Manufacturing Innovation Fund

Connecticut

Manufacturing Innovation Fund Advancing Manufacturing Faster

\$100 Million

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Incumbent Worker Training Apprenticeship Program Industry 4.0 Manufacturing Supply Chamiles and the second second

Overview

\$100 million fund facilitating technology innovation, accelerating growth through supplier networks and cultivating talent development to promote the competitiveness of Connecticut's manufacturing industry. Creating a vibrant ecosystem through key partners in industry, academia, not for profit, labor, state, regional and federal governments.

Workforce Development

Incumbent Worker Training Program (IWT)



Administered by the CT Department of Labor (DOL), the IWT program is a matching fund program to assist manufacturing companies in providing training for their workforce. Total proposed training project value must be at least \$10,000 (in this case, \$5,000 provided by the IWT program and \$5,000 company match). Maximum award is up to \$50,000 per employer, per calendar year.

Program Requirements

- A third-party vendor or service provider must be used to execute the proposed training project
- Applicants are required to match grant awards dollar for dollar
- Companies receiving funds under this program are required to complete an impact report upon completion of the training and additional project documents as deemed necessary by the process.
- A commitment by the company to use the funding to implement the proposed training project
- Must be a CT-based manufacturer who has 2,000 employees or less and registered to conduct business for not less than 12 months.
- Eligible "incumbent" workers are employees:
 - Employed in any of the following functions: direct/indirect labor, including but not limited to, production information technology, logistics or research and development, engineering and production support
 - At least 18 years of age
 - O Working full time hours as defined by the industry
- A proposed use of funding that is consistent with the eligible activities of the program. Typical uses of funding include, but are not limited to, the following training:
 - Opprade and increase skills
 - ◊ Industry specific
 - Written and oral communication
 - Mathematics or science
 - Technical or technological
- Companies applying for funds must be in "Good Standing" with the Department of Revenue Services (DRS) and the DOL. Applications will not be considered complete unless in "Good Standing" with these departments. Clearances will be conducted for DOL. "Letter of Good Standing" must be requested from DRS.

<u>Apply Online</u> Email Program Contact: <u>Bernice Zampano</u> (860) 263-6732

Apprenticeship Program



Administered by the CT Department of Labor (DOL), the Apprenticeship Program is a paid training program of earning while learning. This on-the-job training, combined with classroom instruction, ensures a well-qualified, job-ready employee. Apprenticeships generally range from one to four years. Upon completion, the CT DOL's Office of Apprenticeship Training provides a portable training credential. A Registered Apprenticeship program can help employers develop a world-class workforce and enhance productivity.

Employer Requirements

- Have a Registered Apprenticeship Program with the CT DOL under 31-m et seq of the CT General Statutes and 31-51d-1 et seq of the Regulations of CT State Agencies.
- A Connecticut based manufacturer who is registered to conduct business with the CT Secretary of State for not less than 12 months.
- Eligible industries include, but are not limited to, aerospace, medical devices, composite materials, digital manufacturing, and other technologically advanced commercial products and services supply chains.
- Must operate as a for-profit entity with a facility located in Connecticut.
- Be in good standing with DOL, Department of Revenue Services, and other relevant state/local agencies.

Apprentice Requirements

- Employed in any of the following functions: direct/indirect labor including, but not limited to, production, information technology, logistics or research and development, engineering and production support.
- Work at a Connecticut manufacturing facility.
- At least 16 years of age.
- Working full time hours as defined by the industry.

Types of Assistance

The maximum award amount for the three components is **\$9,500** per apprentice for year one and **\$9,250** for year two. Grants awarded by the MIF shall be in the amounts provided up to \$6,000 (year one) and \$7,000 (year two) for wage subsidy; \$2,500 (year one) and 1,250 (year two) for tuition reimbursement; up to \$1,000 (in both year one and two) for utilization of Competency/Performance Interim Credentialing costs for apprentices in the appropriate trade. The amount of any grant award allowed under the MIF for any program year may not exceed the amount of money spent by, or on behalf of, an apprenticeship sponsor with respect to such program year.

