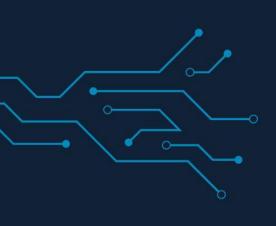


INARTE® PROFESSIONAL

CERTIFICATION REQUIREMENTS





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Approved by:

Andrew Baines, President and CEO Exemplar Global Inc

1. OVERVIEW

About

iNARTE® (International Association for Radio, Telecommunications and Electromagnetics) is an Exemplar Global owned brand. iNARTE® certifications are for qualified engineers and technicians in the fields of telecommunications, electromagnetic compatibility/interference (EMC/EMI), product safety (PS), electrostatic discharge control (ESD), military standards, spectrum management, ESD aerospace, and defense.

iNARTE® is an Exemplar Global-owned brand. Exemplar Global is a not-for-profit organization and is proudly part of the ASQ (American Society for Quality) family. Operating around the world, with a community of thousands of professionals, we understand, and aim to meet the needs of the iNARTE® community we serve. To learn more about us, please visit our website at www.exemplarglobal.org.

Becoming a part of the iNARTE® certification community provides global recognition of your skills and demonstrates commitment to your career development. Career opportunities with government and civil contractors in electronics, avionics, and many other technical fields may depend upon iNARTE® certification.

Digital Badging

Exemplar Global is committed to providing our professionals with the tools necessary to achieve their goals.

We understand that communicating your credentials in an ever-expanding online marketplace can be challenging. That is why we have partnered with Credly to provide you with a digital version of your credentials. This digital version takes the form of a digital badge, which is a verified image that allows you to manage and share your iNARTE® certification credentials and achievements online in a way that is simple, trusted, and can be verified in real time online.

A digital badge is an image that contains verified metadata to describe your qualifications and the process required to earn them. A digital badge is a digital representation of a learning outcome, experience, or competency. Based on the Open Badges Standard, Credly badges can be shared and verified online in a way that is easy and secure. Credly badges link to metadata that provides context and verification. They can be shared across the Internet for maximum visibility and recognition.

You can find more information on the suite of Exemplar Global badges on Credly here.



Application Instructions

1. Log in to ExemplarLINK

- Visit https://exemplarlink.org/
- · Create an account or Log into Exemplarlink

2. Apply for Certification

Manage my certifications / iNARTE®

3. Select the Certification Type

Select certification from the drop-down menu

4. Indicate if you are a Veteran

- Current and past service members can apply for iNARTE® Certification for free
- If yes, upload evidence of your past/current military service. Example: Veterans Affairs Card, DD214.

5. Upload Resume/CV

- Minimum requirements for certification and grade must be demonstrated.
- Applicants agree to comply with the certification requirements and to supply any information needed for the assessment.

6. Agree to the terms and conditions

 Submission of the application requires agreement to adhere to the iNARTE® Code of Ethics and Exemplar Global Code of Conduct.

7. Proceed to payment

- · Credit card payment is accepted
- Application fee is non-refundable

8. Pass the iNARTE® examination

- Link is provided upon receipt of application
- Required pass mark is specified under certification type

Requesting examination accommodations

Applicants who require medical, disability, language, or religious-related accommodations to assist them in applying for certification may request these accommodations by emailing details to support@exemplarglobal.org prior to commencing their application where reasonable requests will be supported by a member of the Exemplar Global team.

Transition from Associate to full iNARTE® certification status

Submit the Certification Application Form including a current resume that shows that the required work experience is met for the applicable certification level desired.

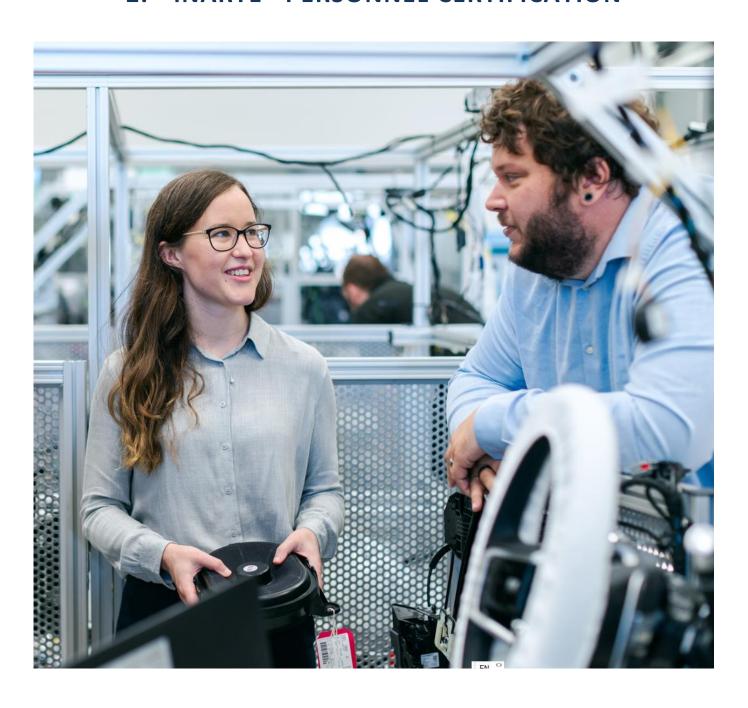


Code of ethics

We the engineers, technicians, and other professionals certified by iNARTE professional certification, in recognition of the importance of our technologies in affecting the quality of life throughout the world, and in accepting a personal obligation to our profession, its members and the communities we serve, do hereby commit ourselves to the highest ethical and professional conduct and agree:

- 1. To accept responsibility in making decisions consistent with the safety, health, and welfare of the public, and to disclose promptly factors that might endanger the public or the environment;
- 2. To avoid even the appearance of professional impropriety, to avoid real or perceived conflicts of interest whenever possible, and to disclose them to affected parties when they do exist;
- 3. To be honest and realistic in stating claims or estimates based on available data and to exercise independent objective professional judgment;
- 4. To reject bribery in all its forms;
- 5. To improve the understanding of technology, its appropriate application, and potential consequences;
- 6. To maintain and improve our technical integrity and competence, to assist in preventing unauthorized practices and to undertake technological tasks for others only if qualified by training or experience, or after full disclosure of pertinent limitations;
- 7. To seek, accept, and offer honest criticism of technical work, to acknowledge and correct errors, and to credit properly the contributions of others;
- 8. To treat fairly all persons regardless of such factors as race, religion, gender, disability, age, or national origin;
- 9. To avoid injuring others, their property, reputation, or employment by false or malicious action;
- 10. To assist colleagues and co-workers in their professional development and to support them in following this code of ethics.

