# 2024 COURSE OPTIONS



## 4 Convenient Learning Platforms



- classroom
- home study
- custom



National Association for Surface Finishing





# KNOW MORE

Whether you're new to the finishing field or consider yourself a veteran, there are learning opportunities that will increase and deepen your knowledge of this complex and evolving industry.

The NASF Foundation offers NASF members thoughtfully developed technical courses that explore and explain the important "basics" of metal finishing as well as the latest and most impactful developments in every specialty within the field.

# Know – and grow – with help from NASF Foundation

Let us help you with the work you do now – and succeed with the new opportunities in your future.

### **The National Association for Surface Finishing**

Email: info@nasf.org Website: nasf.org/education Phone: +1 202.591.2454





# **BECOME CERTIFIED**

Certified Electroplater Finisher (CEF), Certified Aerospace Finisher (CAF) and Master Surface Finisher (MSF) designations are the gold standards for finishing industry education worldwide. Certification demonstrates that the holder has the knowledge, skills and aptitude to excel on a comprehensive exam and to understand and work with the challenges of surface finishing.

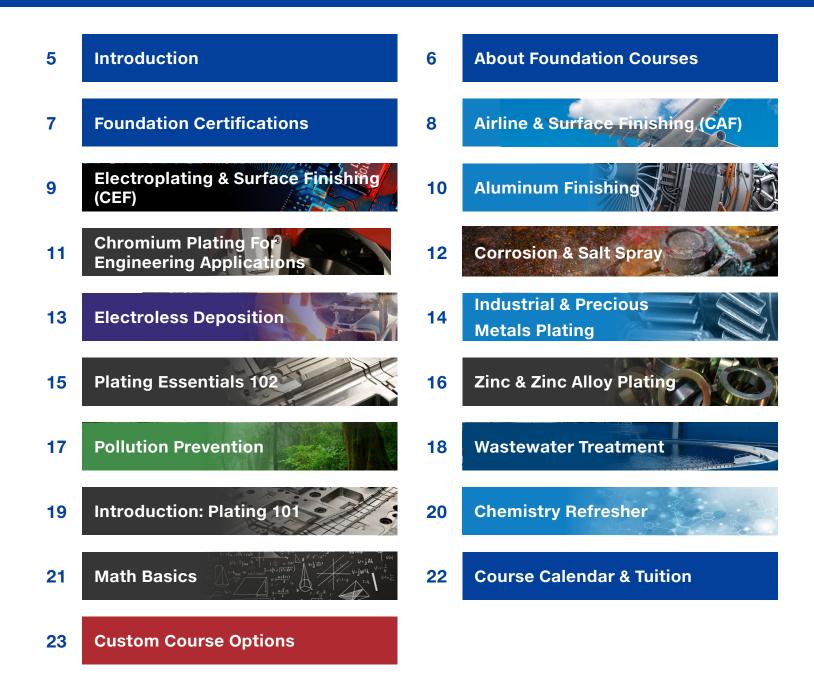
When students achieve certification, they expand their knowledge, grow within the field and evolve as true professionals. They also become members of a select group that is recognized and rewarded by employers and peers.

Certification validates a student's mastery of information and ability to meet the challenges of complex finishing environments. Each individual who achieves certification not only expands their knowledge and professional value, but raises the bar within the industry overall, making finishing more predictable and of higher quality.

Find info and schedules at **nasf.org/education** 



## **Table of Contents**



## Introduction

The National Association for Surface Finishing - NASF - represents the interests of businesses and professionals throughout the surface coatings industry.

## NASF's highly regarded programs and activities reflect its mission to:

- Advance an environmentally and economically sustainable future for the finishing industry.
- Promote the vital role of surface technology in the global manufacturing value chain.

NASF provides a vital and active link to companies, professionals and technical experts through its events, programs, committees and communications. It serves every specialty – and every job title – within the surface finishing universe.

Membership is open to job shop and "captive" applicators, industrial users, suppliers of chemicals, equipment and services, technologists, researchers and academics.