- Wage Subsidy Reimbursement Grant: Employers may seek a wage subsidy and reimbursement for credentialing costs. Total MIF Registered Apprenticeship Grant per apprentice in manufacturing occupations is the "Lesser" of the Following: \$5.00 per hour multiplied by the total number of hours worked during the company's program per year, by apprentice, not to exceed more than 50% of the annual salary OR \$6,000 per qualified apprentice for year one and \$7,000 for year two.
- 2. Tuition Reimbursement Grant: Approved Related Instruction Training providers may seek tuition or training costs of registered apprentices. The funds do not need to be repaid by the applicant provided the applicant meets the deliverables and complies with the terms and conditions of the agreement. Reimbursement to the sponsor or to a related instruction provider chosen by the sponsor company and approved by the CT DOL Office of Apprenticeship Training for apprentice tuition/training costs or payments on behalf of an apprentice duly registered with a qualified apprenticeship sponsor shall not exceed \$2,500 year one and \$1,250 year two.
- 2. **Competency/Performance Reimbursement Grant:** Reimbursement of reasonable and customary costs for utilization of Competency/Performance registered apprenticeships that have interim credentials embedded in the work and related instruction schedules shall not exceed \$1,000 in year one and year two, respectively.

Email Program Contact: Office of Apprenticeship (860) 263-6085

Technology Awareness and Adoption Programs

Comprehensive programming associated with Industry 4.0 and Additive Manufacturing have four components: Awareness, Education, Demonstration, and Adoption, where manufacturers can begin their journey with no-cost introductory elements, in addition to grant funding (i.e. IVP and AMAP) for those companies whose path may also include the adoption of approved technology.

Industry 4.0 for CT Manufacturing Supply Chain



The Connecticut Center for Advanced Technology (CCAT) is leading a CT industry-driven program to advance the global competitiveness of the CT supply chain. The program provides access to no-cost education and demonstration in support of Industry 4.0 technologies. The program is designed to minimize disruption to the company's current manufacturing process.

Four (4) Areas of Focus

- Industrial Internet of Things (IIOT): Digital shop floor technology including machine instrumentation, data analysis, and visualization for manufacturing
- Big Data and Analytics: Adoption of Model Based Definition and advanced digital design
- Additive Manufacturing: An alternative and often faster and cheaper method of producing parts
- **Automation:** Increasing the speed and accuracy of quality inspection using state-of-the-art vision, contact, and non-contact technologies

CT manufacturing companies may take advantage of this program by applying before April 30, 2023. The Industry 4.0 program, including the Industry 4.0 Technology Integration Voucher Program, ends <u>June 30, 2023</u>.

High Rate Additive Manufacturing (HRAM)



CCAT has developed a Connecticut industry-driven technology program to help drive the demonstration and adoption of Additive Manufacturing (AM) technologies within the Connecticut Manufacturing supply chain across industry sectors, with a focus on small-medium size manufacturers, which will include no-cost workshops introducing AM technologies, explanation of various applications and existing case studies, and demonstration of AM operation at CCAT. Manufacturers that are ready to adopt AM tools can receive assistance in selecting and procuring AM machine tools, in addition to assistance in applying for AMAP additive manufacturing grant funds.

Program Objectives

- Introduce AM technologies for cross-cutting industry sectors through demonstrations and applied research and development projects
- Facilitate the adoption of AM technologies by administering a cost-share grant program for AM equipment by the Connecticut supply chain.

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Email Program Contact: Nasir Mannan

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Email Program Contact: <u>Jeff Crandall</u>

Grant Programs

Manufacturing Voucher Program (MVP)



To help keep pace with state-of-the art product development and manufacturing technology, the MVP provides companies with access to capital to help them obtain new equipment and the expertise they need to become more efficient, productive and competitive. The program is administered by the CT Center for Advanced Technology (CCAT).