2. inarte® personnel certification



iNARTE® Electromagnetic Compatibility (EMC/EMI) Certification

About this certification

The iNARTE Electromagnetic Compatibility (EMC/EMI) Certification Program is applicable to professional engineers and technicians practicing in EMC fields such as: bonding, shielding, grounding, EMI prediction, EMI analysis, conducted and radiated interference, and lightning protection.

Certified EMC engineers and technicians can add to their professional certification with the <u>iNARTE MIL-STD EMC</u> <u>Specialist Certification</u>.

The purpose of the EMC Certification Program is to foster technical excellence and establish a competency criteria for EMC personnel performing EMI control work. The program benefits the EMC community by establishing a standard of excellence in EMC engineering that will endure and extend across the boundaries of private and government agencies.

EMC Engineer or Technician?

Engineers know the math and physics of EMC. Technicians know the instruments and test setups. Engineers need good writing and verbal skills. Technicians need to know the pitfalls of real measurements. All applicants have to be competent in the fundamentals, i.e., coupling, filters, shielding, etc. as well as the specifications which apply to their particular specialty.

INARTE® EMC ENGINEER

Certification Criteria

Grade	Exam	Education	Experience * (refer to guidance on evidence requirements)
iNARTE® EMC Engineer	A passing score of 70% in the iNARTE® EMC Engineer examination, administered by Exemplar Global	College / University Transcript / Diploma in Science, Technology, Engineering or Mathematics (STEM)	Nine years of EMC-related education / work experience
Associate iNARTE® EMC Engineer	A passing score of 70% in the iNARTE® EMC Engineer examination, administered by Exemplar Global	College / University Transcript / Diploma in Science, Technology, Engineering or Mathematics (STEM)	No requirements

Examination Topics

- Field Theory
- Antennas
- Coupling
- Shielding
- Transmission Line
- Electrical Networks
- Filters
- Amplifiers
- Mathematics
- EMI Prediction and Analysis
- Signal and Transforms
- Spectrum Analysis

- Test and Measurement / Test Facilities
- EMC Design
- Terminology
- Special Devices, Materials and components
- EMP
- ESD
- Lightning
- Specifications and Standard
- Grounding and Bonding
- Safety (HERP, HERF, HERO)
- EMC Management

On-going Certification Requirements

To maintain your certification, you are expected to complete a minimum of 30 hours CPD for every year of renewal. Continuing Professional Development Log

Guidance on evidence requirements to support your application

Certification Criteria	Guidance on evidence requirements to support your application
Experience	Provide an up-to date resume that clearly shows evidence of nine years or more of engineering education / experience.
	 i. Graduation from a STEM curriculum of four years shall be considered equivalent to four years of such required experience.
	 ii. Graduation from a college with a BSET/Associate degree in Engineering Technology will be considered as equivalent to two years of such required experience.
	iii. Postgraduate study in engineering may be given credit for up to one year.
	iv. The satisfactory completion of each year of an accredited engineering curriculum shall be considered equivalent to a year of such required experience.
	v. Graduation in a physical science curriculum other than engineering will be evaluated by iNARTE®.
	vi. Graduation from a college with a BSET in Engineering Technology (BSET) shall be considered as equivalent to two years of such required experience.
	vii. Graduation in a curriculum other than engineering or physical science will be evaluated by iNARTE®.
	viii. Postgraduate study in engineering may be given credit up to one year.

	 ix. Teaching: Engineering teaching of a nature satisfactory to iNARTE® shall be considered as experience not in excess of two years. x. No more than 5 years' experience credit will be allowed for education and/or teaching as outlined above. The mere execution or the supervision of construction of such work as a foreman, first line supervisor, or superintendent shall not be deemed to be the practice of engineering. 	
Education and training	 University Diploma / Post-secondary degree level study is required in Engineering or a closely related field (eg: physics) 	
	Photocopies /scans of applicable training certificates may be submitted. These	
	may be verified by Exemplar Global for authenticity as part of the approval	
	process.	
	•	
Examination	The link to the iNARTE® EMC examination will be provided upon once your application	
	has been reviewed and all other criteria have been met.	
iNARTE® Code of Ethics	Submission of the application requires confirmation of your agreement to comply with the certification requirements and to supply any information needed for the assessment. This includes the iNARTE Code of Ethics and the Exemplar Global Code of Conduct for certified professionals.	

Digital Badging





INARTE® EMC TECHNICIAN

Certification Criteria

Grade	Exam	Education	Experience* (refer to guidance on evidence requirements)
iNARTE® EMC Technician	A passing score of 70% in the iNARTE® EMC Technician examination, administered by Exemplar Global	College / University Transcript / Diploma in Science, Technology, Engineering or Mathematics (STEM)	Six years of EMC-related work experience
Associate iNARTE® EMC Technician	A passing score of 70% in the iNARTE® EMC Technician examination, administered by Exemplar Global	College / University Transcript / Diploma in Science, Technology, Engineering or Mathematics (STEM)	No requirements

Examination Topics

- Antennas
- Coupling
- Shielding
- Electrical Networks
- Filters
- Amplifiers
- Signal and Transforms
- Test and Measurement / Test Facilities
 Terminology

- Special Devices, Materials, and components
- EMP
- ESD
- Lightning
- Specifications and Standard
- Grounding and Bonding
- Safety (HERP, HERF, HERO)
- EMC Management

On-going Certification Requirements

To maintain your certification, you are expected to complete a minimum of 30 hours CPD for every year of renewal. Continuing Professional Development Log





Access your future with Exemplar Global

Click here to log in or register.

Guidance on evidence requirements to support your application

Certification Criteria	Guidance on evidence requirements to support your application	
Experience	 Provide an up-to date resume that clearly shows evidence of six years or more of EMC technician experience. i. The satisfactory completion of each year of an accredited technician curriculum is considered equivalent to one year of experience. ii. Graduation in a physical science curriculum other than engineering will be evaluated by iNARTE®. iii. Graduation from a college with a BSET in Engineering Technology (BSET) shall be considered as equivalent to two years of such required experience. iv. Graduation in a curriculum other than engineering or physical science will be evaluated by iNARTE®. v. Postgraduate study in engineering may be given credit up to one year. vi. Teaching: Engineering teaching of a character satisfactory to iNARTE® shall be considered as experience not in excess of two years. vii. No more than 5 years' experience credit will be allowed for education and/or teaching as outlined above. The mere execution or the supervision of construction of such work as a foreman, first line supervisor or superintendent shall not be deemed to be the practice of EMC Technician. 	
Education and training	 College transcript is acceptable for Technician grades Post-secondary degree level study is required for Engineering grades Photocopies of school transcripts and any applicable training certificates may be submitted. These may be verified for authenticity as part of the approval process. 	
Examination	The link to the iNARTE® EMC examination will be provided upon once your application has been reviewed and all other criteria have been met.	
iNARTE® Code of Ethics	Submission of the application form implies your agreement	

Digital Badging



iNARTE® Electrostatic Discharge Control (ESD) Certification

About this certification

The iNARTE Electrostatic Discharge Control (ESD) Certification Program is appropriate for engineers and technicians whose training and experience has primarily focused on engineering design and corrective measures associated with minimizing or eliminating electrostatic discharge.