Headquartered in Washington DC, the association conducts a robust advocacy and legislative education effort on behalf of the North American surface technology community. **The NASF Foundation** is a non-profit organization that functions as NASF's training arm. The Foundation's three core areas are education, research and scholarship. NASF Foundation was formed in 2006 and offers several distinct learning platforms: Classroom, Web-based Training, Home Study and Custom Courses, which are tailored to the individual needs of public and private entities.

NASF is the gold standard in finishing industry education and the exclusive grantor of industry certifications, from basic CEF (Certified Electroplater Finisher) to MSF (Master Surface Finisher).

## **About Foundation Courses**

The National Association for Surface Finishing (NASF Foundation) offers technical education to advance the science and technology of surface finishing.



#### Web-Based Courses:

WEB-BASED

- Foundation courses in a series of web-based sessions
- Live, online interaction with NASF/AESF Foundation instructors and other industry experts
- Sessions take place on pre-determined Tuesdays & Wednesdays between Noon and 2:00 PM ET
- Session recordings are available to students for 30 days after the original posting date



#### Home Study Courses:

 Begin a Home Study course at any time; work and study at your own pace.



- Excellent preparation for the CAF, CEF, or topic specific exam
- Receive a link to course materials and quizzes



#### **Classroom Courses:**

• Live interaction with instructor in a classroom setting

CLASS ROOM

- Instruction takes place over 2-4 days (add 1 day for optional exam)
- Taught in select locations throughout the U.S.

#### **Registration is easy – and all online!** Go to nasf.org/education/



### **Custom Courses:**

- Design your course to meet your company's needs
- Mix and match 110 available course modules
- No travel required; we come to you
- Host a course at a time of your choosing

### Help with registration or want more info? Contact NASF Foundation

+1 202.591.2454 | info@nasf.org

## **Foundation Certifications**

### **CERTIFICATIONS:**

**Certified Aerospace Finisher** (CAF) demonstrates specialized knowledge in materials, plating processes and quality control methods that are vital to airline manufacturing.

**Certified Electroplater Finisher** (CEF) demonstrates a broad knowledge of surface finishing that can be applied toward positions or business with manufacturers in a variety of industries.

### **DESIGNATION:**

**Master Surface Finisher** (MSF) demonstrates mastery of essential finishing processes, as well as knowledge in specialized processes and environmental stewardship.

To obtain the MSF designation, the student must pass exams for the following:

### Primary (Choose 1)

- Airline & Aerospace Finishing (CAF)
- Electroplating & Surface Finishing (CEF)

### Core (Choose 3)

- Aluminum Finishing
- Chromium Plating for Engineering Purposes
- Electroless Deposition
- Precious Metals Finishing
- Zinc & Zinc Alloy Plating

#### Secondary (Choose 2)

- Corrosion & Salt Spray
- Environmental Stewardship: Pollution Prevention
- Environmental Stewardship: Wastewater Treatment

## **Course 1**

## Airline & Aerospace Finishing (CAF)

### (COURSE & CAF CERTIFICATION EXAM)

**Recommended Time & Experience:** The CAF Prep Course and Exam covers advanced processes and techniques that require a strong Foundation in chemistry and math only provided through work experience and/or specialized training.

The course and exam are structured for an individual who has at least 3 years' experience in the Aerospace or the Surface Finishing industry. A two-year degree or higher in a STEM related program is helpful but not required.

**Description:** This course will provide a broad range of information related to metal finishing operations that are common in the Airline/Aerospace industry.

**Designed For:** Individuals working in a facility following NADCAP standards. It is recommended, but not limited to individuals in the following positions: Quality & Plating Management; Vendors and Suppliers of Chemistry & Equipment on the commercial and technical level; Technical Specialists (R&D, Lab) within Aerospace.

Course Content Level: Advanced (300 level) Approx Hours to Complete: 40 Hours

**Learning Objectives:** Those completing this course and/or earning the CAF certification are able to demonstrate:

- Expertise in each step of the surface finishing process related to the aerospace industry from preparation & manufacturing to final inspection.
- The ability to anticipate, recognize, diagnose, troubleshoot, and correct surface finishing discrepancies, anomalies, or defects.
- Competence in matching plating strategy to the end-use application and environment.

