

Table 2. Training requirements

Recognition Level	Training Required	For Whom	How Often
All Measurement Parameters	Regional Measurement Assurance Program (RMAP) Training	At least one staff member	Annually
Legal Metrology* Mass, Echelon III Volume, Echelon II	<ol style="list-style-type: none"> 1. Fundamentals of Metrology (1 week course) 2. Introduction and Orientation to Mass and Volume Procedures* 3. Fundamentals of Metrology, Laboratory Auditing Program (LAP) problems 4. Successful completion of proficiency testing 	Usually all staff, at least one staff member	Once Initially Refresher portions covered during Regional Measurement Assurance Program (RMAP) training
Mass Calibration Echelon III and II	<ol style="list-style-type: none"> 1. All of the above, plus: 2. Mass Seminar (2 week course) 3. Successful completion of proficiency testing for each area on the laboratory Scope 	Usually all staff, at least one staff member	Once Initially Refresher recommended every 10 years
Advanced Mass Calibration, Echelon I	<ol style="list-style-type: none"> 1. All of the above, plus: 2. Advanced Mass Seminar (1 week course) 3. Advanced Laboratory Auditing Program (LAP) problems 4. Successful completion of proficiency testing using weighing designs 5. Optional: Advanced Hands-On Mass Seminar (if available) 	At least one staff member	Once Initially Refresher recommended every 10 years
Volume Calibration, Echelon I and II	<ol style="list-style-type: none"> 1. Legal Metrology Requirements and Mass Calibration Requirements noted above 2. Volume Calibration Course (1 week) 3. Successful completion of proficiency testing for each area on the laboratory scope using gravimetric calibrations 	Usually all staff, at least one staff member	Once Initially Refresher recommended every 10 years
All measurement parameters in addition to mass and volume	<ol style="list-style-type: none"> 1. Documented evidence of training 2. Successful completion of proficiency testing in each area of the laboratory Scope 	At least one, as needed	At least once; Refresher as needed

*Legal Metrology procedures will be provided as orientation training by NIST for mass and volume procedures during other seminars, during on-site laboratory visits, via web-based training, or through verified on-the-job training by qualified staff who have successfully met all other requirements at the designated level to enable completion of proficiency testing and Fundamentals of Metrology, Laboratory Auditing Program (LAP) problems. Mass and Volume Calibration courses must be completed by at least one person in each laboratory. If there is only one staff member in the laboratory, the laboratory will only be fully Recognized when staff have successfully completed Mass Calibration and Volume Calibration courses.