The purpose of the iNARTE ESD Credential Certification Program is to foster technical excellence in ESD engineering. This approach establishes technical competency criteria for ESD and enforces these criteria for technical personnel.

The program benefits the ESD community by establishing a standard of excellence in ESD engineering that will endure and extend across the boundaries of private and government agencies.

INARTE® ESD ENGINEER

Certification Criteria

Grade	Exam	Education	Experience* (refer to guidance on evidence requirements)
iNARTE® ESD Engineer	A passing score of 70% in the iNARTE® ESD Engineer examination, administered by Exemplar Global	College / University Transcript / Diploma in Science, Technology, Engineering or Mathematics (STEM)	Nine years of ESD-related work experience
Associate iNARTE® ESD Engineer	A passing score of 70% in the iNARTE® ESD Engineer examination, administered by Exemplar Global	College / University Transcript / Diploma in Science, Technology, Engineering or Mathematics (STEM)	No requirements



Examination Topics

- ESD Program Design & Management
- ESD Loss Analysis
- ESD Theory
- Math/Physics
- Safety
- Standards/Specifications
- Terminology
- System Test & Measurement
- Workstations
- Flooring
- ESD Shielding Analysis
- Manufacturing/Repair Facility Evaluation, Survey &
- Auditing Plant Equipment ESD
- Control & Evaluation
- Clean Room Equipment & Material Control
- Body Charge Evaluation & Control

- Garment Control & Evaluation
- Manufacturing Plant Handling Procedures
- ESD Control Material In-Field Testing
- Production Aids & Tool Evaluation
- Materials Test & Measurement
- In Field ESD Controls
- Ionization Devices & Systems
- Grounding Technology
- Laboratory Test & Analysis of ESDC Packaging
- Materials
- Equipment Design
- Intersystem & Intrasystem Design
- ESD Prediction (Devices & Systems)
- ESD Analysis (Devices & Systems)
- Device Sensitivity Test & Measurement

On-going Certification Requirements

To maintain your certification you are expected to complete a minimum of 30 hours CPD for every year of renewal. Continuing Professional Development Log

Guidance on evidence requirements to support your application

Certification Criteria	Guidance on evidence requirements to support your application	
Experience	Provide an up-to date resume that clearly shows evidence of nine years or more of	
	ESD Engineering experience.	
	 Graduation from an accredited engineering curriculum of four years shall be considered equivalent to four years of such required experience. 	
	ii. The satisfactory completion of each year of an accredited engineering curriculum shall be considered equivalent to a year of such required experience.	
	iii. Graduation in a physical science curriculum other than engineering will be evaluated by iNARTE®.	
	iv. Graduation from a college with a BSET in Engineering Technology (BSET) shall be considered as equivalent to two years of such required experience.	
	v. Graduation in a curriculum other than engineering or physical science will be evaluated by iNARTE®.	
	vi. Postgraduate study in engineering may be given credit up to one year.	
	vii. Teaching: Engineering teaching of a character satisfactory to iNARTE® shall be considered as experience not in excess of two years.	
	iii. No more than 5 years' experience credit will be allowed for education and/or teaching as outlined above. The mere execution or the supervision of	

	construction of such work as a foreman, first line supervisor or superintendent shall not be deemed to be the practice of engineering.
Education and training	 Post-secondary degree level study is required for Engineering grades Photocopies of school transcripts and any applicable training certificates may be submitted. These may be verified for authenticity as part of the approval process.
Examination	The link to the iNARTE® ESD examination will be provided upon once your application has been reviewed and all other criteria have been met.
iNARTE® Code of Ethics	Submission of the application form implies your agreement

Digital Badging





INARTE® ESD TECHNICIAN

Certification Criteria

Grade	Exam	Education	Experience* (refer to guidance on evidence requirements)
iNARTE® ESD Technician	A passing score of 70% in the iNARTE® ESD Technician examination, administered by Exemplar Global	College / University Transcript / Diploma in Science, Technology, Engineering or Mathematics (STEM)	Six years of ESD-related work experience
Associate iNARTE® ESD Technician	A passing score of 70% in the iNARTE® ESD Technician examination, administered by Exemplar Global	College / University Transcript / Diploma in Science, Technology, Engineering or Mathematics (STEM)	No requirements

Examination Topics

- ESD Program Design & Management
- ESD Loss Analysis
- ESD Theory
- Math/Physics
- Safety
- Standards/Specifications
- Terminology
- System Test & Measurement
- Workstations
- Flooring
- ESD Shielding Analysis
- 12. Manufacturing/Repair Facility Evaluation, Survey
- & Auditing Plant Equipment ESD

- Control & Evaluation
- Clean Room Equipment & Material Control
- Body Charge Evaluation & Control
- Garment Control & Evaluation
- Manufacturing Plant Handling Procedures
- ESD Control Material In-Field Testing
- Production Aids & Tool Evaluation
- Materials Test & Measurement In Field ESD Controls
- Ionization Devices & Systems
- Grounding Technology
- Laboratory Test & Analysis of ESDC Packaging Materials

On-going Certification Requirements

To maintain your certification, you are expected to complete a minimum of 30 hours CPD for every year of renewal. Continuing Professional Development Log

Guidance on evidence requirements to support your application

Certification Criteria	Guidance on evidence requirements to support your application	
Experience	Provide an up-to date resume that clearly shows evidence of six years or more of ESD Technician experience. i. The satisfactory completion of each year of an accredited technician curriculum is considered equivalent to one year experience. ii. Graduation in a physical science curriculum other than engineering will be evaluated by iNARTE®. iii. Graduation from a college with a BSET in Engineering Technology (BSET) shall be considered as equivalent to two years of such required experience. iv. Graduation in a curriculum other than engineering or physical science will be evaluated by iNARTE®. v. Postgraduate study in engineering may be given credit up to one year. vi. Teaching: Engineering teaching of a character satisfactory to iNARTE® shall be considered as experience not in excess of two years. vii. No more than 5 years' experience credit will be allowed for education and/or teaching as outlined above. The mere execution or the supervision of construction of such work as a foreman, first line supervisor or superintendent shall not be deemed to be the practice of ESD Technician.	
Education and training	Photocopies of school transcripts and any applicable training certificates may be submitted. These may be verified for authenticity as part of the approval process.	
Examination	The link to the iNARTE® ESD examination will be provided upon once your application has been reviewed and all other criteria have been met.	
iNARTE® Code of Ethics	Submission of the application form implies your agreement	

Digital Badging



iNARTE® Spectrum Management Certification

About this certification

The iNARTE® Spectrum Engineering certification is for qualified engineers and technicians/practitioners who have a vested interest in advancing their profession and the industry in the field of spectrum management.

