




**PREPARE FOR A CAREER AS AN
ADVANCED
MANUFACTURING
PROFESSIONAL**

AT HARPER COLLEGE

“Over the next decade, \$100 billion in goods production can return to U.S. shores.”

– Boston Consulting Group

Start. Finish. Go Foward.

 Harper College®



MANUFACTURING BUILDS SUCCESSFUL CAREERS

Harper Advantages

- Training completed in as little as 12 months.
- “Learn and Earn” paid internship with local manufacturer.
- Advanced training and credential opportunities.
- State-of-the-art equipment and classroom facilities.
- Financial assistance, grants and scholarships available.
- In-district tuition no matter where you live or work.
- Lifetime job placement assistance.
- Transferable college credit and credentials.
- Certificates build toward Associate Degree.
- Prepare for bachelor’s degree options when you’re ready.

“Manufacturers simply cannot find the skilled labor needed today to handle the kinds of sophisticated production processes and tasks required on the manufacturing shop floor.”

— Fabricators & Manufacturers Association International****

***ere.net, 12/12/13
****nutsandboltsfoundation.org, The Manufacturing Predicament: Sector Primed to Surge Yet Skilled Labor an Obstacle, Whitepaper by Fabricators & Manufacturers Association International, 2011

LEARN MORE. EARN MORE.

Harper's Manufacturing program begins with intense classroom work which prepares you for MSSC Certification. Once you complete your paid internship, you may choose to earn additional credentials to specialize in:

- Mechatronics/Automation
- Precision Machining
- Metal Fabrication
- Supply Chain/Logistics



“Instead of cutting production workers and outsourcing overseas, manufacturers are bringing more work back onshore, necessitating the hiring of workers.”***

***enr.net, 12/12/13
****nutsandboltsfoundation.org, The Manufacturing Predicament: Sector Primed to Surge Yet Skilled Labor an Obstacle, Whitepaper by Fabricators & Manufacturers Association International, 2011



IF YOU THINK MANUFACTURING JOBS ARE GRITTY, THINK AGAIN

Much of today's manufacturing work is done in high-tech, temperature controlled, sterile environments. That's because manufacturing has been revitalized and revolutionized, and it's proving to be one of the United States' largest major growth industries. In fact, the White House is investing \$200 million+ to create manufacturing hubs that bring together companies and universities for research and development of products. Harper College is at the leading edge of this initiative.

“Whether it’s due to more conservative hiring practices, changing demographics or negative perceptions of manufacturing jobs, the demand for high-skill labor is growing faster than supply.”

— Pradeep Amladi, Vice president
Discrete Manufacturing Industries
SAP ***

***ere.net, 12/12/13
**** nutsandboltsfoundation.org, The Manufacturing Predicament: Sector Primed to Surge Yet Skilled Labor an Obstacle, Whitepaper by Fabricators & Manufacturers Association International, 2011





“Our first intern demonstrated competencies in safety, general work ethic and shop math. The training he brought from Harper was instrumental to his success here at KOMET of America. We consider the Harper program a great feeder source of entry level production candidates.”

— Joanne Snarich
KOMET of America, Inc.
Schaumburg

MANUFACTURING GOES LOCAL

Harper students have connections to 100+ local manufacturing companies through Harper’s advisory partnerships with local manufacturers and connections through the Department of Labor’s iNAM grant. These companies host interns and hire Harper graduates. Your paid internship will also earn you two college credit hours. People with the right skills and acumen are in demand. The annual Manpower Talent Shortage Survey of 40,000 employers found that 34% of them are having trouble filling skilled trades and engineering positions.

***ere.net, 12/12/13
**** nutsandboltsfoundation.org, The Manufacturing Predicament: Sector Primed to Surge Yet Skilled Labor an Obstacle, Whitepaper by Fabricators & Manufacturers Association International, 2011



“The manufacturing industry is facing a severe shortage of qualified machinists and programs like this give me hope that manufacturing is solidifying its comeback in this country. I have had an intern working for us for the last year and I have been very pleased with his knowledge and work ethic. I look forward to hiring more interns from Harper’s program in the near future.”

Steven Godek
Operations Manager, GPM Mfg Inc
Lake Zurich



EXPERIENCE AND CREDENTIALS

With paid internship experience at local employers and credentials earned at Harper College, you’ll be positioned to secure a solid career path. As a Harper student, you’ll receive life-time personal assistance with job placement.

