Biomedical Engineering Technology Program
Information and Application Packet 2022-2023

PROGRAM DESCRIPTION

The Biomedical Engineering Technology (BMET) Program will prepare the student to maintain and repair medical equipment in hospital, 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). 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 all 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 — Basic Human Anatomy & Physiology with a grade of 3.0 or better. Complete ELECT 131 — Basic Measurement & Reporting Skills with a grade of 2.5 or better. Complete ELECT 137 — DC Circuits & Mathematical Modeling with a grade of 2.5 or better. Complete ELECT 138 — AC Circuits & Mathematical Modeling with a grade of 2.5 or better. Complete ELECT 139 — *Diodes & Transistors* with a grade of 2.5 or better. Complete ELECT 180 — Lab VIEW Programming CORE 1 and 2 with a grade of 2.5 or better. Complete ELECT 215 — Operational Amplifiers & Linear Integrated Circuits with a grade of 2.5 or better. Complete ELECT 219 — *Digital Logic Circuits* with a grade of 2.5 or better. Time Limits: All Electronic transfer courses and Schoolcraft College Electronic courses completed over 5 years prior to program application require testing for credit.
5. Cumulative GPA	Attain a cumulative grade point average at Schoolcraft College of 2.5 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.

OPEN/SUPPORTING COURSES

Admission to the Biomedical Engineering Technology Program is <u>not</u> 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*
Social Sciences	*See online Catalog for Social Sciences Options*
	(*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:	$ 8,908.00	$12,784.00	$18,020.00
Registration Fees:	$ 258.00	$ 258.00	$ 258.00
Service Fee:	$ 544.00	$ 544.00	$ 544.00
Instructional/Equipment Fees:	$ 680.00	$ 680.00	$ 680.00
Infrastructure Fee:	$ 544.00	$ 544.00	$ 544.00
Course Fees:	$ 609.00	$ 609.00	$ 609.00
TOTAL:	**$11,543.00**	**$15,419.00**	**$20,655.00**
The above figures are based on 2022-2023 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
E-mail: admissions@schoolcraft.edu
Web: www.schoolcraft.edu

Biomedical Engineering Technology
Restricted Enrollment Application 2022-2023

Schoolcraft College

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 all 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.

Section I: To be completed by student

Demographic information on this application must match the information on record in the Registrar's Office at Schoolcraft College.

Name _____
Last (Family Name)   First   Middle   Former (If Applicable)

Address _____
Number   Street   Apt.   City   State   Zip + 4 Digit Code

Day Phone (____) _____   **Evening Phone** (____) _____

Email _____   **Birth Date** _____
                                                                                    Month / Day

Student Number _____   **Social Security Number** _____
                                                                                    Last 4 Digits

It is the policy of Schoolcraft College that no person shall, on the basis of race, color, national origin, gender, age, marital status, creed, or handicap, be excluded from participating in, be denied the benefits of, or be subjected to discrimination during any program or activity or in employment.

Section II: To be completed with academic advisor

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.*

Student:

☐ has taken assessment test or ⇒

☐ is exempt from assessment.

Academic Advisor Signature	Date

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

Part B: PROFICIENCY Attain *the minimum Assessment Scores listed above or successfully complete appropriate developmental courses to improve your skills.*

Student:

		Test Score or Course	Academic Advisor Signature	Date
☐ has met minimum **English** score or ⇒	☐ has successfully completed ENG 055 or higher with a 2.0/C or better			
☐ has met minimum **reading** score or ⇒	☐ has successfully completed COLLS 053 or higher with a 2.0/C or better			
☐ has met minimum **math** score or ⇒	☐ has successfully completed MATH 053 or higher with a 2.0/C or better			

Part C: BIOL 105 or equivalent. *Complete Basic Human Anatomy & Physiology with a grade of 3.0/B or better. You may complete an equivalent college course to satisfy this requirement.*

Student:

		Academic Advisor Signature	Date
☐ has successfully completed BIOL 105 (3.0/B or better) or ⇒	☐ has successfully completed _____ at_____ with a grade of _____		

Part D: ELECT 131 *Complete Basic Measurement & Reporting Skills or equivalent (pending testing) with a grade of 2.5 or better within 5 years of application to the program.*

Student:

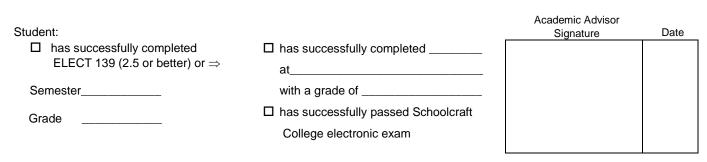|		Academic Advisor Signature	Date
☐ has successfully completed ELECT 131 (2.5/C or better) or ⇒ Semester_____ Grade _____	☐ has successfully completed _____ at_____ with a grade of _____ ☐ has successfully passed Schoolcraft College electronic exam		

Part E: ELECT 137 *Complete DC Circuits & Mathematical Modeling 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 ELECT 137 (2.5 or better) or ⇒ Semester_____ Grade _____	☐ has successfully completed _____ at_____ with a grade of _____ ☐ has successfully passed Schoolcraft College electronic exam		

3/11/2022

Part F: ELECT 138 *Complete AC Circuits & Mathematical Modeling or equivalent (pending testing) with a grade of 2.5 or better within 5 years of application to the program.*

Student:

☐ has successfully completed
ELECT 138 (2.5 or better) or ⇒

Semester_____

Grade   _____

☐ has successfully completed _____
at_____

with a grade of _____

☐ has successfully passed Schoolcraft
College electronic exam

Academic Advisor
Signature   Date

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.*

Student:

☐ has successfully completed
ELECT 139 (2.5 or better) or ⇒

Semester_____

Grade   _____

☐ has successfully completed _____
at_____

with a grade of _____

☐ has successfully passed Schoolcraft
College electronic exam

Academic Advisor
Signature   Date

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.*

Student:

☐ has successfully completed
ELECT 180 (2.5 or better) or ⇒

Semester_____

Grade   _____

☐ has successfully completed _____
at_____

with a grade of _____

☐ has successfully passed Schoolcraft
College electronic exam

Academic Advisor
Signature   Date

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.*

Student:

☐ has successfully completed
ELECT 215 (2.5 or better) or ⇒

Semester_____

Grade   _____

☐ has successfully completed _____
at_____

with a grade of _____

☐ has successfully passed Schoolcraft
College electronic exam

Academic Advisor
Signature   Date

3/11/2022

> **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:

☐ has successfully completed ELECT 219 (2.5 or better) or ⇒

Semester_____

Grade _____

☐ has successfully completed _____

at_____

with a grade of _____

☐ has successfully passed Schoolcraft College electronic exam

Academic Advisor Signature	Date

> **Part K: CUMULATIVE COLLEGE GPA** Attain *a 2.5 or better Schoolcraft College cumulative grade point average.*

Student:

☐ Student has a cumulative GPA of 2.5/C *or better.*

☐ Student not yet established a GPA at Schoolcraft College.

Academic Advisor Signature	Date

Section III: Application to be signed by an Academic Advisor

✖_____

Academic Advisor Signature   Date

3/11/2022