

EN Advanced Manufacturing Program Key Milestones ER





Metropolitan State University of Denver, thanks to visionary leadership, has laid the foundation to become a preeminent urban-centric manufacturing education university, serving the workforce development needs of the Denver region and the entire state of Colorado.

An investment of close to \$60 million by MSU Denver, the state of Colorado and private sector companies has been made to construct a state-ofthe-art building, demonstrating the tremendous commitment that has been made to the future of workforce development, with respect to advanced manufacturing.

Milestones

Nationally Unique Degree Program Created

A novel Advanced Manufacturing Sciences baccalaureate degree program was launched in the fall 2017 semester. The position level target for program graduates is "manufacturing professional," which represents the critical, underserved position level between programmable machine tool operator and design engineer. The new B.S. degree program was designed by Metropolitan State University of Denver faculty in collaboration with an industry advisory board comprising respected professionals from a variety of manufacturing industry sectors.

Integrated into the instructional program will be handson exposure by AMS degree students to state-of-the-art subtractive and additive programmable machine tools, which will be made available through industry partners. The primary objective is to train students on advanced manufacturing equipment, processes and materials that are currently in use, or are projected to be in use, by manufacturers throughout Colorado and the nation.

Advanced Manufacturing Sciences Institute Established

The primary mission of AMSI is workforce development and its focus is on producing graduates that are well prepared in terms of both technical and soft skills to assume in-demand manufacturing engineering positions with manufacturing companies throughout Colorado.

MSU Denver/Hartwig, Inc. Partnership Agreement Signed

This partnership agreement, signed on Feb. 14, 2017, represents a critical element of MSU Denver's primary focus on workforce development, since, by virtue of the partnership, participating students will receive hands-on experience working with state-of-the-art programmable machine tools, some of which will be equipped with advanced robotic accessories. MSU Denver faculty and students will benefit extensively from exposure to Hartwig's ecosystem of line-card and affiliate companies, as will the manufacturing base of Colorado and the region, due to its anticipated interaction with the Advanced Manufacturing Sciences Institute.





NATIONALLY UNIQUE DEGREE PROGRAM CREATED

ADVANCED MANUFACTURING SCIENCES INSTITUTE ESTABLISHED

MSU DENVER AND HARTWIG, INC. PARTNERSHIP AGREEMENT SIGNED

TARGETED INVESTMENT BY LOCKHEED MARTIN SPACE SYSTEMS RECEIVED

PUBLIC-PRIVATE PARTNERSHIP FLOOR CREATED IN NEW AES BUILDING

MSU DENVER AND YORK SPACE SYSTEMS PARTNERSHIP ANNOUNCED









Targeted Investment by Lockheed Martin Space Systems Received

A targeted \$1 million investment by the Lockheed Martin Space Systems Corporation of Colorado, announced on June 22, 2017, is creating the Lockheed Martin Additive Manufacturing Laboratory, centered around a Stratasys Fortus 900 mc machine, a 3D printer that will uniquely position MSU Denver as an educational institution in the field of production tooling development. The Fortus 900mc machine is considered state-of-the-art at companies such as Lockheed Martin and United Launch Alliance and having our students and faculty working collaboratively with LMSS and Stratasys personnel will be a tremendous boost to our targeted workforce development efforts.

Public/Private Partnership Floor Created

A unique Public/Private Partnership floor within MSU Denver's Aerospace and Engineering Sciences Building was created. With a view to exposing faculty and students to workforce development opportunities that represent real-world experiences, MSU Denver dedicated the top floor of its new building as a multi-tenant, P3 enterprise floor. Tenant/partners are involved in the manufacturing process and have workforce development as a critical element of their business models.

MSU Denver/York Space Systems Partnership Announced

On Feb. 28, 2017, MSU Denver and York Space Systems announced their new partnership. York Space Systems, an innovative American aerospace company founded by alumni from NASA, Lockheed Martin, Orbital ATK, and Ball Aerospace, specializes in complete space segment customer solutions and the manufacture of small and medium class spacecraft. The company established an innovative manufacturing facility on the P3 floor of the Aerospace and Engineering Sciences building, as part of the Advanced Manufacturing Sciences Institute.

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