Program Requirements

Eligible companies may apply for vouchers up to \$49,000 for the purchase of specialized equipment and expertise. Participating companies are required to provide a cash match from 1:1 to 3:1 depending on the amount of prior awards received and the grant amount currently being requested, as follows:

First Time Applicants

1:1 match for the first \$25,000

2:1 match for the remainder up to \$24,000

Repeat Applicants (those who received awards prior to June 30, 2018)

3:1 match for any amount up to the maximum award of \$49,000

- Applicants must be seeking assistance for a project they are actively contemplating but to which they have not yet committed. Projects where a contract has been signed, a Purchase Order placed, or a deposit made in advance of submitting an MVP application WILL NOT be considered for funding.
- Must be a Manufacturer or Allied Service Provider (Allied Service Providers only include companies that physically interact with a manufactured good to alter the product for example industrial Heat Treaters.
- Must have a manufacturing facility in Connecticut or relocating operations to CT.
- Must be registered for at least 3-years and currently generating revenue.
- 51% or more of the company's revenue must be generated from the sale of goods the applicant manufactures or from allied services provided to manufacturers.
- Must have at least 3 full-time employees and no more than 100.
- Proposed project value must be at least \$10,000.
- Must be operating in an appropriately zoned commercial area.
- Must be in Good Standing with both CT Department of Revenue Services and CT Department of Labor at time of application submission.

Use of Funds

Typical uses of funding include, but are not limited to, the following:

- Assistance with new machinery acquisition
- Technical experts in universities, educational institutions, nonprofits, or other organizations to solve engineering, marketing and other challenges, i.e. workforce development, supply chain network development, research
- Business development
- Financial transition and market growth planning
- Testing or research to support proof of principle
- Prototype development
- Process Improvements
- Commercialization and innovation services
- Specialized equipment for automation

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Email Program Contact: Paul Striebel

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Industry 4.0 Integration Voucher Program (IVP)



This grant program is intended to help Connecticut supply chain companies with the adoption and integration of IoT solutions. The program provides matching grants up to \$20,000 for hardware, sensors, platforms, and related third-party integration services. Project proposals that fall under any of the four (4) areas of focus above will be considered for funding. The goal of this program is **INDUSTRY** to ensure that the Connecticut supply chain is positioned to implement modern digital manufacturing tools to continue to compete favorably against any manufacturing sector in the world.

Program Requirements

- Eligible companies can apply for vouchers up to \$20,000 for the adoption and integration of IoT solutions. •
- Applicants must match grant awards dollar for dollar. •
- Total project value must be at least \$5,000. •
- A third-party vendor or service provider must be used to execute the proposed project. •
- Only projects that commence after submission of application will be considered for funding. •
- Must be a Manufacturer or Allied Service Provider (Allied Service Providers only include companies that physically • interact with a manufactured good to alter the product - for example industrial Heat Treaters and industrial Platers).
- Must have a manufacturing facility in Connecticut or relocating operations to CT. •
- Must be registered to conduct business for at least 3-years and currently generating revenue. .
- 51% or more of the company's revenue must be generated from the sale of goods the applicant manufactures or • from allied services provided to manufacturers.
- Must have at least 3 full-time employees and fewer than 300 employees. •
- The company's manufacturing facility must be operating in an appropriately zoned commercial area. •
- Must not have received \$20K or more from IVP program previously. •
- Must be in Good Standing with both the CT Department of Revenue Services and CT Department of Labor at • time of application submission.
- Companies that receive an award under this program will be required to complete an impact report 6 months following the project's commencement.