The purpose of the Spectrum Management Credential Program is to foster technical excellence in spectrum management and engineering. This approach establishes technical competency criteria for spectrum management and enforces these criteria for technical personnel performing spectrum management tasks.

The program benefits the individual engineer, the technician, and the professional community as a whole by establishing a standard of excellence in spectrum management engineering that will endure and extend across the boundaries of private and government agencies.

In particular, the program's objectives are to:

- Create certified spectrum managers and frequency coordinators
- Assure a uniform level of expertise and quality

Certification Criteria

Grade	Exam	Education	Experience* (refer to guidance on evidence requirements)
iNARTE® Spectrum Management Engineer Certification	A passing score of 70% in the iNARTE® Spectrum Management examination, administered by Exemplar Global	College / University Transcript / Diploma in Science, Technology, Engineering or Mathematics (STEM)	Six years of SM-related work experience
iNARTE® Spectrum Management Associate Engineer Certification	A passing score of 70% in the iNARTE® Spectrum Management examination, administered by Exemplar Global	College / University Transcript / Diploma in Science, Technology, Engineering or Mathematics (STEM)	No Requirements
iNARTE® Spectrum Management Technician Certification	A passing score of 70% in the iNARTE® Spectrum Management examination, administered by Exemplar Global	College / University Transcript / Diploma in Science, Technology, Engineering or Mathematics (STEM)	Five years of SM-related work experience
iNARTE® Spectrum Management Associate Technician Certification	A passing score of 70% in the iNARTE® Spectrum Management examination, administered by Exemplar Global	College / University Transcript / Diploma in Science, Technology, Engineering or Mathematics (STEM)	No Requirements

On-going Certification Requirements

To maintain your certification you are expected to complete a minimum of 30 hours CPD for every year of renewal. Continuing Professional Development Log

iNARTE® SPECTRUM MANAGEMENT ENGINEER Skill sets

Spectrum Management (SM) Engineers should have good knowledge of electromagnetic theory and associated mathematics and physics of transmission, propagation, and interaction.

They are required to be able to carry out analysis of link and channel budgets, collocation analysis and interactions and have some basic understanding of analysis and simulation tools.

SM engineers should also have fundamental knowledge of spectrum testing and monitoring, spectrum risk assessment, and of spectrum management regulatory issues.

SM engineers should also be knowledgeable in the applicable EMC spectrum engineering standards, their rational and implications on design and the corresponding spectrum site surveys, monitoring and testing and test set ups to the extent necessary for adequate design and preparation of test and evaluation procedures.

SM Engineers require "soft skills" and particularly good writing and presentation skills to an extent that enables them to prepare engineering reports and participate in design reviews.

INARTE® SPECTRUM MANAGEMENT TECHNICIAN

Skill sets

Spectrum Management (SM) Technicians should have basic knowledge of SM, to the extent necessary to understand the rationale behind the necessary tests and set-ups, know the instruments and test setups he uses, and be able to verify their proper operation and limitations.

The SM technician needs to know the pitfalls of real measurements.

SM technicians should be able to compile test reports that adequately record the outcomes of the tests.

SM technicians should also be able to help identify failure thresholds and assist in solving problems when identified.

Examination Topics

Category	iNARTE® Spectrum Management Engineer	iNARTE® Spectrum Management Technician
Basic Theory		
Electromagnetic Field Theory	Х	-
Basic EMC Theory	Х	Χ
Vector Mathematics	Х	-
Spectrum Analysis	Х	X
Communication Theory	Х	Χ
Radio Wave Propagation and Multipath	Х	X
Transmission Lines and Waveguides	Х	X

Terminology	х	Х
Spectrum Management, and Engineering		
Spectrum Management	Х	-
Spectrum Allocation	Х	Х
Frequency Licensing and Assignment	Х	Х
Spectrum Policy (Rules and Regulations)	Х	-
Radio Technology	,	
Basic Spectrum Electronic Principles	X	X
Transmitters, Receivers and Antennae Characteristics	Х	Х
Signals & Transforms	x	x
Amplifiers & Attenuators	Х	Х
Radars	Х	Х
Cellular 3/4/5G Technology	Х	х
Spread spectrum, Direct Sequence and Frequency Hopping	Х	Х
Adaptive Antennae and Techniques	x	X
Diversity Techniques	х	х
EMC Design		
Enclosure and Cable Shielding	Х	Х
Filters	х	Х
Electromagnetic Radiation Hazards (EMRadHaz)		
RF Safety	Х	Х
Prediction and Analysis		
Link Budgets	х	Х
Inter-system and Intra-system Collocation Analysis & Prediction	Х	Х
Radio Propagation and Collocation Simulations	х	Х
Interference Resolution	х	Х
Testing, measurements, and validation		
Spectrum Monitoring and Compliance	х	Х
Spectrum Site Surveys	х	Х
Test Facilities and Instrumentation	Х	х

Specifications and Standards	Х	х
Testing and Measurements	Х	Х
Test Plans & Procedures	Х	Х
Test Reports	Х	Х
Program Management		
SM Program Procedures	Х	-
Design Reviews	Х	-
Engineering Ethics	х	Х
Team Leadership	Х	-
"Soft Skills"	х	Х

Guidance on evidence requirements to support your application

Certification Criteria	Guidance on evidence requirements to support your application
Experience	Provide an up-to date resume that clearly shows evidence of qualifying work experience.
Education and training	Photocopies of school transcripts and any applicable training certificates may be submitted. These may be verified for authenticity as part of the approval process.
Examination	The link to the iNARTE® SM examination will be provided upon once your application has been reviewed and all other criteria have been met.
iNARTE® Code of Ethics	Submission of the application form implies your agreement.