### **Registration Fees:**

Home-Study Course	Member: \$1,400	Non-Member: \$1,800
In-Person	Member: \$2,050	Non-Member: \$2,450
Web-Based Course	Member: \$1,400	Non-Member: \$1,800
Exam	Member: \$200	Non-Member: \$300



## **Certification Series**

## Electroplating & Surface Finishing (CEF

## (COURSE & CEF CERTIFICATION EXAM)

**Recommended Time & Experience:** The CEF Prep Course and Exam covers advanced processes and techniques that require a strong Foundation in chemistry and math only provided through work experience and/or specialized training.

The course and exam are structured for an individual who has at least 3 years' experience in the surface finishing industry. A two-year degree or higher in a STEM related program is helpful but not required.

**Description:** This course will provide a broad range of knowledge and understanding of the chemistry, processes, equipment, troubleshooting, and quality control common in the Plating and Surface Finishing.

**Designed For:** But not limited to: Operators and Supervisors of job shops and captive shops applying a broad range of surface finishes on a variety of substrates. The course is also beneficial to sales personnel serving the metal finishing industry.

Course Content Level: Advanced (300 level) Approx Hours to Complete: 40 Hours

**Learning Objectives:** Those completing this course and/or earning the CEF certification are able to demonstrate:

- Expertise in each step of the surface finishing process from preparation & manufacturing to final inspection.
- A comprehensive understanding of the equipment required/used in the Plating/Surface Finishing process.
- The ability to anticipate, recognize, diagnose, troubleshoot, and correct surface finishing discrepancies, anomalies, or defects.
- Competence in matching plating strategy to the end-use application and environment.

### **Registration Fees:**

Home-Study Course	Member: \$1,400
In-Person	Member: \$2,050
Web-Based Course	Member: \$1,400
Exam	Member: \$200

Non-Member: \$1,800 Non-Member: \$2,450 Non-Member: \$1,800 Non-Member: \$300



## **Aluminum Finishing**

## (COURSE & CERTIFICATE EXAM)

**Recommended Time & Experience:** Some experience or training in the art and science of electroplating or electroless plating is recommended. For those a few years away from taking any chemistry courses, the online Chemistry Refresher course offered by NASF Foundation is highly recommended, but not required as a pre-requisite.

**Description:** This course provides an in-depth understanding of the pre-treatment, application of topcoats, anodizing, and testing of Aluminum substrates. In addition, it provides the student a clear understanding of the steps necessary to properly finishing aluminum alloys, including terminology, coating differences, chemistry, processes, and equipment used.

**Core Elective:** Master Surface Finishers (MSF) designation.

**Designed For:** But not limited to: Operators with some level of aluminum finishing experience including but not limited to plating line work, supervisors, sales personnel serving metal finishers and managers.

**Course Content Level:** Intermediate to Advanced (200 to 300 Level) **Approx Hours to Complete:** 20 Hours

**Learning Objectives:** Those completing this course and/or earning a certificate in Aluminum Finishing are able to demonstrate:

- Proper identification and description of the basic properties of aluminum.
- The methods used in the production of aluminum parts.
- Correct analysis on the impact of different production methods on the finishing of aluminum parts.
- Recognize the significance of alloying elements in aluminum and their effects on surface finish.
- Ability to differentiate and identify between equipment requirements, coloring and sealing, and the different anodizing processes.

### **Registration Fees:**

Home-Study Course	Member: \$1,100
Web-Based Course	Member: \$1,250
Exam	Member: \$200

Non-Member: \$1,500 Non-Member: \$1,550 Non-Member: \$300



## Chromium Plating For Engineering Applications

### (COURSE & CERTIFICATE EXAM)

**Recommended Time & Experience:** Some experience or training in the art and science of functional chrome plating is recommended. For those a few years away from taking any chemistry courses, the Chemistry Refresher course offered by NASF Foundation is highly recommended, but not required as a pre-requisite.

