

### 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:

- Twenty (20) new students will be admitted each fall semester.
- Biomedical Engineering Technology courses are offered primarily at the Livonia campus 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 International Certification Commission (ICC) for Clinical Engineering and Biomedical Technology.

### 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:

|  |   |                   |  |                    |  |                    |   |                    |   |                    |   |                    |   |                    |   |
|--|---|-------------------|--|--------------------|--|--------------------|---|--------------------|---|--------------------|---|--------------------|---|--------------------|---|
| <b>1. Apply to Schoolcraft College</b>                       | Apply to Schoolcraft College on-line at <a href="http://www.schoolcraft.edu">www.schoolcraft.edu</a>  |                   |  |                    |  |                    |   |                    |   |                    |   |                    |   |                    |   |
| <b>2. Transcripts</b>  | 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.   |                   |  |                    |  |                    |   |                    |   |                    |   |                    |   |                    |   |
| <b>3. Counseling and Assessment</b>                          | This program requires minimum assessment levels or course work in the areas of math, reading and writing. Students should meet with an academic advisor or counselor to develop an academic plan to determine if an assessment test is necessary and if foundation courses are needed. Students with prior college level work or a degree may be exempt from placement testing. Students who have submitted ACT scores that are less than three years old to the Admissions and Welcome Center may also be exempt from assessment testing.<br><br>Contact the Counseling Center at 734-462-4429 to make an appointment.   |                   |  |                    |  |                    |   |                    |   |                    |   |                    |   |                    |   |
| <b>4. College Prerequisite Coursework</b>                    | <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Complete BIOL 105</td> <td>Basic Human Anatomy &amp; Physiology with a grade of <u>3.0</u> or better.</td> </tr> <tr> <td>Complete ELECT 131</td> <td>Basic Measurement &amp; Reporting Skills with a grade of <u>2.5</u> or better.</td> </tr> <tr> <td>Complete ELECT 137</td> <td>DC Circuits &amp; Mathematical Modeling with a grade of <u>2.5</u> or better.</td> </tr> <tr> <td>Complete ELECT 138</td> <td>AC Circuits &amp; Mathematical Modeling with a grade of <u>2.5</u> or better.</td> </tr> <tr> <td>Complete ELECT 139</td> <td><i>Diodes &amp; Transistors</i> with a grade of <u>2.5</u> or better.</td> </tr> <tr> <td>Complete ELECT 215</td> <td>Operational Amplifiers &amp; Linear Integrated Circuits with a grade of <u>2.5</u> or better.</td> </tr> <tr> <td>Complete ELECT 219</td> <td><i>Digital Logic Circuits</i> with a grade of <u>2.5</u> or better.</td> </tr> </table> <p>Time Limits: All Electronic transfer courses and Schoolcraft College Electronic courses completed over 5 years prior to program application require testing for credit.</p> | Complete BIOL 105 | Basic Human Anatomy & Physiology with a grade of <u>3.0</u> or better. | Complete ELECT 131 | Basic Measurement & Reporting Skills with a grade of <u>2.5</u> or better. | Complete ELECT 137 | DC Circuits & Mathematical Modeling with a grade of <u>2.5</u> or better. | Complete ELECT 138 | AC Circuits & Mathematical Modeling with a grade of <u>2.5</u> or better. | Complete ELECT 139 | <i>Diodes &amp; Transistors</i> with a grade of <u>2.5</u> or better. | Complete ELECT 215 | Operational Amplifiers & Linear Integrated Circuits with a grade of <u>2.5</u> or better. | Complete ELECT 219 | <i>Digital Logic Circuits</i> with a grade of <u>2.5</u> or better. |
| Complete BIOL 105  | Basic Human Anatomy & Physiology with a grade of <u>3.0</u> or better.  |                   |  |                    |  |                    |   |                    |   |                    |   |                    |   |                    |   |
| Complete ELECT 131   | Basic Measurement & Reporting Skills with a grade of <u>2.5</u> or better.  |                   |  |                    |  |                    |   |                    |   |                    |   |                    |   |                    |   |
| Complete ELECT 137   | DC Circuits & Mathematical Modeling with a grade of <u>2.5</u> or better.   |                   |  |                    |  |                    |   |                    |   |                    |   |                    |   |                    |   |
| Complete ELECT 138   | AC Circuits & Mathematical Modeling with a grade of <u>2.5</u> or better.   |                   |  |                    |  |                    |   |                    |   |                    |   |                    |   |                    |   |
| Complete ELECT 139   | <i>Diodes &amp; Transistors</i> with a grade of <u>2.5</u> or better.   |                   |  |                    |  |                    |   |                    |   |                    |   |                    |   |                    |   |
| Complete ELECT 215   | Operational Amplifiers & Linear Integrated Circuits with a grade of <u>2.5</u> or better.   |                   |  |                    |  |                    |   |                    |   |                    |   |                    |   |                    |   |
| Complete ELECT 219   | <i>Digital Logic Circuits</i> with a grade of <u>2.5</u> or better.   |                   |  |                    |  |                    |   |                    |   |                    |   |                    |   |                    |   |
| <b>5. Cumulative GPA</b>                                     | Attain a cumulative grade point average at Schoolcraft College of <u>2.5</u> or better.   |                   |  |                    |  |                    |   |                    |   |                    |   |                    |   |                    |   |
| <b>6. Apply to Biomedical Engineering Technology Program</b> | Meet with a Schoolcraft academic advisor or counselor. Completion of all sections of this application with signatures from academic advisor/counselor is required to be accepted into the Biomedical Engineering Technology Program.  |                   |  |                    |  |                    |   |                    |   |                    |   |                    |   |                    |   |

