ENGINEERING TECHNOLOGY, ASSOCIATE OF SCIENCE - MECHANICAL DESIGN AND FABRICATION

Program Code: 2207D
Career Pathway: Industry, Manufacturing, Construction & Transportation

Location(s): General education courses are available at all BC locations. Program-specific courses for this program are offered at the North Campus and Judson A. Samuels South Campus. (https://www.broward.edu/about/locations/)
Program Entrance Requirements: HS Diploma or GED

Program Description: The purpose of this program is to prepare students for employment or provide additional training for persons previously or currently employed in the manufacturing, medical, electronics, aerospace, or other related industries. This degree is a planned sequence of instruction with a common core. It is recommended that students complete the core before advancing to the courses in the next level of specialization. Topics covered include communication skills, technical competency, safe and efficient work practices, and a combination of theory and laboratory activities to gain the necessary cognitive and manipulative skills to support engineering design, processes, production, testing, and product quality. Visit the program's website (http://www.broward.edu/academics/programs/engineering/Pages/default.aspx) for additional information.

1. CNC Machinist, Technical Certificate 6349
2. Engineering Technology Support Specialist, Technical Certificate 6314
3. Engineering Technology, Associate OF Science - Mechanical Design and Fabrication 2207D
4. Bachelor of Applied Science

Course	Title	Credits	6349	6314
Course EET1084C	Title INTRODUCTION TO ELECTRONICS	Credits 3	6349	6314 X
Course CET1114C	Title DIGITAL TECHNIQUES	Credits 3	6349	6314
Course ETD1320C	Title BASIC CAD	Credits 3	6349	6314 X
Course EET1015C	Title DC CIRCUITS	Credits 3	6349	6314
Course CET1117C	Title MICROPROCESSORS	Credits 3	6349	6314
Course EET1025C	Title AC CIRCUITS	Credits 3	6349	6314
Course ETI1701C	Title SAFETY	Credits 3	6349 X	6314 X
Course ENC1101	Title COMPOSITION I	Credits 3	6349	6314
Course EET1141C	Title LINEAR TECHNIQUES I	Credits 3	6349	6314
Course ETM1010C	Title MEASUREMENT AND INSTRUMENTATION	Credits 3	6349	6314 X
Course GE Course	Title General Education Natural Science Core	Credits 3	6349	6314
Course GE Course	Title General Education Mathematics Core (MAC1105 Recommended)	Credits 3	6349	6314
Course ETI1401C	Title INTRODUCTION TO MACHINING	Credits 3	6349 X	6314
Course ETI1110C	Title INTRODUCTION TO QUALITY ASSURANCE	Credits 3	6349	6314 X
Course ETI2402C	Title ADVANCED MACHINING I	Credits 3	6349 X	6314
Course AMH2010 or AMH2020 or POS2041	Title HISTORY OF THE UNITED STATES TO 1877 or HISTORY OF THE UNITED STATES SINCE 1877 or NATIONAL GOVERNMENT	Credits 3	6349	6314
Course GE Course	Title General Education Humanities Core	Credits 3	6349	6314

Course ETI2403C	Title ADVANCED MACHINING II	Credits 3	6349 X	6314
Course ETI1420C	Title PROCESSES AND MATERIALS	Credits 3	6349	6314 X
Course GE Course	Title General Education Speech	Credits 3	6349	6314
Total Credits		60	6349 12	6314 18

Notes:

See General Education course information here (https://catalog.broward.edu/programs-study/aa-general-education-graduation-requirements/).

Students must satisfy the Digital Literacy requirement by testing out, completing a Credit for Prior Learning portfolio, or passing CGS1060C COMPUTER AND INTERNET LITERACY.

In accordance with Florida Statute and Florida Administrative Code, students may need to satisfy the Civic Literacy Graduation Requirement. Visit the Civic Literacy Graduation Requirement page at broward.edu/civic-literacy (https://students.broward.edu/resources/civic-literacy/).

Students are strongly encouraged to meet with an advisor (https://students.broward.edu/resources/advising/) to create a personalized educational plan.

PROGRAM HIGHLIGHTS
CREDIT FOR PRIOR LEARNING
Accelerate your path to completion with these options:

- Credit by exam
- Earned industry certifications
- Prior Learning Assessment
- And much more…

RELATED INDUSTRY CERTIFICATIONS
Upon completing this program, graduates will be eligible to sit for the following industry certifications/licenses

- NMSSC Certified Production Technician

GET AN INTERNSHIP
After completing your first year of coursework make sure to visit Employment Solutions (https://broward.edu/career/) for internship opportunities and helpful tools like virtual job shadow, to help take your career to the next level!

- Get an Internship (http://broward.edu/studentresources/career/Pages/Find-a-job-or-internship.aspx)
- Virtual Job Shadow Tool (http://www.broward.edu/studentresources/career/Pages/default.aspx)

MEDIAN WAGE AND JOB GROWTH OUTLOOK
Broward College has Career Coach (https://www.broward.edu/careercoach/)! It is designed to help you find a good career by providing the most current local data on wages, employment, job postings, and associated education and training.

FUND YOUR EDUCATION
This program is Financial Aid (https://www.broward.edu/admissions/financial-aid/) eligible. Scholarships (https://www.broward.edu/admissions/financial-aid/scholarships/) may be available.

PROGRAM LEARNING OUTCOMES
Graduates from this program will:

- Students will be able to recognize the role of, attitudes, beliefs, behaviors, and ethics in what we know and what we do, as well as understand the importance of quality in modern business scenarios to individuals, organizations, customers, suppliers, and society.
- Graduates will be able draft various designs for electric circuits and mechanical diagrams.
- Graduates will be able to calculate the inductance of electrical circuits.
- Graduates will be able be to demonstrate knowledge of Occupational Safety and Health Administration (OSHA) standards.
- Upon completion of this course, students will be able to troubleshoot an electronic circuit and find the fault within the circuit.

- Graduates will be able to calculate the capacitance of electrical circuits.
- Graduates will be able to accurately identify calibration requirements for tools.