| | Course Number | Credit Hrs | Taken | Grade | Course Name | Prerequisites/Advisor Notes | F | Sp | Su |
|---|---|---|---|---|---|---|---|---|---|
| **FIRST YEAR FALL** | BGSU 1910 | 1 | | | First Year Seminar | | × | | |
| | BGP | 3 | | | | Human & the Arts / Cultural Diversity | × | × | × |
| | ENGT 1100 or ECET 1960 | 3 | | | Basic Computer-Aided Design or Electrical-Electronic Systems | | × | × | |
| | MATH 1220 (BGP) | 4 | | | College Algebra | | × | × | × |
| | ROBO 1010 | 3 | | | Sensors & Acuators | | × | | |
| | WRIT 1110 (BGP) | 3 | | | Seminar in Academic Writing | | × | × | × |
| | **Semester Total** | **17** | | | | | | | |
| **FIRST YEAR SPRING** | BGP | 3 | | | | Humanities and the Arts | × | × | × |
| | ECET 1960 or ENGT 1100 | 3 | | | Electrical-Electronic Systems or Basic Computer-Aided Design | | × | × | |
| | MATH 1280 | 5 | | | Precalculus Mathematics | By Placement or MATH 1200 or MATH 1220 | × | × | × |
| | WRIT 1120 | 3 | | | Seminar in Research Writing | By Placement or WRIT 1010 or WRIT 1110 | × | × | × |
| | **Semester Total** | **14** | | | | | | | |
| | **FIRST YEAR TOTAL** | **~31** | | | | | | | |
| **SECOND YEAR FALL** | CS 2010 | 3 | | | Programming Fundamentals | By Placement or MATH 1200 or MATH 99 or higher | × | × | × |
| | ECET 2400 | 3 | | | Electric Circuits | MATH 1280 | × | | |
| | ENGT 2100 | 3 | | | Solid Modeling | ENGT 1100 | × | | |
| | MATH 1310 | 5 | | | Calculus & Analytic Geometry | By Placement or MATH 1280, MATH 1290 or MATH 1300 | × | × | × |
| | **Semester Total** | **14** | | | | | | | |
| **SECOND YEAR SPRING** | COMM 1020 (BGP) | 3 | | | Introduction to Public Speaking | | × | × | × |
| | ECET 2410 | 3 | | | Electronic Circuits | ECET 2400 | | × | |
| | ECET 2490 | 3 | | | Digital Electronic Components & Systems | ECET 1910 or in ECET 1960 | | × | |
| | PHYS 2010 (BGP) | 5 | | | College Physics I | By Placement or MATH 1200 or | × | × | × |
| | ROBO 2080 | 3 | | | Industrial Robotics & Automation | ROBO 1010 | | × | |
| | **Semester Total** | **17** | | | | | | | |
| **SUMMER** | TECH 2890 | 1 | | | Co-op | ECET 1960 (recommended) | × | × | × |
| | **Semester Total** | **1** | | | | | | | |
| | **SECOND YEAR TOTAL** | **~32** | | | | | | | |
| **THIRD YEAR FALL** | ENGT 2200 | 3 | | | Manufacturing Processes | | × | | |
| | ENGT 2400 | 3 | | | Statics | Prior credit in ONE of MATH 1280, 1300, or 1310, or both MATH 1340 & | × | | |
| | MATH 2470 | 3 | | | Fundamentals of Statistics | Prior credit in ONE of MATH 1260, 1310, MATH 1350 or BA 1700 | × | × | |
| | PHYS 2020 (BGP) | 5 | | | College Physics II | PHYS 2010 | × | × | × |
| | **Semester Total** | **14** | | | | | | | |
| **THIRD YEAR SPRING** | ECET 3000 | 3 | | | Electric Machinery & Controls | ECET 2410 | | × | |
| | ECON 2000 | 3 | | | Introduction to Economics | | × | × | × |
| | ENG 3880 | 3 | | | Introductory Technical Writing | Junior status | × | × | × |
| | ENGT 2480 | 3 | | | Dynamics | ENGT 2400, MATH 1310 & PHYS 2010 or PHYS 2110 | | × | |
| | MATH 2910 | 3 | | | Applied Engineering Mathematics with Applications | MATH 1310 or MATH 1340 & MATH 1350 | × | × | × |
| | QS 3710 or QS 3550 | 3 | | | Six Sigma Overview | MATH 1150 or STAT 2000 or MATH | | × | |
| | **Semester Total** | **18** | | | | | | | |
| **SUMMER** | TECH 3890 | 1 | | | Co-op | | × | × | × |
| | **Semester Total** | **1** | | | | | | | |
| | **THIRD YEAR TOTAL** | **~33** | | | | | | | |
| **FOURTH YEAR FALL** | ECET 3490 | 3 | | | Digital Computer Analysis | ECET 2490 | × | | |
| | QS 3550 or QS 3710 | 3 | | | Lean Systems of Mfg & Service Applications | | × | | |
| | SYE 2010 | 3 | | | Engineering Economics | | × | | × |
| | TECH 3020 | 3 | | | Technology Systems in Societies | Junior or Senior status | × | × | × |
| | Technology Elec #2 | 3 | | | | | × | × | |
| | **Semester Total** | **15** | | | | | | | |
| **FOURTH YEAR SPRING** | ECET 3100 | 3 | | | Programmable Logic Controllers | ECET 1960 | × | × | |
| | ENGT 3480 | 3 | | | Thermodynamics & Heat Transfer | ENGT 2480, PHYS 2010 or PHYS 2110, and MATH 1310 | | × | |
| | QS 4850 | 3 | | | Quantitative Tools for Quality and Continuous Improvement | MATH 1150 or STAT 2000 or MATH 2470 | | × | × |
| | ROBO 4500 | 3 | | | Senior Design Project | Senior status | × | × | |
| | Technology Elec #3 | 3 | | | | | × | × | |
| | **Semester Total** | **15** | | | | | | | |
| | **FOURTH YEAR TOTAL** | **~30** | | | | | | | |
| | **DEGREE TOTAL** | **122** | | | | | | | |

