# Ohio Manufacturing Institute

## Purpose

Ohio Manufacturing Institute's mission is to make the technical resources of higher education easily accessible to industry and to facilitate their use for economic development.

OMI provides manufacturers a quick and cost-effective mechanism to collaborate with Ohio State, including testing, development, applied research, training seminars, and manufacturing process support. Industry needs are teamed with university assets such as faculty expertise, student engagement, and access to university labs and test equipment.

## Impact

OMI facilitates access to academic research facilities, faculty, and students, and has rapidly executable, no-nonsense contracts that make technical resources quickly available for manufacturing problem solving, or new technology assessment and development.

OMI connects manufacturers to key manufacturing technologies, including:
• Welding and Joining
• Forming, Molding, and Machining
• Additive Manufacturing
• Process and Component Design
• Advanced Materials and Corrosion
• Computational Modeling and Simulation

OMI facilitates a unique co-located internship program at Ohio State in which students work for a company on a specific project and remain under the mentorship of university faculty. Students retain access to labs, equipment, and other university resources for the duration of the internship.

### Ohio State Colleges/Units Involved
College of Engineering
Industry Liaison Office

### Community Partners Involved
Ohio Development Services Agency
Ohio MEPs (Magnet, CIFT, APEG, FastLane, OH!Manufacturing, TechSolve)
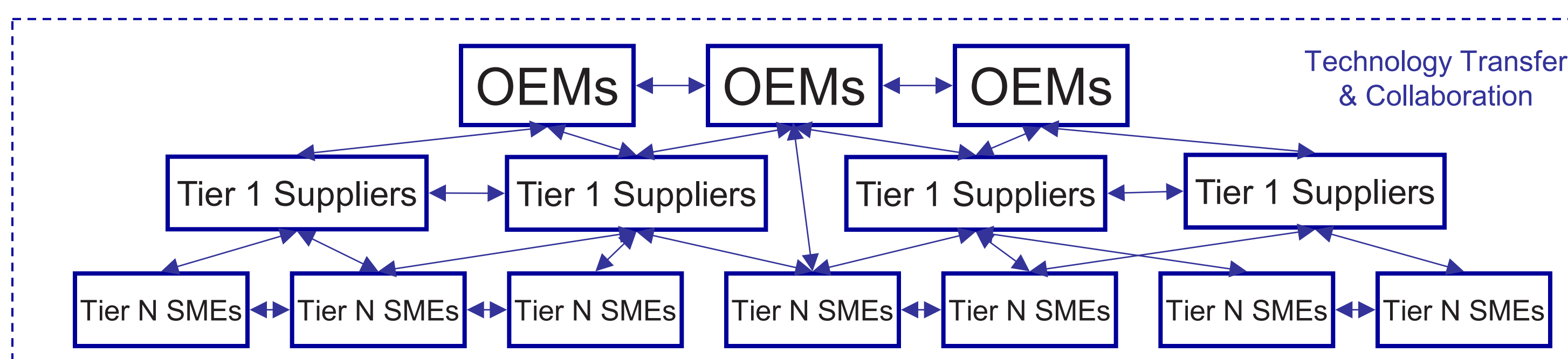Columbus2020
Major state manufacturers

## Contact

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THE OHIO STATE UNIVERSITY

Technology Transfer & Collaboration

OEMs ↔ OEMs ↔ OEMs

Tier 1 Suppliers ↔ Tier 1 Suppliers ↔ Tier 1 Suppliers ↔ Tier 1 Suppliers

Tier N SMEs ↔ Tier N SMEs ↔ Tier N SMEs ↔ Tier N SMEs ↔ Tier N SMEs ↔ Tier N SMEs ↔ Tier N SMEs

| | University College of Engineering Depts & Faculty | University College of Engineering Center of Excellence | Research Institute or Foundation (Univ) | Industry / University Center (incl NSF I/UCRCs) | Public / Private Laboratory | Technical Center (EWI NAMII (TechSolve Mach)) | Technical Organization (Polymer Ohio) | Industry Organization (CIFT BioOhio) | MEP Manufacturing Extension Partnership (MAGNET TechSolve APEG) | Community/ Technical College (Under Fifty Partners) |
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| **Objectives** | Development of technological, professional and personal skills of students. Conduct scientific studies and sponsored basic research projects. | Provide basic and applied sponsored reseach services in specific area of university technical strength or societal need. | Provide basic and applied sponsored reseach services in specific areas of university technical strength to government and industry. Support commercialization of technology. | Partnership between multiple universities and industry to conduct research that is of interest to all parties and advances a specific technology. | Provide basic and applied sponsored research and development services to government and industry. Emphasis is on national security, economic development, energy, life sciences, and sustainability. | Development and application of advanced manufacturing technology. Commercialization of existing and new technologies via membership and/or pay-per-service engagements | Convening companies within a specific technology or focus area to advance technical competencencies. Provide programs & services that facilitate the growth of member companies. | Convening companies within a specific industry to advocate for and advance technical competencencies. Provide programs & services that facilitate the growth of member companies. | Strategic advisor to small and mid-sized manufacturers. Promote business & job growth, & connect manufacturers to public and private resources. | Provide professional and technical associate degree programs, certificate programs, & continuing education opportunities. |
| **Services** | Basic Research | Basic Research | Basic Research | Basic Research | Basic Research | Applied Engineering | Convening | Convening | Workforce Devt | Workforce Dev't |
| | Education | Applied Engineering | Applied Engineering | Applied Engineering | Applied Engineering | Commercialization | Benchmarking | Benchmarking | Training | Technical Training |
| | Experiential Learning | Experiential Learning | Experiential Learning | Experiential Learning | Commmercialization | Convening | Networking | Networking | Growth Services | Professional Trng |
| | Applied Engineering | Convening | | | | Consulting | Consulting | Advocacy | Business Planning | Advisory Services |