

**SkillUp**  
WASHINGTON

IMA CASE STUDY

# The Industrial Manufacturing Academy

*Manufacturing for  
the 21st Century*

2014



We are grateful to the National Fund for Workforce Solutions for funding this report, and to the many partners who created, grew, and sustain the Industrial Manufacturing Academy.

*Many thanks to:*

- The City of Seattle  
Office of Economic Development
- The Seattle College District
- The Manufacturing Industrial Council
- The Seattle-King County  
Workforce Development Council
- King County Work Training Program
- Aerospace Joint Apprenticeship Committee
- Manufacturing Advisory Group  
Employer Representatives
- The SkillUp Washington Funders Group

A particular shout-out is due to the dedicated team of partners who participated enthusiastically in the development of this case study and helped us capture the lessons learned over the past several years.

**Susan Crane**

***Executive Director, SkillUp Washington***

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## I. Purpose of Report

As a workforce collaborative and intermediary that invests in sector pathway building partnerships, SkillUp Washington takes every opportunity to showcase models that offer promise and have worked well. We regularly share what we learn from our work in briefing reports and case studies with local, regional, and national partners and funders in order to elevate these promising practices and strategies.

This report features the Industrial Manufacturing Academy (IMA), which is located on South Seattle College's Georgetown campus, an institution that builds strong collaborations among employers, labor, union, community-based organizations and governmental institutions. The IMA program is a testament to the combined efforts of the Seattle College District and the City of Seattle's Office of Economic Development. Both organizations have worked diligently, in partnership with many others, to ensure that the King County region has access to a skilled manufacturing labor force. The economic health of this region depends on it. Looking ahead through 2020 a 5.8% growth in the manufacturing industry is predicted.



## II. Background

Two previous programs (SODO Inc. and Project Greenlight) informed the design of the IMA. Both of these non-credit programs enrolled young adults in cohort training, and included the engagement of employers as internship site providers and career mentors. The 250, 18-24 year old students enrolled in these 6-7 week programs between 2009-2012 had opportunities to earn a variety of different certifications, including Forklift Operator, Traffic and Flagging, OSHA 10, and First Aid/CPR. Though the short term training influenced the next step career choices of many students, and resulted in some being hired by manufacturing employers, program funders knew a more comprehensive course would increase the labor market competitiveness of graduates.

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### III. IMA Overview

The IMA program serves an incredibly diverse population, including young adults who are detached from work or school, to displaced workers and recent veterans. Students range in age from 18 – 61. All versions of the programs leading up to the IMA have drawn positive attention. SODO Inc. earned the 2011 Washington State Governor’s Best Practice Award for Workforce and Economic Development. The current and significantly enhanced IMA model has garnered national attention and resulted in South Seattle College (SSC) being chosen as the recipient of the 2014 National Council for Workforce Education (NCWE) Exemplary Program Award for a Credit Workforce Development Program.

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The leadership and funding of the Seattle College District (SCD), City of Seattle Office of Economic Development Pathways to Career Initiative, SkillUp Washington, Manufacturing Industrial Council, King County Work Training Program, Seattle-King County Workforce Development Council (WDC), Aerospace Joint Apprenticeship Committee (AJAC) and many other partners contributed to the funding of SODO Inc. and Greenlight Manufacturing and to the subsequent sustainability of the 11 week IMA program, which began in 2013. Every one of these programs leveraged their resources to support the IMA. For example, SkillUp Washington partially funded the Navigator (case manager, referral advocate) position through a grant from its Manufacturing Advancement Pathways Project (MAPP). AJAC invested in curriculum development and instruction. The WDC funded recruitment and case management for students in Vigor Shipyards training, which is a next step training that some graduates of IMA pursue.