**Description:** This course provides an in-depth understanding of the applications, properties, and safety requirements when using functional chrome. It explains why functional chrome would be used and how it would be applied to a substrate.

Core Elective: Master Surface Finishers (MSF) designation.

**Designed For:** But not limited to: Operators with some level of chrome plating experience including but not limited to plating line work, supervisors, sales personnel serving metal finishers and managers.

**Course Content Level:** Intermediate to Advanced (200 to 300 Level) **Approx Hours to Complete:** 10 Hours

**Learning Objectives:** Those completing this course and/or earning a certificate in Chromium Plating are able to:

- Demonstrate an understanding of the application and properties of functional chrome as well as the safe handling, storage, and uses for this chemistry.
- Recognize the proper functions of equipment, waste-treatment handling, regulatory requirements, and the role of catalysts and additives in hard-chrome applications.
- Articulate the importance of pre-treatment preparation including masking, blasting, and monitoring and control of the most common chemical methods.

### **Registration Fees:**

Home-Study Course Exam Member: \$900 Member: \$200

Non-Member: \$1,300 Non-Member: \$300



## **Corrosion & Salt Spray**

## (COURSE & CERTIFICATE EXAM)

**Recommended Time & Experience:** Some experience with accelerated corrosion testing and interpretation of results in a lab environment. For those a few years away from taking any chemistry courses, the Chemistry Refresher course offered by NASF Foundation is highly recommended, but not required as a pre-requisite.

**Description:** This course provides an in-depth understanding of the accelerated corrosion testing commonly used in the industry with an emphasis on salt-spray cabinet operations, corrosion mechanisms, and corrosion testing.

Core Elective: Master Surface Finishers (MSF) designation.

**Designed For:** But not limited to: Quality Control and Lab personnel responsible for the operation of corrosion chambers.

**Course Content Level:** Intermediate to Advanced (200 to 300 Level) **Approx Hours to Complete:** 10 Hours

**Learning Objectives:** Those completing this course and/or earning a certificate in Corrasion & Salt Spray are able to demonstrate:

- The proper selection and maintenance the proper chemistry of a salt-spray corrosion chamber and preparation of samples for testing.
- Accurate reading and recording of results for different finishes and substrates.
- Clear understanding of achieving customer requirements, specification requirements and interpretation of standards including ASTM B-117.
- Overview of alternate accelerated corrosion tests including CASS, Humidity Chambers, Corrodkote, Acetic Acid, and Kesternich tests.

### **Registration Fees:**

Home-Study Course Exam Member: \$900 Member: \$200

Non-Member: \$1,300 Non-Member: \$300



## **Electroless Deposition**

### (COURSE & CERTIFICATE EXAM)

**Recommended Time & Experience:** Some experience with the most widely used chemistries, focusing on electroless nickel. For those a few years away from taking any chemistry courses, the online Chemistry Refresher course offered by NASF Foundation is highly recommended, but not required as a pre-requisite.

**Description:** This is course provides an in-depth understanding of electroless nickel, its components, and deposit properties with special consideration to troubleshooting, pre-treatment and testing. In addition, it provides an understanding of the nuances of plating on plastics and other electroless chemistries including E-Au, Co, and Cu

Core Elective: Master Surface Finishers (MSF) designation.

**Designed For:** E-Ni Applicators, Lab Techs, experienced Operators, Managers, and Engineers as well as those with Design Authority.

Course Content Level: Advanced (300 Level) Approx Hours to Complete: 10 Hours

**Learning Objectives:** Those completing this course and/or earning a certificate in Electroless Deposition are able to demonstrate:

- Recognition of the proper pre- and post-plating processes.
- Knowledge of the differences between electroless alloys and their deposit properties.
- Proper selection and maintenance of equipment and tank chemistry.
- Appropriate quality control testing to achieve optimal results the meet the specified requirements.
- Proper identification of the most common problems encountered with wastewater treatment systems and potential solutions for those problems.

