

## What is AMID?

Advanced Manufacturing by Innovation and Design (AMID)

Nashua Community College received a U.S. Department of Labor, Trade Adjustment Assistance Community College and Career Training Round 3 (TAACCCT 3) grant, to work in tandem with local and regional manufacturers, state agencies and community organizations to transform its Advanced Manufacturing/Machine Tool and Mechanical Design Technology curriculum into a credit based/ Competency-Based Education (CBE) model. The program, will provide students with an opportunity to earn stackable credentials needed for Advanced Manufacturing jobs and will create a path to a STEM-based four-year college degree. The programs offer comprehensive support for their students through the Success Navigator Program. AMID offers a Technology Enhanced Machine Tool Technology CNC Programming certificate. Technology enhanced Degree programs in Mechanical Design Technology and Precision Manufacturing will be offered at a later date.



# Metrology

## Certificate

**Mark Dodge**

mdodge@ccsnh.edu

**Maria Dimitros**

mdimitros@ccsnh.edu

**Melanie Palomino**

mpalomino@ccsnh.edu

603.578.8910

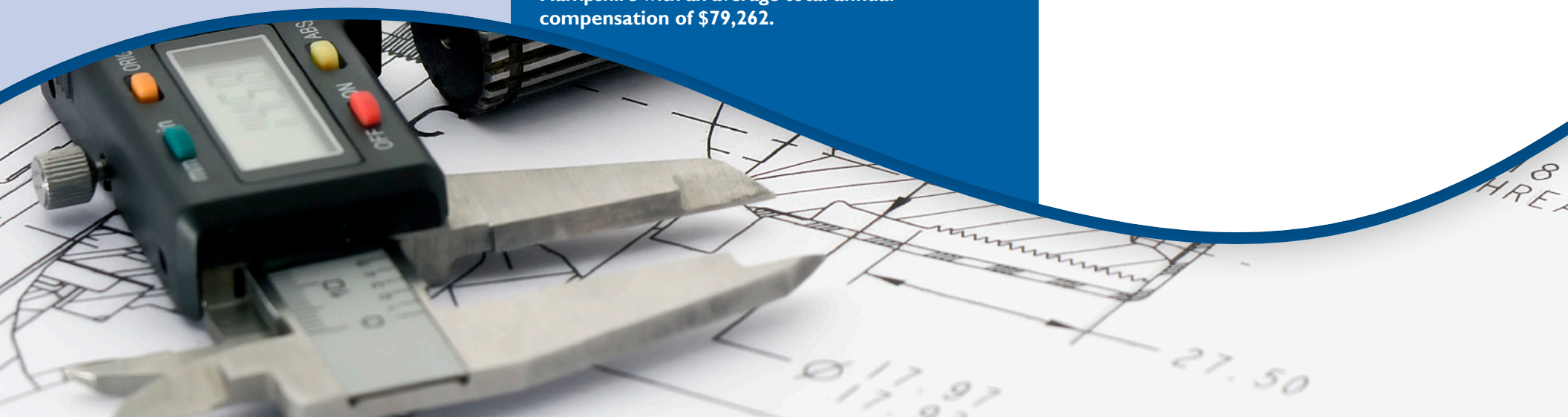
## Average Salary of Jobs with Related Titles

Metrologist Calibration Technician	\$71,000
Measurement Technician	\$48,000
Metrology Technician	\$38,000
Calibration Service Technician	\$52,000
Engineering Technician Senior	\$51,000
Senior Quality Technician	\$52,000
Quality Technician RD Shift	\$27,000

From <http://www.indeed.com/salary/Metrology-Technician.html>

## Manufacturing in New Hampshire:

Manufacturing is the largest single sector employer in New Hampshire when measured by total compensation to New Hampshire employees and represents a third of the total gross product of the state. In 2014, 66,500 manufacturing employees produced \$7.71 Billion dollars in goods in New Hampshire with an average total annual compensation of \$79,262.



# Metrology and Quality Control for Precision Manufacturing

A Precision Manufacturing Certificate Program

Metrology is the science of measurement. It is used in the design and production of almost everything we use on a day-to-day basis. This certificate will enable the student to seek employment as an inspector of manufactured parts with the successful completion of two semesters of course and lab work. The program has a mix of machining courses, CADD courses, manufacturing courses, as well as a new course that concentrates on the specifics of inspection and metrology. Students will be able to utilize state-of-the-art manufacturing machinery, including CNC-programmed lathes and milling machines, as well as the latest in coordinate measuring machines.



## The Certificate Curriculum requires these courses:

CERTIFICATE: METROLOGY AND QUALITY CONTROL FOR PRECISION MANUFACTURING					
FALL SEMESTER					
MTTN101N	Manufacturing Process	3	0	3	
MTTN111N	Machine Tool Theory I	3	9	7	
MATH105N	Technical Math	4	0	4	
SPRING SEMESTER					
CADN131N	Technical Drawing	2	3	3	
MTTN201N	Lean Manufacturing	3	0	3	
MTTN105N	Technical Communications	4	0	4	
MTTN210N	Metrology and Quality Control*	2	3	3	
		<b>Total Credits 27</b>			

\* Metrology and Quality Control is a new course. The prerequisites are MTTN101N and MTTN111N.

## Certificate Facts:

This certificate can be completed in a school year. It will also stack towards an Associate Degree in Precision Manufacturing.



Metrology workers are employed in a variety of industries and have different job duties.

Metrology workers can go by a number of different titles:

- Calibration Technicians
- Instrument Technicians
- Metrology Technician
- Metrologists
- Metrology Specialists

