



Biomedical Engineering Technology

Associate in Science | Code: 26053 | 60 credits

CIP (1615040102)

Effective Term: Fall 2024 (2247)

The Biomedical Engineering Technology program prepares students for employment as Biomedical Engineering Technicians and Technologists and in related occupations in health-related fields. The program also provides supplemental training for persons currently or previously employed in these occupations. The program focuses on the understanding and applying of concepts in electronics, in addition to troubleshooting techniques, to digital, microprocessor, or computer-based systems as they relate to medical devices. Assembly, installation, operations maintenance, calibration, trouble-shooting, repairing and elementary design on medical systems are taught using an integrated, applied and theoretical approach.

GENERAL EDUCATION REQUIREMENTS (15.00 Credits)

COMMUNICATIONS (3.00 credits)

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|----------|-----------------------|-------------|--|
| ENC 1101 | English Composition 1 | (3 credits) | Prerequisite: Student must meet the Developmental Education reading and writing requirements in State Rule 6A-10.0315 (by course, placement score, or eligible exemption). |
|----------|-----------------------|-------------|--|

HUMANITIES (3.00 credits)

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|----------|----------------------------|-------------|------------------------|
| ARH 1000 | Art Appreciation | (3 credits) | |
| HUM 1020 | Introduction to Humanities | (3 credits) | |
| LIT 2000 | Introduction to Literature | (3 credits) | Prerequisite: ENC 1101 |
| MUL 1010 | Music Appreciation | (3 credits) | |
| PHI 2010 | Introduction to Philosophy | (3 credits) | |
| THE 2000 | Theatre Appreciation | (3 credits) | |

MATHEMATICS (3.00 credits)

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|----------|-----------------|-------------|-------------------------|
| MAC 1105 | College Algebra | (3 credits) | Prerequisite: MAT 1033♦ |
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♦Note: Students must seek advisement for proper mathematics course from discipline chairperson.

NATURAL SCIENCE (3.00 credits)

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|----------|--------------------------------|-------------|------------------------|
| BSC 1005 | General Education Biology | (3 credits) | |
| BSC 2085 | Human Anatomy and Physiology 1 | (3 credits) | Corequisite: BSC 2085L |

SOCIAL SCIENCE (3.00 credits)

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|----------|------------------------------|-------------|--|
| AMH 2010 | History of the US to 1877 | (3 credits) | |
| AMH 2020 | History of the US since 1877 | (3 credits) | |
| POS 2041 | American Federal Government | (3 credits) | |

COMPUTER COMPETENCY

Test type(s) needed:

Computer Competency Test (CCT)

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CGS 1060C Introduction to Computer Technology & Applications

MAJOR COURSE REQUIREMENTS (37.00 Credits)

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| CET 1110C | Digital Circuits | (4 credits) | Prerequisite: EET 1015C, MAC 1105; Pre/Corequisite: COP 2270 |
| CET 1487C | Network+ | (3 credits) | |
| COP 2270 | "C" for Engineers | (4 credits) | Pre/Corequisite: MAC 1105 |
| EET 1015C | Direct Current Circuits | (4 credits) | Prerequisite: MAC 1105 |
| EET 1025C | Alternating Current Circuits | (4 credits) | Prerequisite: EET 1015C; |

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|-----------|--------------------------------|-------------|--|
| EET 1141C | Electronics 1 | (4 credits) | Pre/Corequisite: MAC 1114 or 1147 Prerequisite: EET1025C, and MAC 1114 or MAC 1147 |
| EET 2101C | Electronics 2 | (4 credits) | Prerequisite: EET 1141C |
| ETS 2673C | Programmable Logic Controllers | (4 credits) | Prerequisite: CET 1110C |
| HIM 2472 | Medical Terminology | (3 credits) | |
| MAC 1114 | Trigonometry | (3 credits) | Prerequisite: MAC 1105 or MAC 1106 |

PROGRAM ELECTIVE (8.00 Credits)

Electives are restricted to courses listed below:

BSC*, CET*, EET*, ETI*, ETS*, MAC*

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|-----------|-----------------------------------|-------------|---------------------------|
| ETM 1315C | Applied Pneumatics and Hydraulics | (3 credits) | Pre/Corequisite: MAC 1105 |
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