### **Registration Fees:**

Home-Study Course
Exam

Member: \$900 Member: \$200 Non-Member: \$1,300 Non-Member: \$300



## Industrial & Precious Metals Plating

(COURSE & CERTIFICATE EXAM)

**Recommended Time & Experience:** No experience or training the in the art and science of electroplating. For those a few years away from taking any chemistry courses, the online Chemistry Refresher course offered by NASF Foundation is highly recommended, but not required as a pre-requisite.

**Description:** This course presents a broad range of information related to preparing parts for precious metal plating as well as exploring Precious Metal (PM) plating processes. It also covers best practices for troubleshooting and problem solving this technique.

Core Elective: Master Surface Finishers (MSF) designation.

**Designed For:** But not limited to: Operators, Supervisors, and Sales personnel of facilities specializing in PM plating and those selling and supporting the PM industry.

Course Content Level: Intermediate (200 Level) Approx Hours to Complete: 10 Hours

**Learning Objectives:** Those completing this course and/or earning a certificate in Industrial & Precious Metal Plating are able to demonstrate:

- An understanding of the pre- and post-treatment and underlays required for successful PM plating.
- Aspects of reel-to-reel plating technologies used for PM plating.
- Distinguish the features of PM chemistries and operational conditions including gold, palladium, palladium-nickel, platinum, rhodium, silver, and tin.
- Articulate the alternatives to plating including High Velicity Oxygen Fuel (HVOF) and plasma spray.

### **Registration Fees:**

Home-Study Course	Member: \$900	Non-Member: \$1,300
Web-Study Course	Member: \$975	Non-Member: \$1,300
Exam	Member: \$200	Non-Member: \$300



## Plating Essentials 102

## (COURSE & CERTIFICATE EXAM)

**Recommended Time & Experience:** Understanding of Plating Basics; entry level, some experience. Introduction to Plating strongly recommended but not required. For those a few years away from taking basic math courses, the online Math Basics course offered by NASF Foundation is highly recommended, but not required as a pre-requisite.

**Description:** This course provides a comprehensive review of the surface finishing process from pre-treatment, to coating applications, to post-treatment. In addition, it covers quality basics, troubleshooting, equipment requirements and maintenance.

**Designed For:** But not limited to Applicators, Line Operators, Managers, and Sales Personnel who want a higher level of understanding of the surface plating process.

**Course Content Level:** Foundational (100 Level) **Approx Hours to Complete:** 10 Hours

**Learning Objectives:** Those completing this course and/or earning a certificate in Plating Essentials 102 are able to demonstrate:

- An understanding of the finishes commonly applied by the electroplating process and the basic differences in performance among the various coatings.
- Ability to apply basic math and chemistry as it relates to the electroplating process.
- Identify and describe the main components in an electroplating process.
- Knowledge of various types of parts and problems that each can pose when processed by electroplating.

### **Registration Fees:**

Home-Study Course	Member: \$900
Web-Study Course	Member: \$975
Exam	Member: \$200

Non-Member: \$1,300 Non-Member: \$1,300 Non-Member: \$300



## Zinc & Zinc Alloy Plating

## (COURSE & CERTIFICATE EXAM)

**Recommended Time & Experience:** Some experience or training in the art and science of electro plating, zinc, or zinc alloy's is recommended. For those a few years away from taking any chemistry courses, the online Chemistry Refresher course offered by NASF FOUNDATION is highly recommended, but not required as a pre-requisite.

**Description:** This course provides an in-depth understanding of the pre-treatment, application of topcoats, zinc plating and zinc alloy plating out of both acid and alkaline electrolyte solutions.

Core Elective: Master Surface Finishers (MSF) designation.

**Designed For:** But not limited to: Operators with some level of zinc or zinc alloy plating experience including but not limited to plating line work, supervisors, sales personnel serving metal finishers and managers.

