed above or successfully complete

appropriate developmental courses to improve your skills.

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of 2.5 or better within 5 years of application to the program. Academic Advisor Student: Date Signature ☐ has successfully completed ☐ has successfully completed ELECT 138 (2.5 or better) or  $\Rightarrow$ with a grade of Semester ☐ has successfully passed Schoolcraft Grade College electronic exam Part G: ELECT 139 Complete Diodes & Transistors or equivalent (pending testing) with a grade of 2.5 or better within 5 years of application to the program. Academic Advisor Student: Signature Date ☐ has successfully completed ☐ has successfully completed \_\_\_\_\_ ELECT 139 (2.5 or better) or  $\Rightarrow$ with a grade of \_\_\_\_\_ Semester\_\_\_\_ ☐ has successfully passed Schoolcraft Grade College electronic exam Part H: ELECT 180 Lab VIEW Programming CORE 1 and 2 or equivalent (pending testing) with a grade of 2.5 or better within 5 years of application to the program. Academic Advisor Student: Date Signature ☐ has successfully completed ☐ has successfully completed \_\_\_\_\_ ELECT 180 (2.5 or better) or  $\Rightarrow$ with a grade of \_\_\_\_ Semester ☐ has successfully passed Schoolcraft Grade College electronic exam Part I: ELECT 215 Complete Operational Amplifiers & Linear Integrated Circuits or equivalent (pending testing) with a grade of 2.5 or better within 5 years of application to the program. Academic Advisor Student: Date Signature ☐ has successfully completed ☐ has successfully completed ELECT 215 (2.5 or better) or  $\Rightarrow$ with a grade of Semester ☐ has successfully passed Schoolcraft Grade College electronic exam

Part F: ELECT 138 Complete AC Circuits & Mathematical Modeling or equivalent (pending testing) with a grade

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**Part J: ELECT 219** (formerly ELECT 226) Complete Digital Logic Circuits or equivalent (pending testing) with a grade of 2.5 or better within 5 years of application to the program.

Student:		Academic Advisor Signature	Date
☐ has successfully completed	☐ has successfully completed	3	
ELECT 219 (2.5 or better) or $\Rightarrow$	at		
Semester	with a grade of		
Grade	☐ has successfully passed Schoolcraft		
	College electronic exam.		
Part K: CUMULATIVE COLLEGE GF average.	PA Attain a 2.5 or better Schoolcraft College	cumulative grade point	
Student:		Academic Advisor Signature	Date
☐ Student has a cumulative GPA of 2.	5/C or better.	Signature	Date
☐ Student not yet established a GPA a	at Schoolcraft College.		
Section III: Ap	plication to be signed by an Academi	c Advisor	
	-		
<b>X</b>			
Academic Advisor Signature	2	Date	<b>;</b>