# EMPLOYER-ADVISED CURRICULA AND PROGRAM

The IMA curricula were initially informed in 2013 by a cross section of manufacturing employers who participated in the Manufacturing Advisory Group (MAG) convened by the Manufacturing Industrial Council. The MAG participated in a rigorous process which resulted in the selection of core elements of the IMA's entry level skills training course, and acknowledgement that national industry-driven certifications and local industry certificates that identified employer skills and sufficiency level were valuable. The MAG members identified a set of competencies which IMA manufacturing graduates should know.

Members of the MAG also recommended that local employers be integral partners in all aspects of the program. They advocated strongly for core training such as that offered by the IMA, as well as enhanced programs that would help graduates be prepared for specialized pathways in areas such as aerospace and maritime. The IMA followed up on these recommendations, and in 2014 constructed a strong pathway to the maritime industry, through a partnership with Vigor Shipyards. Consistent with the advice of the MAG, employers are engaged in every facet of the program, beginning with the 40 hour IMA orientation Challenge Week. Employers also provide assistance in curriculum development and instruction, share information about job openings with IMA staff, and provide interviewing and career coaching support. Employer involvement has been instrumental to the success of graduates and the program.

Examples of these competencies are presented below.

## A. CAREER READINESS SCREENING AND TRAINING

### Getting & Keeping the Job

Resume writing, cover letters & interviewing skills

Types of communication, active listening/learning skills

### Basic Computer Skills

Basic computer skills: Microsoft Word, Excel and Outlook

## B. EMPLOYER/LOCAL BUSINESS ENGAGEMENT

### Employer Engagement

Employer expectations for entry-level employees

Internship at a local manufacturer

### Manufacturing Company Tour

Tours: firsthand view of a manufacturing work site

## C. SAFETY TRAINING

### OSHA 10/MSDS

Strong emphasis on manufacturing safety: Lock-out, Tag-out, Nip Points, Correct Lifting Procedures, Ergonomics, Body Mechanics, Ladder Safety, Fall Arrest, Blood Borne Pathogens, Hazard Recognition, Hazardous Materials Labeling, and Confined Space Entry

## D. MANUFACTURING TRAINING

### Introduction to Manufacturing/ Career Ladders/Apprenticeship

Manufacturing career options

### Manufacturing Basics Unit I

Overview into manufacturing,

### Basic Blue Print Reading

Recognize the different types of prints

Overview reading, drawing, lettering, lines and symbols

The IMA Navigator summed up the program approach to involving employers, saying, “The best strategy is to bring them in at the start. Get them involved and interested in students. Give them a stake in the transformation the student makes over 11 weeks. When that happens, an employer will feel like they played a part, like they helped in the process, and often, they will be more likely to hire.”



The IMA certificate awarded to graduates was endorsed by manufacturing employers. All who successfully complete industry-identified competencies receive a Certificate of Proficiency. The names of the MAG Advisory Group companies lend a great deal of credibility to the IMA program.

The IMA program is now a permanently embedded course offering of the Seattle College District. Today, students of all ages are enrolled, and have opportunities to earn 28 college credits along with certifications in forklift, traffic and flagging, Industrial CPR/First Aid and OSHA 30. The training includes Lean Manufacturing, Beginning Composites, and Math for Technicians and Manufacturing Tools & Trades.



## IV. The IMA Model Supports Three Critical Student Transitions

The 2014 IMA model includes strategies which support three critical student transitions. The core features of each are presented below.

### Transition 1: Pre Entry to College Entry – Challenge Week

Every student entering IMA completes Challenge Week, a 40 hour week, front-end assessment that helps students see if they have the appetite for and ability to successfully enroll in and complete the rigorous IMA training.

Students complete assessments and paperwork and participate in an interview facilitated by employers. The exposure to the types of activities which graduates of a manufacturing program could expect to encounter at the worksite helps students make an informed career choice.

Navigators work closely with students and help them access vital services, such as financial aid, childcare and transportation, if needed, so that they have every opportunity to afford and persist in training. Students develop authentic connections with employers early on in the IMA program, setting the stage for their later success in the labor market. Students who successfully complete Challenge Week and are determined to be ready for the program by instructors and employer partners are enrolled in the course.