Digital Badging





iNARTE® Military Standard (MIL-STD) EMC Specialist Certification

About this certification

The iNARTE Military Standard (MIL-STD) EMC Specialist Certification Program is applicable to military engineers and technicians practicing in EMC fields to address their specific needs.

MIL-STD EMC Specialists who already hold, or who obtain an iNARTE EMC certification can add this credential as an endorsement to that certificate once all criteria have been met. There is an important section of the EMC community dedicated to supporting military requirements and iNARTE certification addresses this need with this special recognition program and examination.

Certification Criteria

Grade	Exam	Education	Experience* (refer to guidance on evidence requirements)
iNARTE® Military Standard (MIL-STD) EMC Specialist Certification	A passing score of 70% in the MIL-STD EMC Specialist examination, administered by Exemplar Global. Must hold a current iNARTE® EMC certification at Engineer or Technician grade	Graduation from a two, three or four year Bachelor Degree curriculum in an engineering discipline	Six years or more of experience in EMC technician work

On-going Certification Requirements

To maintain your certification you are expected to complete a minimum of 30 hours CPD for every year of renewal. <u>Continuing Professional Development Log</u>

Guidance on evidence requirements to support your application

Certification Criteria	Guidance on evidence requirements to support your application
Experience	Provide an up-to date resume that clearly shows evidence of qualifying work experience.
	 The satisfactory completion of each year of such an accredited engineering or technical curriculum is considered equivalent to one year experience.

	ii. Graduation from other engineering training programs will be evaluated by
	iNARTE.
	iii. Teaching: Engineering teaching of a character satisfactory to iNARTE may be considered as a maximum of one year experience.
	iv. No more than 4 years' experience credit will be allowed for education and/or teaching as outlined above. The mere execution or the supervision of construction of such work as a foreman, first line supervisor or superintendent shall not be deemed to be the practice of engineering
Education and training	Photocopies of school transcripts and any applicable training certificates may be
	submitted. These may be verified for authenticity as part of the approval process.
Examination	The link to the iNARTE MIL-STD EMC Specialist examination will be provided upon once your application has been reviewed and all other criteria have been met.
iNARTE® Code of Ethics	Submission of the application form implies your agreement

Examination Topics

Half of the questions in the examination will be derived from the MIL STDs and MIL Handbooks but may also include related DoD standards and specifications and RTCA/DO-160.

The remaining questions in the examination are of an EMC general knowledge and fundamental nature about:

- Bonding
- Grounding
- Shielding
- Antennas
- Filtering
- Amplifiers
- Field Theory
- Electrical Network
- Mathematics

Digital Badging





Note: You will be certified at the same grade as your iNARTE® EMC Certification



iNARTE® Professional Certification Requirements © Exemplar Global Inc, 2024

iNARTE® Product Safety Certification

INARTE® PRODUCT SAFETY (PS) ENGINEER

About this certification

The iNARTE® Product Safety Certification Program focuses on engineering to reduce types of risk to persons, animals, and property that have to be covered by a formal hazard analysis to meet the requirements of relevant legislation. The purpose of iNARTE's Product Safety Certification Program is to foster technical excellence in product safety engineering. This approach establishes technical competency criteria for product safety and enforces these criteria for personnel designing, manufacturing, and assessing product electrical safety. The program benefits the engineering community as a whole by establishing a standard of excellence in product safety engineering that will endure and extend across the boundaries of private and government agencies.

Certification Criteria

Grade	Exam	Education	Experience* (refer to guidance on evidence requirements)
iNARTE® Product Safety Engineer Certification	A passing score of 70% in the iNARTE® Product Safety Engineer examination, administered by Exemplar Global.	College / University Transcript / Diploma in Science, Technology, Engineering or Mathematics (STEM)	Nine years or more of experience in engineering work
Associate iNARTE® Product Safety Engineer Certification	A passing score of 70% in the iNARTE® Product Safety Engineer examination, administered by Exemplar Global.	College / University Transcript / Diploma in Science, Technology, Engineering or Mathematics (STEM)	N/A

On-going Certification Requirements

To maintain your certification you are expected to complete a minimum of 30 hours CPD for every year of renewal. Continuing Professional Development Log

Guidance on evidence requirements to support your application

Certification Criteria	Guidance on evidence requirements to support your application	
Experience	Provide an up-to date resume that clearly shows evidence of qualifying work experience.	
	 Graduation from an accredited engineering curriculum of four years shall be considered equivalent to four years of such required experience. 	
	 The satisfactory completion of each year of an accredited engineering curriculum shall be considered equivalent to a year of such required experience. 	
	iii. Graduation in a physical science curriculum other than engineering will be evaluated by iNARTE.	
	iv. Graduation from a college with a BSET in Engineering Technology (BSET) shall be considered as equivalent to two years of such required experience.	
	v. Graduation in a curriculum other than engineering or physical science will be evaluated by iNARTE.	
	vi. Postgraduate study in engineering may be given credit up to one year.	
	vii. Teaching: Engineering teaching of a character satisfactory to iNARTE shall be considered as experience not in excess of two years. No more than 5 years' experience credit will be allowed for education and/or teaching as outlined above. The mere execution or the supervision of construction of such work as a foreman, first line supervisor or superintendent shall not be deemed to be the practice of engineering.	
Education and training	Photocopies of school transcripts and any applicable training certificates may be submitted. These may be verified for authenticity as part of the approval process.	
Examination	The link to the iNARTE® Product Safety Engineer examination will be provided upon once your application has been reviewed and all other criteria have been met.	
iNARTE® Code of Ethics	Submission of the application form implies your agreement	

Examination Topics

- Connection to supply
- Isolation of supply
- Mechanical hazards
- Earthing
- Types of Insulation
- Protection against electrical shock
- Resistance to fire
- Fire hazards
- Limits on fuel
- Limits on heat
- Insulation damage
- Creepage
- Inter system and intra system design

- Equipment design
- Hazard analysis
- Risk assessment
- Design review
- Legislation US, EEC and International
- Military and Civil Electrical Safety Standards
- Safety tests
- Assessment authorities
- Competent Bodies
- Safety certification
- Declarations of Conformity
- Operating and maintenance instructions and handbooks

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INARTE® PRODUCT SAFETY (PS) TECHNICIAN

About this certification

The iNARTE® Product Safety Certification Program focuses on engineering to reduce types of risk to persons, animals, and property that have to be covered by a formal hazard analysis to meet the requirements of relevant legislation. The purpose of iNARTE's Product Safety Certification Program is to foster technical excellence in product safety engineering. This approach establishes technical competency criteria for product safety and enforces these criteria for personnel designing, manufacturing, and assessing product electrical safety. The program benefits the engineering community as a whole by establishing a standard of excellence in product safety engineering that will endure and extend across the boundaries of private and government agencies.

