

Georgia Tech Manufacturing Institute

Manufacturing is in Georgia Tech's DNA: GTMI Binds It Together

The Georgia Tech Manufacturing Institute (GTMI) is one of interdisciplinary research institutes (IRIs) at Georgia Tech. IRIs are to create transformative opportunities, strengthen collaborative partnerships, and maximize the societal impact of the research being done at Georgia Tech. Both government and industry work with Georgia Tech's IRIs to connect with a large portfolio of basic and applied research programs, to create and use novel research laboratories, to interact with Georgia Tech students, and to collaborate with other research partners.

GTMI is the world's premier institute anticipating needs and providing solutions on the frontier of manufacturing research, development and deployment. We focus on the complete innovation value chain — from raw and recycled resources to prototypes and finished products — and develop materials, systems, processes, education programs, and policies. GTMI is a leader in moving innovation from the lab to the market. Its comprehensive expertise ranges from manufacturing processes and factory automation to supply chain management and enterprise transformation. GTMI also offers hands-on educational experiences that produce scientists and engineers who are innovative, collaborative, adaptive and well-suited for the rapidly evolving world of manufacturing.

GTMI Mission - To pursue knowledge and skills that accelerate the translation of manufacturing-related research into high impact products and manufacturing systems.

Organizational Structure

The GTMI team supports Georgia Tech faculty and other stakeholders. The team consists of professionals in research, business operations, strategic partnerships and communications. The GTMI executive director is assisted by two advisory organizations: the External Advisory Board (EAB) and the Internal Advisory Board (IAB). Members of the EAB represent business, government agencies, other universities and professional associations. Members of the IAB represent Georgia Tech faculty. Collaboration with faculty and researchers at Georgia Tech is a key component of the value GTMI provides its stakeholders. GTMI regularly communicates with a targeted group of about 500 Georgia Tech faculty and staff. We also have open channels with over 1,500 industry leaders who receive regular information from GTMI.

Facilities & Resources

Space

Most GTMI R&D activities are in Callaway Manufacturing Building and Advanced Manufacturing Pilot Facility.

Equipment

Link to equipment listed on website: <http://gtmiservicecenter.gatech.edu/equipment/>

Impact to Georgia Tech

Georgia Tech has a 125-year history with manufacturing, earning it a reputation as an industry thought leader. Georgia Tech President G. P. “Bud” Peterson is one of six university presidents to serve on the Steering Committee for the Advanced Manufacturing Partnership (AMP). AMP is a national public-private effort that is charting the course for developing emerging technologies, creating high-quality manufacturing jobs, and enhancing U.S. global competitiveness.

GTMI works with Georgia Tech colleges, industry, small businesses, government agencies and with numerous consortia. The major intellectual themes and research thrusts are: Additive Manufacturing, Analytics and Prognostic Systems, Cell Manufacturing, Clean Energy Manufacturing, Extreme Tribology and Diagnostics, Industrial Design, Internet of Things for Manufacturing, Model-Based Systems Engineering, Nano-Composite Processing, Precision Machining, Public Policy, Supply Chain & Logistics, Sustainable Design and Manufacturing, and Ultra-lightweight, Energy Efficient Materials and Structures.

Among GTMI's recognitions are:

- Named a Boeing Supplier of the Year and serves as one of the company's eight university partners
- Awarded a grant to develop and lead the Consortium for Accelerated Innovation and Insertion of Advanced Composites (CAIIAC)
- Named a Caterpillar “University Center of Excellence in Machining-Related Research”
- A Siemens research partner for 25 years and counting
- GTMI develops international standards for electronics, solar energy, woodworking and precision machining industries that allow companies to easily work together, compare results and exchange data.

Other Accomplishments: Advancing Manufacturing Innovation

GTMI has assisted in the development of numerous spin-off companies including: AkroMetrix, Applied Thermoplastics Resources, CAMotion, CAMotion Cranes, CardioMEMS, DDM Systems, DHX Electric Machines, Factory Right, GTC, Innovolt, InterCax, MedShape, Polaritek Systems, Qcept Technologies, Radatec, Snturistic, Suniva, Vendormate, Verco Materials and viaCycle.