This is not an official graduation plan but a tool to use along with your audit and check-sheet
Assuming a MATH placement of 1220, a WRIT placement of 1110, and 2 years of high school language

*Fall (F), Spring (Sp) , Summer (Su)

**BGSU.** | College of
**Technology, Architecture
and Applied Engineering**

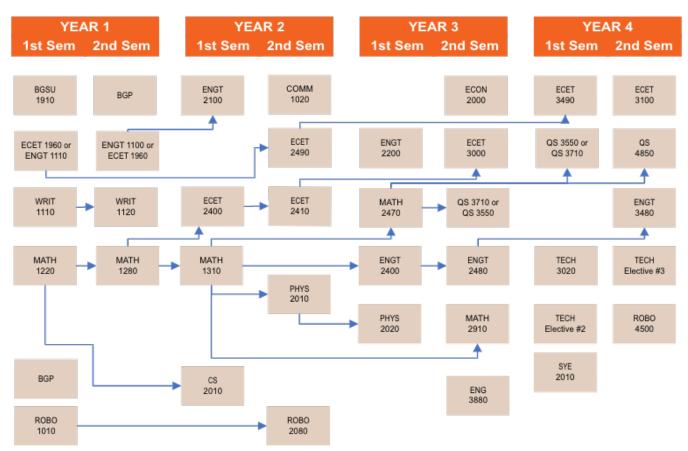BOWLING GREEN STATE UNIVERSITY

B.S. in **MECHATRONICS ENGINEERING TECHNOLOGY**
Fall 2022

**Course Sequence Flowchart with Prerequisites** (Excluding Co-ops)

## Program Planning

The student, in cooperation with an advisor, should use a Program Guide and the corresponding undergraduate

## Matriculation

Full admittance to major in a College of TECHnology, Architecture and Applied Engineering program becomes effective when a student has:

1. Attained an overall BGSU GPA of at least 2.25 for all courses taken prior to applying for matriculation and a 2.5 in courses in the major;
2. Complete a cooperative educ. experience-TECH 2890(Aviation, Architecture, LDT and QS majors are exempt from this requirement);
3. Completed with a grade of "C" or better in all bold courses, as specified on program checksheets;
4. Applied for matriculation. Applications are available from the Undergraduate Student Services Offices website.

The steps listed above must be completed before students will be permitted to register for 3000 and 4000 level courses in the College of Technology, Architecture and Applied Engineering.

## Co-op

All students in the College are required to complete 1-2 co-ops, depending on your major. THIS IS A COURSE. It carries credit and is graded. Full-time or part-time (20hrs/week) for two consecutive semesters, paid and must be directly related to your major. All students MUST complete the Co-op Orientation available in Canvas.