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“Challenge Week works because it emulates the class, emulates work, and gets students thinking all at the same time. We keep to a strict time schedule, requiring that students clock in and clock out from the first day of Challenge week. Students understand that this is the week to show their best selves, and to determine their readiness to enter the IMA course.”

– IMA Navigator

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## Transition 2: Program to Completion

The IMA Program to Completion part of the model features: (1) A cohort model, increasing student access to peer supports and opportunities to build essential 21st century communication, decision-making and conflict resolution skills; (2) Stackable credentials; (3) Contextualized developmental education; (4) Navigator support of students who need information about, and/or assistance to access non-academic services; (5) Employer engagement during the eleven week training as instructors, interviewers and conduits to jobs; (6) Instructor-Navigator-Employer-Student partnership to troubleshoot barriers to student persistence in tandem to ensure a wide-lens view and approach to problem-solving; (7) Industry-approved curriculum; and (8) Preparation for and close articulation to next step work and training.

## Transition 3: Connections to Careers

The IMA Connections to Careers portion of the model focuses strongly on helping students develop: (1) Connections with employers; (2) Familiarity with industry environments and hiring practices; (3) An understanding of labor market hiring practices and approaches; and (4) Knowledge of career pathway access and advancement points.

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“The students that persist are the ones that realize the importance of buying in immediately. This is short-term training, only 11 weeks long and then it’s over. We know when they make a commitment to always be present and demonstrate a strong sense of personal pride during the training and through their interactions with peers who will be their future co-workers that they’re going to be great future employees.”

– IMA Navigator

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## V. IMA students benefit from Location. Location.

A frequent refrain IMA faculty share with students is: “Your Next Career Starts Here”. The Georgetown campus brings this mantra to life for two main reasons:

**Location:** The Georgetown campus houses the largest representation of apprenticeships at a Washington state community college.

**Location:** The neighborhood around Georgetown campus is full of entry level and living wage industrial jobs.

On the ride to campus, from any direction, students pass companies and industrial complexes where they are likely to soon work. The campus too is a bustling real-world environment, showcasing people applying and honing high-demand skills. The Georgetown environment erases the lines between course and career. Daily demonstrations of real-life job skills and engagement of local employers are such an ever present part of the curricula that students have no doubt they are “at work.” All IMA students are treated like employees. As such they are expected to demonstrate a strong work ethic and adhere to workplace performance and safety skills. Students clock in and clock out, increasingly taking on more ambitious tasks and team work responsibilities. The IMA approach paves the way for graduate employment.

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“The IMA training was great. It made me believe in my abilities – and think of myself as working as a fabricator or metal worker. I am ready to do something.”

– IMA Student

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“I never thought of myself as a student. And never really planned for the future until I took this class. But since enrolling in IMA I have started to do both.”

– IMA Student

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## VI. IMA Job Placement Results

The employers who worked with SODO Inc. continue to be IMA employer partners. SSC's commitment to designing employer-driven curricula, a high level of employer engagement and ongoing incorporation of evidence-based practices into the manufacturing training programs has contributed to the high program completion and job placement performance of these programs.

The IMA is recognized as a "go to" for employers looking to hire skilled workers in manufacturing jobs. It has also proven to be a strong conduit to advanced training. IMA graduates are filling a great need in the labor market. Two IMA cohorts are in process as of the writing of this report. Five cohorts have run since the start of the IMA in 2013; since that time, 81 students have enrolled. Data for the first five cohorts reveals that 71 students completed the training and of those, 44 (68%) are employed, including four enrolled in apprenticeships. In addition, 10 students are pursuing next steps education. An impressive 82% have entered employment or are continuing their education.

The IMA performance data is notable, especially given that the IMA student population includes high numbers of low-income students, many of whom have not experienced success in traditional academic environments. Wage data shows that 96% of the students

going into entry-level jobs earn between \$14-21 per hour. The success of the program can be attributed largely to the skilled navigator and instructor support provided to students, and to the IMA environment which focuses squarely on the needs of employers, and routinely embeds the competencies that employers are seeking.