Use of Funds

Typical uses of funding include, but are not limited to, the following:

- Acquisition of hardware and software in the Industry 4.0 Technology groups. •
- Third-party consultants retained to (a) evaluate the suitability of the company's data infrastructure and procedures • for the proposed initiative or (b) advise the company in selecting and implementing such hardware and software. except that the matching grant portion related to these third-party consulting fees shall be limited to a maximum of \$5.000.
- Other such costs that the Advisory Board and/or DECD deem eligible. •

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Additive Manufacturing Adoption Program (AMAP)



The AMAP seeks to infuse additive manufacturing (AM) technologies into the production processes of CT manufacturers. AM is rapidly changing the way organizations design and manufacture products. Components that could not be produced just a few years ago can now be made to high standards using a wide variety of plastic resins and metal powders. As AM technologies have progressed, 3D printed parts are more commonly moving outside the Research and Development arena and onto the production floor. When implemented properly, AM can significantly reduce material waste, the number of production steps, the amount of inventory, and the quantity of distinct parts needed for an assembly.

Funding

The program will award six matching grants of \$100,000 each on a competitive basis:

- Please refer to the <u>CCAT website</u> for application deadlines and funding limits
- Recipients must provide a minimum cash match of 1:1.

Payments will be made directly to the grantee following completion of the required award documents.

Program Requirements

Eligible applicants include manufacturing companies, allied service providers and other organizations that support AM. Of particular interest will be smaller-sized applicants who are adopting AM for the first time. Preference will also be given to organizations with a project that would offer the greatest benefit to Connecticut's manufacturing capabilities. The project must be consistent with the program goals, including but not limited to, developing new technologies and growing new business in Connecticut.

- Must be a manufacturing company or allied service provider with a proven ability to be innovative and a history of successfully adopting new technologies. (An allied service provider is a company that physically interacts with a manufactured good to alter its characteristics and add value.)
- Must be located in a Connecticut or in the process of relocating to Connecticut.
- Must be operating in an appropriately zoned commercial area.
- Must evidence good standing with the DRS and DOL and other relevant state or local agencies.
- Must be registered for at least 3-years and must be generating manufacturing revenue.
- For twelve months preceding the application date, the applicant must have had at least 5 full-time employees and fewer than 300 employees in its Connecticut facilities. (For purposes of the program, a person must consistently work 35 hours or more per week in order to be considered a full-time employee).
- At least 51% of an applicant's revenue must be generated from the sale of goods they manufacture or from allied services provided to manufacturers.
- Must have a proposed project with a minimum value of \$200,000 that is worthy of funding.
- Must evidence the ability to complete the proposed project and provide the required 1:1 match.
- Must have toured CCAT's Additive Technology, Optimization & Machining Lab or have participated in one of CCAT's additive webinar's, workshops, or seminars within 12 months preceding the application date (either virtually or on-site).

Additive Manufacturing Adoption Program (continued)

Use of Funds

Typical uses of funding include, but are not limited to, the following:

- Directed Energy Deposition Machines
- Hybrid CNC Additive Manufacturing Systems
- Power Bed Fusion Machines
- Binder Jet 3D Metal Printers
- Industrial Grade and Large Scale Polymer Printers

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Email Program Contact: <u>Paul Striebel</u>

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The AMAP program is structured to exclusively assist with the acquisition of new additive manufacturing equipment that will be integrated directly into a manufacturing process or will directly improve the productivity of a manufacturing cell or environment. All applications will be assessed to determine if the proposed use of the additive equipment is possible given the technical resources of the applicant. Integration of the following additive technologies are among those that will be considered for funding:

Energy Efficiency

Energy on the Line Program



C-PACE helps companies take control of energy usage. Through the Energy on the Line program, Connecticut manufacturing facility owners are eligible for up to \$40,000 in grant money when working with C-PACE to implement green energy upgrades. Grant funds may be used for any project-related expenses at the sole discretion of individual recipients (e.g. capital improvements, additional equipment, cash flow optimization). To further assist in lowering the long-term cost of energy, manufacturers may also be eligible for full financing of their energy upgrades through the C-PACE program.

Program Benefits

- Reduced energy costs and an increased bottom line, freeing businesses to focus their attention and resources on core concerns.
- Predictable, trustworthy energy savings projections, a result of the Connecticut Green Bank's rigorous technical standards.
- Support from the CT Green Bank and its program partners in developing projects that are custom tailored to each businesses' needs.

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