For those with up-to-date credentials and hands-on experience, average full-time pay is about \$24 an hour. On average, Chicago-area manufacturing salaries exceeded the U.S. manufacturing average of \$60,340 by 10 percent. Salaries in the region’s manufacturing sector, \$67,168 on average, were about 16 percent higher than the \$56,579 average earnings for all jobs in the metropolitan area.**

*Bureau of Labor Statistics
** Source: Crains Ch <http://www.thinkstockphotos.com/image/stock-photo-technician-repairing-an-hot-water-heater/450231597> icago Business, 2/25/13

MANUFACTURING: NATIONAL PRIORITY, LOCAL OPPORTUNITIES.

- In 2012, manufacturers contributed \$2.03 trillion to the economy, up from \$1.93 trillion in 2011. This was 12.5 percent of GDP. For every \$1.00 spent in manufacturing, another \$1.32 is added to the economy, the highest multiplier effect of any economic sector.¹
- Manufacturing supports an estimated 17.4 million jobs in the United States—about one in six private-sector jobs. More than 12 million Americans (or 9 percent of the workforce) are employed directly in manufacturing.²
- In 2012, the average manufacturing worker in the United States earned \$77,505 annually, including pay and benefits. The average worker in all industries earned \$62,063.³
- Manufacturers in the United States are the most productive in the world, far surpassing the worker productivity of any other major manufacturing economy, leading to higher wages and living standards.⁴
- Manufacturers in the United States perform two-thirds of all private-sector R&D in the nation, driving more innovation than any other sector.⁵
- Taken alone, manufacturing in the United States would be the 8th largest economy in the world.⁶

Source: National Association of Manufacturers, 3/20/2014, <http://www.nam.org/Statistics-And-Data/Facts-About-Manufacturing/Landing.aspx>

¹ Bureau of Economic Analysis, Industry Economic Accounts (2012).

² Bureau of Labor Statistics (2014), with estimates of total employment supported by manufacturing calculated by NAM using data from the Bureau of Economic Analysis (2012).

³ Bureau of Economic Analysis (2012).

⁴ NAM calculations based on data from the United Nations, Bureau of Labor Statistics, and the International Labour Organization.

⁵ National Science Foundation (2009).

⁶ Bureau of Economic Analysis, Industry Economic Accounts (2012) and International Monetary Fund (2012)



ADVANCED MANUFACTURING PROFESSIONAL EDUCATION PATHWAY

STEP 1

Earn Your Manufacturing Production Certificate

This 16-hour certificate builds core competencies of manufacturing production to prepare students for internships and entry level positions in manufacturing.

- MTH 097 Tech Math
- MFT 102 Intro to Manufacturing and Safety
- MFT 104 Quality and Measurement
- MFT 108 Manufacturing Processes
- MFT 109 Intro to Manufacturing Maintenance

This certificate also prepares students for a nationally recognized credential offered by the Manufacturing Skills Standards Council (MSSC).

STEP 2

Select a Field of Specialization

- Mechatronics/Automation
- Precision Machining
- Metal Fabrication
- Supply Chain Management/Logistics

Serve an Internship

Serve an Internship (MFT 119) related to your field of specialization.

COMPLETE TWO OR THREE CERTIFICATES IN YOUR SPECIALIZED FIELD

STEP 3

Mechatronics/ Automation

- Electrical Maintenance (10 hours)
- Industrial Electronics (6 additional hours)
- Mechatronics/Automation (10 additional hours)

Precision Machining

- Computer Numerical Control Operator I (15 hours)
- Computer Numerical Control Operator II (12 additional hours)

Metal Fabrication

- Basic Welding (16 hours)
- Welding Fabrication (13 additional hours)

Supply Chain Management/Logistics

- Inventory/Production Control (12 hours)
- Purchasing Certificate (6 additional hours)
- Physical Distribution Certificate (6 additional hours)

READY FOR EMPLOYMENT

STEP 4

When you're ready, complete your Associate of Applied Science Degree

STEP 5

When you're ready, Advance to a four-year institution to pursue your Bachelor's degree

LEARN MORE. EARN MORE.

Call 847.925.6112 to get started.

