

The Vermont Manufacturing Collaborative (VT-MC), through its Center of Excellence model, will initially focus on providing advanced manufacturing education and training to the Vermont student population and eventually to Vermont's incumbent manufacturing workforce to help bridge the industrial skills gap outlined in the CS-20-1601 IBAS initiative. The VT-MC will also combine this with the opportunity for its manufacturing affiliates to utilize VT-MC equipment and facility for their own application of training as well as for low profile part production. The long-term objective is to utilize this now-proven technical approach, its resources and its integrated workforce development program (through Vermont Technical College), making the VT-MC model a viable and sustainable model for continued growth.

Through a strategic and functional relationship with VMEC, VT-MC will draw upon the network and expertise of VMEC (and the national MEP network in general) in developing and executing industrial outreach initiatives and activities. Activities should include:

- The development and maintenance of a VT-MC website that is informative, reflects the equipment and capabilities of the VT-MC and a process that describes the VT-MC's product development approach from designing-to-building actual AM components.
- Development of an on-line application form that will allow those with AM needs to solicit help and allow the VT-MC to follow up. Degree of VT-MC interest can also be determined based on the analytical data captured
- Produce and distribute VT-MC collateral materials and other marketing medium including the 2-page VT-MC description of the Vermont Manufacturing Collaborative
- Continually research AM including industry/technology trends and competitive approaches
- Identify and determine degree of interest in target market(s) such as SME's, entrepreneurial communities, other scientists and researchers
- Reach out to the Vermont SME population through VT-MC events, channel partners, blogs and through other regional AM events and organizations
- Hire an Industry Advisor (VMEC) to provide industry outreach interface, solicitation and MEP survey delivery
- Connect with and potentially pursue defense related programs such as the Army Mantech Additive Manufacturing Program (AM NOW), CCDC and other defense related programs - eventually submit necessary documentation to be classified as a supplier
- VT-MC Grand Opening / Open House to the general public and high school population
- Conduct public events through various organizations (VMEC, VT Chamber, AIVT)
- Attend other AM events

VT-MC Participating Organizations

Partnerships - those companies or organizations who have expressed interest in supporting and developing the VT-MC AM infrastructure and/or participating in the day to day activities of the VT-MC Center of Excellence (COE) itself. Partners would consist of federal/state programs, educational institutions, prime contractors and small-medium manufacturing companies (SME's) and manufacturing based organizations whose members can take advantage of the services offered in the form of reciprocal agreements

Vermont Technical College is committed to fostering dynamic growth in partner collaboration and development. Through its continued link to industry, these partnerships are ever growing. Current and prospective partners include: Vermont Tech, University of Vermont, Vermont Manufacturing Extension Center (VMEC), Vermont Chamber of Commerce (Aerospace & Aviation Manufacturers), General Dynamics Ordnance and Tactical Systems (OTS), Concepts NREC, G.S. Precision, General Electric Aviation, Superior Technical Ceramics, G.W. Plastics and the Vermont Department of Economic Development.

VT-MC will also develop formal relationships with various DoD components and their respective programs and initiatives related to advanced manufacturing in order to gain insight into specific needs, leverage DoD investments in areas such as best manufacturing practices, technical training curricula, and AM part qualification and certification policies and methods. Primary partnership targets include the America Makes Manufacturing Innovation Institute managed by the Air Force and the Army Manufacturing Technology Program's AMNOW initiative.

A partnership is currently established with the US Army Combat Capabilities Development Command (CCDC) Armaments Center, U.S. Army Picatinny Arsenal, New Jersey. Through VTC's involvement and contract with the OSD Industrial Base Assessment and Sustainment program (IBAS), the CCDC Armaments Center has been appointed to serve as "technical managers" for the National Imperative initiative. Through this unique formal relationship, VTC/VT-MC will draw upon this partnership to obtain:

- Technical expertise and guidance on AM equipment sourcing and AM best practices
- AM Curriculum development and delivery needs and materials
- Contract manufacturing opportunities for VTC and VT-MC participants
- Internship and work study opportunities
- AM material and process data sharing in support of product development and testing

Vermont Technical College (VTC)

- Serve as lead “Contractor” to the Cornerstone OTA
- Host of the VT-MC
- AM and Advanced Manufacturing curriculum development
- Center for AM/Advanced manufacturing/engineering education and training
- Consult with (VT-MC) management regarding the strategic and operational direction of the Center.
- Consult with VT-MC regarding equipment and software purchases.
- Review and approve VT-MC marketing and business development plans and associated budgets.
- Establish and monitor the VT-MC Key Performance Indicators (KPIs).
- Serve as Comptroller for VT-MC financial planning and oversight.
- Work with the CEWD Department to develop and deliver technical classes/training to community &

Vermont Manufacturing Extension Center (VMEC) – Vermont MEP

- Primary liaison to the manufacturing community
- Provide technical as well as enterprise-wide expertise to the manufacturing community
- Be the primary conduit for any outreach activity to the SME population
- Provide project management services to SMEs and VTC
- Work with the VT-MC on developing, capturing and documenting potential impacts associated with the Center’s activity

Stakeholders – those organizations or companies who might not have a need to directly utilize the services of the VT-MC, but are interested in providing financial support for the day to day and future success of the VT-MC.

- Vermont Agency for Commerce and Community Development (VACCD)
- Chamber of Commerce
- Associated Industries of Vermont