**Course Content Level:** Intermediate to Advanced (200 to 300 Level) **Approx Hours to Complete:** 12 Hours

**Learning Objectives:** Those completing this course and/or earning a certificate in Zinc & Zinc Alloy Plating are able to demonstrate:

- Expertise in each step of the zinc plating or alloy plating process from preparation to final inspection.
- A comprehensive understanding of acid and alkaline cyanide and non-cyanide plating of zinc and zinc alloys including iron, cobalt, and nickel.
- The ability to anticipate, recognize, diagnose, troubleshoot, and correct surface finishing discrepancies, anomalies, or defects.
- Competence in matching plating strategy to the end-use application and environment.

### **Registration Fees:**

Home-Study Course	Member: \$900	Non-Member: \$1,300
In-Person Course	Member: \$900	Non-Member: \$1,200
Web-Study Course	Member: \$975	Non-Member: \$1,300
Exam	Member: \$200	Non-Member: \$300



## **Environmental Series**

## **Pollution Prevention**

## (COURSE & CERTIFICATE EXAM)

**Recommended Time & Experience:** No experience or training the in the art and science of electroplating but work in a facility performing metal finishing operations such as electroplating and anodizing.

**Description:** This course presents a broad range of information related to methods of preventing pollution by employing good operating practices, recycling, and substitution.

Secondary Elective: Master Surface Finishers (MSF) designation.

**Designed For:** But not limited to: Operators and Supervisors of wastewater pre-treatment systems as well as Sales personnel who work for wastewater treatment suppliers.

Course Content Level: Intermediate (200 Level) Approx Hours to Complete: 10 Hours

**Learning Objectives:** Those completing this course and/or earning a certificate in Pollution Prevention are able to demonstrate:

- An understanding of best practices used for proper rinsing, treatment of wastewater and use and maintenance of the specific equipment used for pollution prevention and recycling.
- Knowledge of the basics of ion exchange, electrolytic, evaporative, and membrane technologies used for the recover and recycling of processing chemicals.
- Articulate methods for reducing pollution from plating and stripping processes and know the types of recycle and recovery technologies used in multiple finishing processes.

### **Registration Fees:**

Home-Study Course	Member: \$900
Web-Study Course	Member: \$975
Exam	Member: \$200

Non-Member: \$1,300 Non-Member: \$1,300 Non-Member: \$300



## **Environmental Series**

## Wastewater Treatment

## (COURSE & CERTIFICATE EXAM)

**Recommended Time & Experience:** No experience or training the in the art and science of electroplating. For those a few years away from taking any chemistry courses, the online Chemistry Refresher course offered by NASF Foundation is highly recommended, but not required as a pre-requisite.

**Description:** This course presents a broad range of information related to removing, neutralizing, and/or destroying pollutants found in metal finishing wastewater.

Secondary Elective: Master Surface Finishers (MSF) designation.

**Designed For:** But not limited to: Operators and Supervisors of wastewater pre-treatment systems as well as Sales personnel who work for wastewater treatment suppliers.

**Course Content Level:** Foundational (100 Level) **Approx Hours to Complete:** 10 Hours

**Learning Objectives:** Those completing this course and/or earning a certificate in Electroless Deposition are able to demonstrate:

- An understanding of the basic chemical reactions conducted in wastewater treatment as well as the specific equipment required.
- Knowledge of basic operation of pH and Oxidation Reductin Potential (ORP) control systems and alternative methods of treatment.

### **Registration Fees:**

Home-Study Course	Member: \$900	Non-Member: \$1,300
Web-Study Course	Member: \$975	Non-Member: \$1,300
Exam	Member: \$200	Non-Member: \$300



## **Essentials Series**

## **Introduction: Plating 101**

## (NEW COURSE. AVAILABLE JULY 2024)

**Recommended Time & Experience:** No experience or knowledge of the surface finishing industry required.

**Description:** This online, self-paced course covers the base concepts of Plating and the importance of personal and environmental safety in the workplace.

**Designed For:** Those who want to better understand when and how surface plating is used. Ideal for those new to the industry or as part of a new employee orientation.