## **APPLICATION PROCESS**

1. The order of acceptance of qualified applicants is based on the date the College receives a valid Biomedical Engineering Technology Program application. Applications are received and processed on an on-going basis.  
For the purpose of fairness, applications received at the end of each semester will be held for three business days after final grades are available and then will be dated received.
2. In the event that more than one qualified student applies on the same day, the order of acceptance will be based on the student's cumulative grade point average at Schoolcraft College and then by residency if needed.
3. When the maximum number of qualified applicants has been accepted, students will be considered for acceptance into the next available semester.
4. Applications received from non-qualified students are returned and may be resubmitted after the application requirements are complete.

## **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).

|                        |   |
|------------------------|---|
| <b>ELECT 180</b>       | <i>LabVIEW Programming CORE 1 and 2</i>                                       |
| <b>ENG 101</b>         | <i>English Composition 1</i>  |
| <b>ENG 102 or 116</b>  | <i>English Composition 2 or Technical Writing</i>                             |
| <b>HUM 106</b>         | <i>Introduction to Art and Music</i>  |
| <b>MATH 111 or 113</b> | <i>Applications-Utility Math or Intermediate Algebra for College Students</i> |
| <b>Social Sciences</b> | <i>See online Catalog for Social Sciences Options</i>                         |
| <b>2 Electives</b>     | <i>See online Catalog for See BMET Program Elective</i>                       |

## **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 (734-462-4530), located in the Applied Science Building, Room 581. 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.
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.

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**

| <b>BIOMEDICAL ENGINEERING TECHNOLOGY PROGRAM (Based on 68 Credits)</b> |                   |                     |                     |
|--|-------------------|---------------------|---------------------|
|  | <b>Resident</b>   | <b>Non-Resident</b> | <b>Out-of State</b> |
| Tuition:   | \$6,936.00        | \$10,064.00         | \$14,824.00         |
| Registration Fees:   | \$258.00          | \$258.00            | \$258.00            |
| Service Fee:   | \$476.00          | \$476.00            | \$476.00            |
| Instructional/Equipment Fees:  | \$612.00          | \$612.00            | \$612.00            |
| Infrastructure Fee:  | \$476.00          | \$476.00            | \$476.00            |
| Course Fees:   | \$700.00          | \$700.00            | \$700.00            |
| <b>TOTAL:</b>  | <b>\$9,458.00</b> | <b>\$12,586.00</b>  | <b>\$17,346.00</b>  |

The above figures are based on 2016-2017 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.  
Estimation 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](mailto:admissions@schoolcraft.edu)

Web: [www.schoolcraft.edu](http://www.schoolcraft.edu)

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/counselor 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 or counselor is required to be accepted into the Biomedical Engineering Technology program. 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/counselor**

**THE ITEMS IN SECTION II ARE REQUIRED. MEET WITH AN ACADEMIC ADVISOR OR COUNSELOR 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 or counselor). Assessment Test scores are valid for up to three years.