Certification Criteria

Grade	Exam	Education	Experience* (refer to guidance on evidence requirements)
iNARTE® Product Safety Technician Certification	A passing score of 70% in the iNARTE® Product Safety Technician examination, administered by Exemplar Global.	Nil?	Six years or more of experience in product safety technician work
Associate iNARTE® Product Safety Engineer Technician	A passing score of 70% in the iNARTE® Product Safety Technician examination, administered by Exemplar Global.	Nil?	N/A

On-going Certification Requirements

To maintain your certification you are expected to complete a minimum of 30 hours CPD for every year of renewal. Continuing Professional Development Log

Guidance on evidence requirements to support your application

Certification Criteria	Guidance on evidence requirements to support your application
Experience	Provide an up-to date resume that clearly shows evidence of qualifying work experience.
	 The satisfactory completion of each year of an accredited technician curriculum is considered equivalent to one year experience.
	ii. Graduation from other technician training programs will be evaluated by iNARTE.
	iii. Teaching: Engineering teaching of a character satisfactory to iNARTE may be considered as a maximum of two years' experience. No more than 5 years' experience credit will be allowed for education and/or teaching as outlined above. The mere execution or the supervision of construction of such work as a

	foreman, first line supervisor or superintendent shall not be deemed to be the practice of engineering.
Education and training	Photocopies of school transcripts and any applicable training certificates may be submitted. These may be verified for authenticity as part of the approval process.
Examination	The link to the iNARTE® Product Safety Engineer examination examination will be provided upon once your application has been reviewed and all other criteria have been met.
iNARTE® Code of Ethics	Submission of the application form implies your agreement

Examination Topics

- Connection to supply
- Isolation of supply
- Mechanical hazards
- Earthing
- Types of Insulation
- Protection against electrical shock
- Resistance to fire
- Fire hazards
- Limits on fuel
- Limits on heat
- Insulation damage
- Creepage
- Inter system and intra system design

- Equipment design
- Hazard analysis
- Risk assessment
- Design review
- Legislation US, EEC and International
- Military and Civil Electrical Safety Standards
- Safety tests
- Assessment authorities
- Competent Bodies
- Safety certification
- Declarations of Conformity
- Operating and maintenance instructions and handbooks

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iNARTE® Telecommunications Certification

INARTE® TELECOMMUNICATIONS ENGINEER

About this certification

Telecommunications is the science and technology of communication (as opposed to processing of information) at a distance by electronic transmission of impulses, such as by telegraph, cable, telephone, radio, or television. The iNARTE® Telecommunication certification pertains to professionals involved in the science and practice of communications by electromagnetic means. iNARTE® certified (NC) Engineers and NC Technicians work throughout the telephone/communications industry, public/utilities industry, airline technology industry, oil/gas industry, radio communications and telephone systems for state and local municipalities and broadcast industry.

Certification Criteria

Grade	FCC General Radiotelephone Operator License (GROL	Education	Experience* (refer to guidance on evidence requirements)
Junior iNARTE® Telecommunications Engineer	Pass the FCC General Radiotelephone Operator License (GROL) examination	College/University transcripts or diploma	Minimum of 4 years of bona fide engineering experience in telecommunications
Senior iNARTE® Telecommunications Engineer	Current license	Continued education and engagement within the telecommunications field	Minimum of 6 years of experience as a telecommunications engineer iNARTE Junior Engineer certification for a period of at least 1 year
Master iNARTE® Telecommunications Engineer	Current license	Continued education and engagement within the telecommunications field	Minimum of 8 years of experience as a telecommunications engineer iNARTE Senior Engineer certification for a period of at least 1 year

On-going Certification Requirements

To maintain your certification you are expected to complete a minimum of 30 hours CPD for every year of renewal. Continuing Professional Development Log

Guidance on evidence requirements to support your application

Certification Criteria	Guidance on evidence requirements to support your application
Experience	Provide an up-to date resume that clearly shows evidence of qualifying work experience.
Education and training	Photocopies of school transcripts and any applicable training certificates may be submitted. These may be verified for authenticity as part of the approval process.
iNARTE® Code of Ethics	Submission of the application form implies your agreement

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INARTE® TELECOMMUNICATIONS TECHNICIAN

Certification Criteria

Grade	FCC General Radiotelephone Operator License (GROL	Education	Experience* (refer to guidance on evidence requirements)
Junior iNARTE® Telecommunications Technician	Pass the FCC General Radiotelephone Operator License (GROL) examination	College/University transcripts or diploma	Minimum of 2 years of experience in telecommunications
Senior iNARTE® Telecommunications Technician	Current license	Continued education and engagement within the telecommunications field	Minimum of 6 years of experience as a telecommunications engineer iNARTE Junior Technician certification for a period of at least 1 year
Master iNARTE® Telecommunications Technician	Current license	Continued education and engagement within the telecommunications field	Minimum of 8 years of experience as a telecommunications engineer iNARTE Senior Technician certification for a period of at least 1 year

On-going Certification Requirements

To maintain your certification you are required to complete a minimum of 30 hours CPD for every year of renewal. Continuing Professional Development Log

Guidance on evidence requirements to support your application

Certification Criteria	Guidance on evidence requirements to support your application
Experience	Provide an up-to date resume that clearly shows evidence of qualifying work experience.
Education and training	Photocopies of school transcripts and any applicable training certificates may be submitted. These may be verified for authenticity as part of the approval process.

iNARTE® Code of Ethics

Submission of the application form implies your agreement

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3. JOINTLY DEVELOPED INARTE® PRODUCTS



KEC-iNARTE® EMC Design Engineer Certification

About this certification

The main business of Kansai Electronic Industry Development Center (KEC) is EMC as an activity to practice safe and secure product evaluation technology, a test business centered on product safety, technical information provision and engineer training activities through seminars, technical courses, qualification examinations, etc. Learn more by visiting their website https://www.kec.ip/

The KEC-iNARTE® EMC Design Engineer Certification is awarded to qualifying applicants who successfully demonstrate their knowledge and understanding by passing the EMC Design Engineer examination.

The KEC-iNARTE® EMC Design Engineer Certification Program is applicable to professional engineers practicing in EMC fields whose main responsibility is designing electronic circuits, components, sub systems and equipment to ensure EMC compliance. It was developed between iNARTE® and KEC, Japan, in equal partnership.