**Course Content Level:** Introductory (100 Series) **Approx Hours to Complete:** 1 Hour

Learning Objectives: Those completing this course will be able to:

- Describe the three methods and types of metal plating.
- Outline the steps in Plating: Loading, Pre-Treatment, the Electroplating Process, and Post-Treatment.
- Recognize and understand the elements and importance of personal and environmental safety in the workplace.

### **Registration Fees:**

Online Course

Member: \$0

Non-Member: \$175



## **Essentials Series**

## **Chemistry Refresher**

### (NEW COURSE. AVAILABLE JULY 2024)

**Recommended Time & Experience:** No experience or knowledge of the surface finishing industry required.

**Description:** This online, self-paced course covers the base concepts of Plating and the importance of personal and environmental safety in the workplace.

**Designed For:** Individuals who scored less than 100% on the Chem Test Your Knowledge test and need a refresher and intending to take the CAF, CEF, or one of the plating specific courses listed below.

- Aluminum Finishing
- Chromium Plating
- Electroless Deposition
- Wastewater Management
- Industrial & Precious Metals
- Plating Essentials
- Zinc & Zinc Alloy

**Course Content Level:** Introductory (100 Series) **Approx Hours to Complete:** 1 Hour

Learning Objectives: Those completing this course will be able to:

- Understand the atomic structures for the most used elements in the plating process.
- Properly apply the principles of Ohm's and Faraday's Law.
- Recognize and identify various chemical reactions including water & salt, acids & bases, anodes & cathodes.

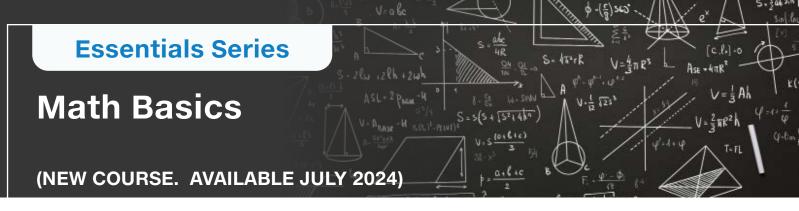
#### **Registration Fees:**

Online Course

Member: \$0

Non-Member: \$175





**Recommended Time & Experience:** No experience or knowledge of the surface finishing industry required.

**Description:** This online, self-paced course provides the learner a refresher in the math basics critical to understanding and fulfilling their role in the plating process. It includes basic and intermediate mathematical functions including scientific notations, solving algebraic and proportional equations, and units of measure.

**Designed For:** Individuals who scored less than 100% on the *Math Test Your Knowledge* test and need a refresher and intending to take the CAF, CEF, or one of the plating specific courses listed below.

- Aluminum Finishing
- Chromium Plating
- Electroless Deposition
- Wastewater Management
- Industrial & Precious Metals
- Plating Essentials
- Zinc & Zinc Alloy

**Course Content Level:** Introductory (100 Series) **Approx Hours to Complete:** 1 Hour

Learning Objectives: Those completing this course will be able to:

- Those completing this course will be able to: Recognize mathematical symbols, conventions, and definitions.
- Utilize scientific notation and units of measure to solve algebraic and proportional equations.
- Properly calculate surface areas.

#### **Registration Fees:**

Online Course

Member: \$0

Non-Member: \$175



## **Course Calendar & Tuition**

NASF may make adjustments to course dates/times (before registration opens.) Please check the website for the most current course dates/times. Please note that courses do require a minimum enrollment to proceed as scheduled.

#### **Classroom Courses**

These courses are offered onsite at SUR/FIN 2024 in Atanta, GA. The registration fee for the CEF and CAF courses includes lunch on Day 1, admission to the Wednesday Reception and Industry Night, and access to the Exhibit Hall. If you select the onsite exam option, a room and proctor will be provided; instructions will be provided in advance.