Student:

has taken assessment test or ⇒

is exempt

Counselor or Academic  
Advisor Signature

Date

|  |  |
|--|--|
|  |  |
|--|--|

**Part B: PROFICIENCY** Attain the minimum Assessment Scores listed below or successfully complete appropriate developmental courses to improve your skills. Assessment Test Scores and/or ACT Scores are valid for up to three years.

| Minimum Scores:      | CPT     | ACT | new SAT(March 2016) |
|----------------------|---------|-----|---------------------|
| Writing              | 71 +    | 18+ | 25+                 |
| Reading              | 70 +    | 18+ | 25+                 |
| Numerical/Arithmetic | 75/78 + | 19+ | 25+                 |

| Student:  | Test Score or Course   | Counselor or Academic Advisor Signature | Date |
|---|--|---|------|
| <input type="checkbox"/> has met minimum <b>English</b> score or ⇒<br><input type="checkbox"/> has met minimum <b>reading</b> score or ⇒<br><input type="checkbox"/> has met minimum <b>math</b> score or ⇒ | <input type="checkbox"/> has successfully completed ENG 055 with a <u>2.0/C</u> or better<br><input type="checkbox"/> has successfully completed COLLS 053 with a <u>2.0/C</u> or better<br><input type="checkbox"/> has successfully completed MATH 053 with a <u>2.0/C</u> 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:  | Counselor or Academic Advisor Signature | Date |
|---|---|------|
| <input type="checkbox"/> has successfully completed BIOL 105 (3.0/B or better) or ⇒<br><input type="checkbox"/> has successfully completed _____ at _____ with a grade of _____ |   |      |

**Part D: ELECT 131 (formerly ELECT 119)** 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:  | Counselor or Academic Advisor Signature  | Date |
|---|--|------|
| <input type="checkbox"/> has successfully completed ELECT 131 (2.5/C or better) or ⇒<br>Semester _____<br>Grade _____ | <input type="checkbox"/> has successfully completed _____ at _____ with a grade of _____<br><input type="checkbox"/> has successfully passed Schoolcraft College electronic exam |      |

**Part E: ELECT 137 (formerly ELECT 127)** 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:  | Counselor or Academic Advisor Signature  | Date |
|---|--|------|
| <input type="checkbox"/> has successfully completed ELECT 137 (2.5 or better) or ⇒<br>Semester _____<br>Grade _____ | <input type="checkbox"/> has successfully completed _____ at _____ with a grade of _____<br><input type="checkbox"/> has successfully passed Schoolcraft College electronic exam |      |

**Part F: ELECT 138** (formerly ELECT 128) 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:<br><input type="checkbox"/> has successfully completed ELECT 138 (2.5 or better) or ⇒<br>Semester _____<br>Grade _____ | <input type="checkbox"/> has successfully completed _____ at _____ with a grade of _____<br><input type="checkbox"/> has successfully passed Schoolcraft College electronic exam | Counselor or Academic<br>Advisor Signature      Date |
|   |  |  |

**Part G: ELECT 139** (formerly ELECT 129) Complete Diodes & Transistors or equivalent (pending testing) with a grade of 2.5 or better within 5 years of application to the program.

|   |  |  |
|---|--|--|
| Student:<br><input type="checkbox"/> has successfully completed ELECT 139 (2.5 or better) or ⇒<br>Semester _____<br>Grade _____ | <input type="checkbox"/> has successfully completed _____ at _____ with a grade of _____<br><input type="checkbox"/> has successfully passed Schoolcraft College electronic exam | Counselor or Academic<br>Advisor Signature      Date |
|   |  |  |

**Part H: ELECT 215** (formerly ELECT 206) 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:<br><input type="checkbox"/> has successfully completed ELECT 215 (2.5 or better) or ⇒<br>Semester _____<br>Grade _____ | <input type="checkbox"/> has successfully completed _____ at _____ with a grade of _____<br><input type="checkbox"/> has successfully passed Schoolcraft College electronic exam | Counselor or Academic<br>Advisor Signature      Date |
|   |  |  |

**Part I: 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:<br><input type="checkbox"/> has successfully completed ELECT 219 (2.5 or better) or ⇒<br>Semester _____<br>Grade _____ | <input type="checkbox"/> has successfully completed _____ at _____ with a grade of _____<br><input type="checkbox"/> has successfully passed Schoolcraft College electronic exam | Counselor or Academic<br>Advisor Signature      Date |
|   |  |  |

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

|   |  |
|---|--|
| Student:<br><input type="checkbox"/> Student has a cumulative GPA of 2.5/C or better.<br><br><input type="checkbox"/> Student not yet established a GPA at Schoolcraft College. | Counselor or Academic<br>Advisor Signature      Date |
|   |  |

**Section III: Application to be signed by student**

**X**

Applicant Signature

Date

**RETURN TO:**

Admissions and Welcome Center  
McDowell Center  
Schoolcraft College  
18600 Haggerty Road  
Livonia, MI 48152-2696

Phone: 734-462-4683  
Fax: 734-462-4552

**DATE RECEIVED:**