## VII. IMA Sustainability

The Seattle-King County area's need for a strong and skilled manufacturing talent pipeline is vast. The IMA staff and Pathways to Careers partners are continually engaging in efforts to grow the program. As part of this effort IMA staff routinely:

- Review and utilize IMA demographic data, performance data, and student and employer feedback to improve IMA training.
- Engage new employer partners to build bridges to potential future career opportunities; and
- Improve the training to respond to lessons learned and emerging labor market need.

IMA staff also focus heavily on strategies which build bridges to the program. For example, IMA staff recently partnered with SkillUp Washington to build an on-ramp for young adults to IMA through the Youth Industry Partnership Initiative (YIPI). The SkillUp grant, funded by the National Fund for Workforce Solutions, will be used to integrate basic education strategies into the course curricu-

lum and leverage employer partnerships to offer paid, credit-bearing internships as part of the on-ramp.

Staff also incorporate new course content and career advising into the program to expand the capacity of IMA students to pursue next step training. These efforts are already resulting in some students exiting the program to pursue coursework in HVAC Services, Welding Fabrication, Aerospace Composite Technology and Aviation Maintenance Technology Training.

Furthermore, IMA staff and partners are continually looking for ways to align, coordinate and leverage resources and funds to sustain and build IMA pipelines. The SCD Pathways to Careers Director and SkillUp Washington have played a pivotal role in this work and in showcasing IMA. For example, South Seattle College co-hosted a tour of the IMA for 50 elected officials affiliated with the National League of Cities at Georgetown in partnership with City of Seattle Councilmember Sally Clark and the City Office of Intergovernmental Relations, and looks for expansion opportunities. SkillUp regularly convenes recruitment, navigator, and employer engagement partners to coordinate and better align sector pathways and employer engagement efforts and to document the lessons learned from these efforts as the IMA partnership continues to evolve and grow.

The leadership of SSC and SCD has played a significant role in ensuring that the sector pathway efforts of the IMA are well-known, continually evaluated and enhanced. Being

connected to the OED/SCD Pathways to Careers Initiative and to the SkillUp Washington funders collaborative has helped all IMA partners to stay focused on the end goal – which is to ensure that the pipeline to manufacturing keeps growing in a data-driven and streamlined fashion. To do so has required that partners work in unison to create a patchwork of funding that appears seamless to students. The creativity and capacity of partners to align and leverage funds and expertise of the SSC administrators, staff and employers has contributed significantly to sustainability efforts.

The success of IMA draws attention to the investing in Pathways to Careers and SkillUp investment priorities which direct to talent pipeline-building efforts that:

## DESIGN

- Build in core transferable skills, and industry-approved training that focuses on high demand pathways or emerging occupations;
- Embed strong recruitment pathways from community based organizations and secondary school partners; Offer rigorous selection and screening criteria (such as the student academic, career and training readiness assessments which occur during Challenge Week);
- Integrate efficient articulation pathways from secondary institutions to IMA and from IMA to next step training;
- Incorporate sector pathway and college completion evidence-based research/economic development plans and priorities;



### STAFFING

- Include IMA Navigator staff working in partnership with the IMA Instructor to ensure that students receive course access and persistence supports;

### SUSTAINABILITY

- Are well-integrated with similar regional efforts;
- Have a potential for sustainability and growth;
- Promise multi-level college support – e.g. Vice President, Administrators, workforce and instructional deans; and
- Ensure a high level of support/interest in sector pathway learning from local Workforce Development Council, Chamber of Commerce, employer and labor partners.

The IMA approach and partnerships highlight the power of coordination and collaboration. The program continues to implement the strategies needed to adapt to the workforce transformation and business agility needs of the manufacturing sector. Programs such as IMA are necessary to ensure that a diverse, talent pipeline of future workers enter the economy equipped with the skills, knowledge and networks necessary to enter, contribute to and advance within the workforce.



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