#### **Electroplating & Surface** Finishing Parts 1 & 2 (CEF)

**Dates:** Tuesday thru Friday, June 4–7, 2024

Registration Deadline: May 21, 2024 Member: \$2,050 **Non-Member:** \$2,450 Add On: Onsite Exam Fee - Saturday, June 8, 8:00 AM to 10:00 AM Member: \$160 (20% Discount) Non-Member: \$240 (20% Discount)

#### **Airline & Aerospace Finishing** Parts 1 & 2 (CAF)

Dates: Tuesday thru Friday, June 4-7, 2024 Registration Deadline: May 21, 2024 Member: \$2,050 Non-Member: \$2,450 Add On: Onsite Exam Fee - Saturday, June 8, 8:00 AM to 10:00 AM Member: \$160 (20% Discount) Non-Member: \$240 (20% Discount)

### **Zinc & Zinc Alloy Plating**

Dates: Wednesday thru Thursday, June 5-6, 2024 Registration Deadline: May 21, 2024 Member: \$900 **Non-Member: \$1,200** Add On: Onsite Exam Fee - Saturday, June 8, 8:00 AM to 10:00 AM Member: \$160 (20%) Discount)



#### Non-Member: \$240 (20% Discount)

#### Web-Based Courses

These courses are offered live with an instructor and provide participants the opportunity to interact with peers and ask questions as the content is being presented. Instruction is scheduled for specific dates/times on Tuesday and Wednesday from 12:00 PM ET to 2:00 PM ET.



#### **Industrial & Precious Metals** Finishing

Dates: May: 7-29 (8 sessions) Registration Deadline: April 30, 2024 Member: \$975 Non-Member: \$1,300

#### **Environmental Stewardship** Part 1: Wastewater Treatment

Dates: Tuesday/Wednesdays, July 9-31 (8 sessions) Registration Deadline: July 2, 2024 Member: \$975 Non-Member: \$1,300

## **Pollution Prevention**

Dates: Tuesday/Wednesdays, August 6-28 (8 sessions) Registration Deadline: July 30, 2024 Member: \$975 Non-Member: \$1,300

#### **Aluminum Finishing**

Dates: Tuesday/Wednesdavs. September 3-October 23 (16 sessions) Registration Deadline: August 27, 2024 Member: \$1,250 Non-Member: \$1,550

#### **Zinc & Zinc Alloy Plating**

Dates: Tuesday/Wednesdays, October 29-November 20 (8 sessions) Registration Deadline: October 22. 2024 Member: \$975 Non-Member: \$1,300

#### **Environmental Stewardship 2: Airline & Aerospace Finishing** Parts 1-2 (CAF)

Dates: Thursday/Fridays, October 17-December 20 (16 sessions) Registration Deadline: October 10, 2024 Member: \$1,400 Non-Member: \$1.800

## **Custom Course Options**

### **Flexible and Convenient**

The Foundation Customized Course Series allows you to design two-to-four-day training courses that perfectly fit the needs and goals of your company, association or public entity.

Training stimulates – **and motivates!** It also keeps workers up to date so they can respond effectively to the needs of the market.

Training sharpens skills, and helps develop new ones, enabling employees at every level to reach their potential, while improving the quality of their work.

### **Train for Success**

The most successful organizations prioritize training and make it an integral part of their culture and their mission.

The Foundation has designed courses for the top aerospace, DOD, medical and electronic companies. A qualified Foundation instructor develops and teaches a curriculum according to your company's needs. Each module takes 45 to 90 minutes. Upon completion of the course, participants receive a certificate and an opportunity to take an optional exam. Upon passing the exam, employees will qualify for the Foundation's certification program.

### The Ultimate "Win-Win"

Training and development have significant benefits for employers and employees. Great training accomplishes these 9 goals – and more!

Enhances employee satisfaction and morale Increases motivation Boosts efficiencies in process, resulting in financial gain Increases capacity to adopt new technologies and methods Encourages innovative thinking Reduces employee turnover Enhances company image Increases credibility with business partners Improves the employer's competitive advantage

### **Customize to Suit the Organization**

Choose any combination of lessons from the courses listed in this catalog to create a training program tailored to your specific needs. Five to six lessons typically require one day to present.





## NASF.org