

Bachelor of Applied Science - Advanced Manufacturing and Materials Engineering Technology (BAS-AMMET) Information Sheet

What is the Bachelor of Applied Science?

The BAS degree is an applied bachelor's degree specifically designed to build on professional-technical associate's degrees that provide workplace skills, such as the Associate in Applied Science-Transfer (AAS-T) degree. The BAS degree differs from other bachelor degrees as it incorporates prior work experience and more hands-on learning.

BAS Advanced Manufacturing and Materials Engineering Technology

The Bachelor of Applied Science in Advanced Manufacturing and Materials Engineering Technology (BAS-AMMET) program focuses on hands-on learning, taught by faculty with industry experience, providing students with knowledge and skills in the manufacturing process, additive manufacturing, automation, product design, control systems, and materials characterization. Highly competitive graduates are prepared for entry-level positions in a variety of industries.

Program Requirements Prior to Applying (90 credits)

Proficiency Courses (60 credits)

This is met through the core courses of the AAS-T or equivalent degree in Materials Science, Mechatronics, Engineering Technology, or similar degree.

Requisite Courses (varies)

Additional requisite courses may be required depending on prior education and work experience. Courses may include ETEC 110 Introduction to Manufacturing (5 credits) and ETEC175 Introduction to Materials Science (5 credits). Please speak with the Program Manager for more information.

General Education Courses (30 credits)

These credits may vary, please speak with the Program Manager for credit evaluation.

Distribution Area	Recommended Courses Prior to the BAS-AMMET
Communication Skills	□ ENGL&101 - English Composition I (5 credits)□ ENGL&235 or ENGR231 - Technical Writing (5 credits)
Quantitative Analysis/Symbolic Reasoning	□ Math&141 - Precalculus I (5 credits)□ MATH&146 - Intro to Statistics (5 credits)
Natural Sciences and Mathematics	☐ PHYS& 114 - General Physics with Lab (5 credits)☐ CHEM&161 General Chemistry (6 credits)



Remaining Program Requirements (90 credits)

Additional General Education Courses (30 credits)

These credits are in addition to what you would have completed in the AAS-T degrees and may be taken together with the BAS-AMMET courses. Please contact the Program Manager for advising and transcript evaluations.

Upper Division Requirements - AMMET Courses (60 credits)

YEAR ONE	
Fall Quarter	☐ AMMET 302 Calculus and Advanced Mathematics (5 credits)
Winter Quarter	 AMMET 318 Applied Statics and Mechanics of Materials (5 credits) AMMET 350 Additive and Subtractive Manufacturing (5 credits)
Spring Quarter	 AMMET 351 Manufacturing Systems, Automation, and Operations (5 credits) AMMET 383 Materials Characterization (5 credits)

YEAR TWO	
Fall Quarter	 AMMET 400 Product Design, Tooling, and Assembly (5 credits) AMMET 426 Lean Manufacturing (5 credits) AMMET 427 Quality and Continuous Improvement (5 credits)
Winter Quarter	 □ AMMET 429 Industrial Organization, Safety, and Management (5 credits) □ AMMET 454 Capstone I (5 credits)
Spring Quarter	 □ AMMET 440 Advanced Materials Science (5 credits) □ AMMET 455 Capstone II (5 credits)

Admissions Process

Acceptance into the BAS-AMMET program is by application only and is determined holistically with the statement of purpose, grade point averages, work experience and completion of an AAS-T in Materials Science, Engineering Technology, Mechatronics, or similar degree. Students with an Associate of Technical Arts (ATA) degree in one of these areas are encouraged to consult with the Program Manager regarding additional prerequisite course requirements.

Program Contact Information

AMMET@edmonds.edu | www.edmonds.edu/programs/bas/ammet