Certification Criteria

Grade	Examination	Experience
Senior iNARTE® EMC Design Engineer	A passing score of 70% in the iNARTE® EMC Design Engineer examination, administered by Exemplar Global	Minimum of three (3) years practical design engineering work after having been certified as an iNARTE®/KEC EMC Design Engineer. OR Graduation from an accredited bachelor degree engineering curriculum, (e.g. BSEE), followed by four (4) years practical design engineering work experience. OR Graduation in a physical science curriculum other than engineering, followed by four years practical design engineering work experience will be evaluated by iNARTE®.

iNARTE® EMC Design Engineer Intended for new or recent graduates who are entering industry with a view to building a career in electronics design and have the knowledge to apply EMC principles to design for compliance.	A passing score of 70% in the iNARTE® EMC Design Engineer examination, administered by Exemplar Global	Nine yea i. ii. iii. v.	Graduation from an accredited engineering curriculum of four years shall be considered equivalent to four years of such required experience. Graduation in a physical science curriculum other than engineering will be evaluated by iNARTE®. Graduation from a college with a BSET in Engineering Technology (BSET) shall be considered as equivalent to two years of such required experience. Graduation in a curriculum other than engineering or physical science will be evaluated by iNARTE®. The completion of five (5) years of EMC design work experience shall be considered as sufficient work experience without regard to educational achievements.
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On-going Certification Requirements

The Certification remains valid from the date of issue.

Examination Preparation

The examination is significantly different from the established iNARTE® EMC Certification Exam in the following respects: The exam questions are all related to EMC Design for Compliance and other EMC fundamentals. There are few if any questions related to Field Theory, EMC Emission or Susceptibility standards and disciplines better suited to Test, Measurement and Mitigating Engineering.

iNARTE® EMC Engineer Examination question categories for each level

Category	EMC Design Engineer Level	Senior EMC Design Engineer Level
EMC Countermeasures &	Application	Expertise
Components		
EMC Design & Design Review	Expertise	Expertise
EMC Simulation & Rule Check	Application	Expertise
Signal Integrity & Power Integrity	Application/Basic	Expertise
Electronics Circuits & Power	Basic	Expertise/Application
Electronics		
Basic EMC Knowledge	Expertise	Expertise
Terminology	Expertise	Expertise
Mathematics	Basic	Basic
Electromagnetics & Shielding	Application	Expertise
Electrical Circuit Theory	Application	Expertise
Measurement & Analysis	Basic	Application

Specifications and Standards	Basic	Basic
•		

Examination structure and requirements

- There is one part, four hours duration.
- All questions are multiple choice.
- The exam is 50 questions, and all should be attempted.
- The exam is open book.
- The pass mark is 70% average.
- Retake is possible after 90 days.
- There will be no credit for past exam scores

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The iNARTE® EMC Design Engineer Certification Program is applicable to professional engineers practicing in EMC fields whose main responsibility is designing electronic circuits, components, sub systems, and equipment to ensure EMC compliance. The Master level certification is granted to those who have completed the Senior EMC Design Engineer examination and is given at the discretion of Exemplar Global.



RMV-iNARTE® ESD Aerospace & Defense Engineer Certification

About this certification

RMV Technology Group, LLC, a NASA Industry Partner, is located onsite at NASA Ames Research Center.

RMV provides electrostatic discharge (ESD) Materials Testing, Technology Training, Troubleshooting and Engineering Services for the Aerospace & Defense, Space Technology, Medical Device/Pharmaceutical, Consumer Electronics, Automotive and Semiconductor sectors.

RMV have designed and exclusively teach a five-day iNARTE® Certified ESD Aerospace & Defense Engineer Engineer™ training course as part of this Certification.

All applicants are required to pass the training course prior to undertaking and passing the iNARTE® Certified ESD Aerospace & Defense Engineer™ examination.

https://www.esdrmv.com/new-esd-program-monitor-training - more info here.

How to Apply

- 1. Complete the ESD Aerospace & Defense Application Form and submit application fee directly via the ESD Training website: https://www.esdaerospacetraining.org/
- 2. Your application will be processed by RMV, and you will be advised if you have been accepted onto the training course. Once accepted, RMV will liaise directly with you to arrange completion of the training and examination.
- 3. Upon successful completion of the training and examination, RMV will communicate directly with Exemplar Global to confirm you have met the criteria for iNARTE® certification. Exemplar Global will process and issue your iNARTE® Certification to you directly.

Re-Certification Requirements

The Certification remains valid for two years following approval. Applicants must undertake training and examination every two years as a pre-requisite to renewing their Certification.

Certification Criteria

Grade	Training & Exam	Education	Experience* (refer to guidance on evidence requirements)
iNARTE® Certified ESD Aerospace & Defense Engineer™	Passing mark for: 5 Day iNARTE® Certified ESD Aerospace & Defense Engineer™ AND iNARTE® Certified ESD Aerospace & Defense Engineer™ exam	Graduate engineer (4 years of college)	Six or more years of work experience
iNARTE® Certified ESD Aerospace & Defense Engineer- in-Training™	Passing mark for: 5 Day iNARTE® Certified ESD Aerospace & Defense Engineer™ AND iNARTE® Certified ESD Aerospace & Defense Engineer-in- Training™ certificate Exam.	Graduate engineer (4 years of college)	Less than six years of experience
iNARTE® Certified ESD Aerospace & Defense Technician™	Passing mark for: 5 Day iNARTE® Certified ESD Aerospace & Defense Technician™ AND iNARTE® Certified ESD Aerospace & Defense Technician™ certificate Exam.	Two years of college (associate degree)	Four or more years of work experience.
iNARTE® Certified ESD Aerospace & Defense Technician- in-Training™	Passing mark for: 5 Day iNARTE® Certified ESD Aerospace & Defense Technician™ AND iNARTE® Certified ESD Aerospace & Defense Technician-in- Training™ certificate Exam.	Two years of college (associate degree)	Less than four years of work experience.

