



## Dimensional Metrology IMTS Education Event, Sept. 14-15, 2016

Seminar 116: Dimensional Metrology: Measurement, Inspection and Calibration (2-Day seminar)

## **Enjoy three events in one trip to the Chicago area!**

- Visit IMTS in Chicago the International Manufacturing Technology Show
- > Tour Mitutoyo America's headquarters in Aurora
- > Attend our popular Dimensional Metrology course.

Avoid the cost and trouble of getting to IMTS by staying in select hotels in Aurora that provide free shuttles to the Metra trains going into Chicago. In addition, register and attend our special offering during IMTS week and receive free tickets to the show.

Dimensional metrology – the science and practice of dimensional measurement – is the fundamental educational series of the Mitutoyo Institute of Metrology. Our Dimensional Metrology curriculum is intended for anyone who wishes to learn about dimensional measuring equipment and strategies for implementation. The modern curriculum gives equal treatment to all measuring equipment, from calipers to gage blocks to multi-sensor CMMs. The course is taught from a "Measurement Planning" perspective and cover aspects of selection, application, calibration, and care of dimensional measuring systems. Principles and practice are taught with a hands-on experiential learning approach to engage the students and promote retention of the concepts.

Our 2-day Seminar 116 will cover the following:

- Review language and units.
- Measurement planning.
- Sources of error.
- Variable vs. attribute gaging.
- Standards gage blocks, pins, rings, surface plates, etc.
- Hand tools micrometers, calipers, indicators, etc.
- Major instruments optical methods, CMMs, form, surface finish, lasers, etc.
- Selection of proper tools.
- Traceability.

**Prerequisites**: Students are encouraged to start with the free online resources to establish base knowledge to ensure a successful classroom experience. The Education On-Demand resources at <a href="https://www.mitutoyo.com/education">www.mitutoyo.com/education</a> includes a section on <a href="https://www.mitutoyo.com/education">Fundamental Education Resources</a> which should be studied prior to attended class. The resources available through Education On-Demand are available anytime to anyone (registration required for some content).

**Course Materials:** The Metrology Handbook (2<sup>nd</sup> ed.), a 280 page, full color reference book written by Nobuo Suga of the Mitutoyo Institute of Metrology, is included with this course. Additional materials will be provided in class.

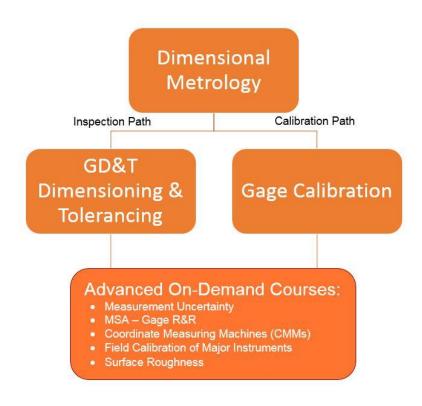
**Registration:** For questions or registration, please call the Education Department at 888-MITUTOYO (option 6) or direct at 630-723-3620. Office hours are 8:30 am to 5:00 pm Central Time. We can also be reached via email at <a href="mim@mitutoyo.com">mim@mitutoyo.com</a>. Purchase orders can be faxed to 630-978-6471.

## Pricing:

Course	No. of Days	Advanced Price	Standard Price
Education On-Demand	Self-paced	Free	Free
Seminar 116: Dimensional Metrology: Measurement, Inspection, and Calibration	2	\$ 890	\$ 995

- Advanced pricing applies when registration is completed more than 2 weeks prior to the class starting.
- A discount of 10% is available when registering more than two students for the same course.
- For cancellation information, please visit our website at www.mitutoyo.com/education.

**Comprehensive Curriculum:** The Mitutoyo Institute of Metrology offers a number of courses to meet the educational needs of manufacturing, quality, and measurement professionals. Our course are scheduled regularly throughout the year. The advanced courses are scheduled less frequently and are available on customer request in certain locations.





Mitutoyo and the Mitutoyo Institute of Metrology is a worldwide organization. We are proud to state that more than 200,000 engineers, technicians and managers have attended our measurement seminars over the years. If you wish to register or if you have additional questions, please contact us at 630-723-3620, 888-MITUTOYO, or email <a href="mim@mitutoyo.com">mim@mitutoyo.com</a>. Please visit our website for cancellation information at <a href="www.mitutoyo.com/education">www.mitutoyo.com/education</a>.