# MECHATRONICS ENGINEERING TECHNOLOGY

## Overview

**Degrees Offered:** BAS
**Limited Enrollment:** Yes
**Program Begins:** Fall
**Delivery Method:** On Campus
**Phone:** 701-224-5651 • 800-852-5685
**Email:** bsc.aeat@bismarckstate.edu

## Description

The Mechatronics Engineering Technology (MET) program is an interdisciplinary technical branch of engineering that focuses on electrical and mechanical systems combining electronics, programming, communications, systems, control, and product engineering.

This degree prepares graduates to work with smart devices that incorporate mechanical, electrical, computer and software components, such as robots, automated guided systems, and computer-integrated manufacturing equipment. As industry advances and the complexity of technical systems continues to evolve, there is a need for qualified individuals to design and develop components and parts to produce safe and efficient automated equipment.

With an emphasis on hands-on learning, courses are both classroom and lab-based. Students gain real-world technical skills in state-of-the-art labs. In addition, students are required to complete cooperative education experiences where they work in an industry setting. Students gain valuable real-world experience and begin building their professional network.

## Preparation

This program is designed to allow a student to be admitted as either a transfer applicant or as a direct enrolled applicant. Refer to the Program Admission (p. 1) tab for additional admission requirements.

Students enrolling in the Mechatronics Engineering Technology BAS program as a transfer applicant may have earned an associate in applied science degree in Industrial Automation & Robotics from BSC or an associate in applied science degree, certificate, or diploma in an approved and related program from an accredited institution recognized by Bismarck State College. Previous college coursework, along with industry experience and/or military training, may be considered to determine eligibility.

## Computer Requirements

All BSC courses use a Learning Management System (LMS) called Blackboard. Chromebooks, Chrome OS devices, iPads, and mobile devices (iOS, Android phones, tablets) do not allow students to satisfactorily access and complete course content.

Please refer to the Computer Specifications for BSC students.

## Program Requirements

Students who complete the curriculum requirements can earn a Bachelor of Applied Science degree in Mechatronics Engineering Technology.

## Career Opportunities

Graduates are prepared for careers in the robotics and automation areas directly related to process control, electronic instrumentation, testing, manufacturing, sales and service. Typical engineering technologists' duties may include analysis and design of process control equipment, laboratory testing services, product sales and service, applications engineering, and the development of systems that require a hardware/software interface.

## College Admission

Review BSC's How to Apply page and complete the college admission requirements.

## Program Admission

The Bachelor of Applied Science in Mechatronics Engineering Technology is designed for qualified students to be directly admitted.

In addition to being admitted to BSC, students must meet program requirements based on their status:

### First-Year Applicant

A student who has no prior postsecondary experience or who has earned less than 24 semester credits or 36 quarter credits. Students who earned college credits while still in high school are considered first-year applicants.

Students must apply and be accepted at BSC as degree seeking, in addition to the following requirements:

1. Minimum high school cumulative grade point average – 2.00+
2. Completion of high school core course requirements:
   a. English: four units
   b. Mathematics: Algebra I or above – three units
   c. Laboratory Science: three units
   d. Social Science: three units

**Notes:**

- Successful completion of a GED exam meets the qualifications for both #1 and #2 above.
- Applicants 25 years of age or older on the first day of class are exempt from the high school core requirements.
- Students who don't meet requirements #1 and #2 will begin their college career in Industrial Automation & Robotics AAS.
- After the completion of one semester of BSC enrollment with a 2.00 cumulative GPA, a student may request a program change into the Mechatronics Engineering Technology Bachelor of Applied Science program.

### Transfer Applicant

A student who has earned 24 semester credits or 36 quarter credits from an accredited post-secondary institution.

Students must apply and be accepted at BSC as degree seeking, in addition to the following requirements:

1. Cumulative grade point average – 2.00+ on all accredited post-secondary institutions attended.
2. Student must not be on dismissed or suspension status at their most recently attended institution.

**Notes:**

- Students who don't meet requirements #1 and #2 will begin their college career in Industrial Automation & Robotics AAS.
- After the completion of one semester of BSC enrollment with a 2.00 cumulative GPA, a student may request a program change into the Mechatronics Engineering Technology Bachelor of Applied Science program.

### Returning Applicant

Returning to BSC following a break in enrollment or graduation.

Students must apply and be accepted at BSC as degree seeking, in addition to the following requirements:

1. Cumulative grade point average – 2.00+ on credits from all prior accredited post-secondary institutions attended, including BSC.
2. Student must not be on dismissed or suspension status.

**Notes:**

- Students who don't meet requirements #1 and #2 will begin their college career in Industrial Automation & Robotics AAS.
- After the completion of one semester of BSC enrollment with a 2.00 cumulative GPA, a student may request a program change into the Mechatronics Engineering Technology Bachelor of Applied Science program.

## Degree Plans

- Mechatronics Engineering Technology Bachelor of Applied Science