Guidance on evidence requirements to support your application

Certification Criteria	Guidance on evidence requirements to support your application	
Experience	Provide an up-to date resume that clearly shows evidence of qualifying work experience.	
	Graduation from an accredited engineering/science curriculum of four years shall be considered equivalent to four years of such required experience. i. The satisfactory completion of each year of an accredited engineering curriculum shall be considered equivalent to a year of such required experience.	
	 ii. Graduation from a college with a BS degree in Electrical Engineering or Mechanical Engineering, physics, engineering, chemical engineering, aerospace engineering, physics, nuclear engineering. 	
	iii. Graduation in a curriculum other than engineering or physical science (BS/BA) will be evaluated by iNARTE®.	
	iv. Postgraduate study in electrical engineering or physical science may be given credit up to two years.	
Education and training	Provide evidence of education and training. Degree Copy is required. Photocopies of applicable training certificates may be submitted. These may be verified for authenticity as part of the approval process.	
RMV iNARTE® training prerequisite	Undergo the prerequisite 5 Day iNARTE® Certified ESD Aerospace & Defense Engineer/Technician™ training by RMV Technology Group, LLC at NASA Ames. This course may be offered in a virtual platform or onsite at NASA Ames Research Center.	
	https://www.esdaerospacetraining.org/	
Examination	Pass the iNARTE® Certified ESD Aerospace & Defense Engineer/Technician™ exam and the Daily "Hands-On" Grading by Instructors.	
	All above requirements must be met.	
iNARTE® Code of Ethics	Submission of the application form implies your agreement	

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iNARTE® Professional Certification Requirements © Exemplar Global Inc, 2024

RMV-iNARTE® Certified Space & Defense ESD Program Monitor™

Requirements:

The individual is recommended to have 2 years' experience in Aerospace or Defense, trade school certification, Associates of Arts or Associates of Science Degree or Bachelor of Science degree. A high school diploma or GED also counts with 2 years of work experience. The prerequisite RMV Technology Group LLC iNARTE® Certified Space & Defense ESD Program Monitor™ or iNARTE® Certified ESD Electronics Industry Coordinator™ 3-day course is required in order to take the iNARTE® Examination.

Level of Difficulty:

Intermediate. The student should be familiar with ESD Basics before taking this course.

Who is it for:

NASA, DoD and DOE Engineers, Technicians, Supervisors, Incoming Inspection, Military Logistics Specialists, ESD Program Managers and Support Federal Contractors.

Purpose:

ESD Workstation Verification in the ESD Protected Area (EPA) to the new and revised ANSI/ESD S20.20, ANSI/ESD S541, NASA STD. 8739.6B and MIL STDs that apply for low RH and extreme environmental conditions. The Student will learn the electrostatic requirements for assembly, packaging, handling, storage, transport and inspection of ESD circuit card assemblies and EEE Parts (ESD Sensitive Devices) or equipment in the EPA.

Length of Certification:

2 years, with 2-year renewals to maintain certification.

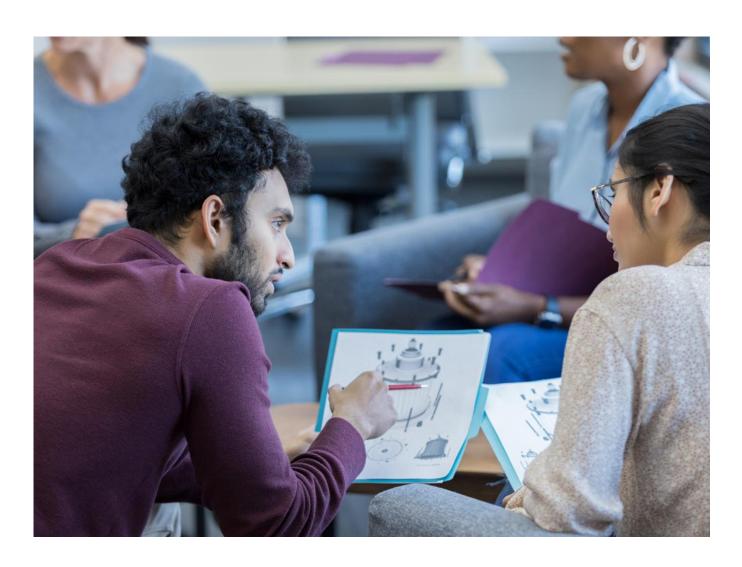
Exam:

Virtual Hands-On Instrument driven exam plus remote written exam for an overall passing score of 70%.

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4. CONTINUING PROFESSIONAL DEVELOPMENT GUIDANCE



CONTINUING PROFESSIONAL DEVELOPMENT EXPECTATIONS

Continuing professional development (CPD) is an ongoing requirement to undertake education, maintain a current knowledge base and improve skills and knowledge. All professionals are expected to take ownership of their learning and development needs and develop a plan to indicate how they might meet these objectives.

While iNARTE® may specify a minimum CPD requirement for a given Personnel Certification, there is no maximum or limit on the CPD activities you can complete. The CPD year runs for 12 calendar months from the date Personnel Certification is granted and may be audited as part of the renewal process.

Continuing professional development should be selected from a range of categories. There is no minimum requirements per category. Random audits may be undertaken by Exemplar Global. If selected, you will be asked to submit supporting evidence for your CPD.

CPD CATEGORY	DESCRIPTION
Professional Development Maximum 20 hours allowed per year	Conference, seminars, workshops, webinars or forums. Must be verified by the company you work for by having your manager/supervisor sign your CPD Log, certificate of completion, attendance roster, or similar. Must be relevant toward the certification you obtain.
Employment Maximum 20 hours allowed per year	Must be verified by obtaining a letter from your employer on company letterhead from a manager/supervisor who can verify your job title, duties, employment status and time with the company. Employment must be relevant to our certification.
Instructor Courses: Teaching or Leading Courses Maximum 20 hours allowed per year	All courses must clearly apply to the certification you obtain. Must be verified by either having your employer sign your CPD log or submitting the student attendance list with your details as their instructor.
Student Courses Completed Maximum 20 hours allowed per year Certification 10 hours per additional certification with a maximum of 20 hours allowed per year. Initial	All courses must relate to the certification you obtain. Must be verified by submitting a certificate of attendance from the training provider. Certifications awarded by technical or professional societies. Must be verified by submitting a copy of your certificate or card from the technical or professional society.
20 hours allowed per year. Initial certification only. Must have been	professional society.

CPD CATEGORY	DESCRIPTION
granted during the recertification period.	
Meetings (Technical/Industry Association) Allowing 2 hours per meeting with a maximum of 10 hours per year.	Participation in regular meetings with technical societies. Meetings must be technically or professionally based; internal company meetings do not apply.
Committees Maximum 25 hours allowed per year.	Committee work encompasses professional associations and must contribute to the advancement of the certification discipline.
Publishing Maximum 20 hours allowed per year.	Published articles or papers based on the current industry you are certified in, including submissions for the iNARTE newsletter. You might verify your writing activities through: • published tables of content and date of publication • copies of published articles and date of publication • letters or emails from publishers, editors, course organisers These should be accompanied by a record of the
	time you spent. You should not count writing which is part of your role.