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:

<table>
<thead>
<tr>
<th>1. Apply to Schoolcraft College</th>
<th>Apply to Schoolcraft College on-line at <a href="http://www.schoolcraft.edu">www.schoolcraft.edu</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Transcripts</td>
<td>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.</td>
</tr>
<tr>
<td>3. Academic Advising and Assessment</td>
<td>This program requires minimum assessment levels or coursework 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.</td>
</tr>
<tr>
<td>4. College Prerequisite Coursework</td>
<td>Complete BIOL 105 Basic Human Anatomy &amp; Physiology with a grade of 3.0 or better. Complete ELECT 131 Basic Measurement &amp; Reporting Skills with a grade of 2.5 or better. Complete ELECT 137 DC Circuits &amp; Mathematical Modeling with a grade of 2.5 or better. Complete ELECT 138 AC Circuits &amp; Mathematical Modeling with a grade of 2.5 or better. Complete ELECT 139 Diodes &amp; 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 &amp; 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.</td>
</tr>
<tr>
<td>5. Cumulative GPA</td>
<td>Attain a cumulative grade point average at Schoolcraft College of 2.5 or better.</td>
</tr>
<tr>
<td>6. Apply to Biomedical Engineering Technology Program</td>
<td>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.</td>
</tr>
</tbody>
</table>
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).

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 101</td>
<td>English Composition 1</td>
</tr>
<tr>
<td>ENG 102 or 116</td>
<td>English Composition 2 or Technical Writing</td>
</tr>
<tr>
<td>Humanities</td>
<td>See online Catalog for General Education Humanities</td>
</tr>
<tr>
<td>(COMA 103 Fundamentals of Speech Recommended)</td>
<td></td>
</tr>
<tr>
<td>MATH 102</td>
<td>Technical Mathematics</td>
</tr>
<tr>
<td>Social Sciences</td>
<td>See online Catalog for Social Sciences Options</td>
</tr>
<tr>
<td>(PSYCH 153 Human Relations Recommended)</td>
<td></td>
</tr>
<tr>
<td>2 Electives</td>
<td>See online Catalog for BMET Program Elective</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>BIOMEDICAL ENGINEERING TECHNOLOGY PROGRAM (Based on 68 Credits)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident</td>
</tr>
<tr>
<td>----------</td>
</tr>
<tr>
<td>Tuition:</td>
</tr>
<tr>
<td>Registration Fees:</td>
</tr>
<tr>
<td>Service Fee:</td>
</tr>
<tr>
<td>Instructional/Equipment Fees:</td>
</tr>
<tr>
<td>Infrastructure Fee:</td>
</tr>
<tr>
<td>Course Fees:</td>
</tr>
<tr>
<td>TOTAL:</td>
</tr>
</tbody>
</table>

The above figures are based on 2020-2021 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

2/10/2021
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.

<table>
<thead>
<tr>
<th>Minimum Scores:</th>
<th>CPT</th>
<th>NGA</th>
<th>ACT</th>
<th>SAT (March 2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>English/Writing</td>
<td>71+</td>
<td>250</td>
<td>18+</td>
<td>25+</td>
</tr>
<tr>
<td>Reading</td>
<td>70+</td>
<td>250</td>
<td>18+</td>
<td>25+</td>
</tr>
<tr>
<td>Math</td>
<td>78+</td>
<td>AR=270 or QRAS=250</td>
<td>19+</td>
<td>25+</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Student:</th>
<th>Test Score or Course</th>
<th>Academic Advisor Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ has met minimum <strong>English</strong> score or ⇒ 055 or higher with a 2.0/C or better</td>
<td>☐ has successfully completed ENG 055 or higher with a 2.0/C or better</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ has met minimum <strong>reading</strong> score or ⇒ 053 or higher with a 2.0/C or better</td>
<td>☐ has successfully completed COLLS 053 or higher with a 2.0/C or better</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ has met minimum <strong>math</strong> score or ⇒ 053 or higher with a 2.0/C or better</td>
<td>☐ has successfully completed MATH 053 or higher with a 2.0/C or better</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Student:</th>
<th>Academic Advisor Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ has successfully completed BIOL 105 (3.0/B or better) or ⇒</td>
<td>☐ has successfully completed ________ at____________________________ with a grade of __________________</td>
<td></td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Student:</th>
<th>Academic Advisor Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ has successfully completed ELECT 131 (2.5/C or better) or ⇒</td>
<td>☐ has successfully completed ________ at____________________________ with a grade of __________________</td>
<td></td>
</tr>
<tr>
<td>Semester__________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade ____________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ has successfully passed Schoolcraft College electronic exam</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Student:</th>
<th>Academic Advisor Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐ has successfully completed ELECT 137 (2.5 or better) or ⇒</td>
<td>☐ has successfully completed ________ at____________________________ with a grade of __________________</td>
<td></td>
</tr>
<tr>
<td>Semester__________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade ____________</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☐ has successfully passed Schoolcraft College electronic exam</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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
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

x

Academic Advisor Signature Date

Application page 4 of 4