



**SIEMENS**

*Ingenuity for life*



Training center  
programs

Siemens engines & gen-sets

[siemens.com/engines](https://www.siemens.com/engines)



Siemens Engines R&D S.A.  
 Parque Tecnológico de Alava  
 Leonardo da Vinci, 12  
 01510 VITORIA-GASTEIZ  
 (Alava) Spain

**Product training**

Siemens is concerned about its distribution and service network and offers product training sessions of their engines and genset. Ad-hoc designed for a wide range of clients' profile from operations, maintenance, general staff and engineering personnel. Our full-time instructors and field service engineers use "building block" and "team teaching" techniques to go from basic concepts about the equipment to a fully complete and comprehensive course on engine overhauls and design concepts more orientated to experienced operators. Training programs and documentation are presented in Spanish or English.

**Training Center Facilities**

**Spain**

Siemens Engines R&D S.A.  
 Parque Tecnológico de Alava  
 Leonardo da Vinci, 12  
 01510 VITORIA-GASTEIZ  
 (Alava) Spain

This center is located less than 1 hour from Bilbao\*, which is the most convenient airport of the area.

Siemens R&D center is devoted to a constant product innovation and improvement. It is unique in Spain and considered as one of the most advanced R&D center in the world. In addition to R&D, this facility serves as the head office for Power's engineering services. Siemens R&D is equipped with several state of the art test

benches including hydraulic brakes, gearboxes, generators and resistance benches; all of which are used for the controls training. A special hands-on workshop is available for engine operation.

**USA**

Siemens Engines - Training Center  
 570 Hayden Station Rd  
 Windsor, CT 06095  
 USA

This center is located less than 2 hours from Boston, Massachusetts\* and less than 3 hours from New York City, NY.

Siemens has expanded its instructor base and is committed in providing clients the state-of-the-art educational resources needed. The USA training center increases the availability of courses in our world-wide organization. Expert advice and trainers with hands-on experience are available in North America.

**On site**

Siemens engine business trainers have been successfully training domestically and internationally. It supplies a wealth of information on topics around the world. Training can be offered locally at the client's site for a more adapted approach and in-situ trials. Please contact the Training center for further details on this kind of training.

**Safety Information**

Siemens will provide all safety guidance and personal protective

equipment (PPE). Participants are not required to bring safety shoes and work clothes/coveralls. All safety and security policies at each location will be explained prior to training and must be followed by all participants.

**Registration, Payment**

Siemens policy only allows to offer training to Siemens employees or companies belonging to the distribution and service network with a signed agreement for the service and operability of the equipment. All registrations will be confirmed according to all related with payment terms and assistance should be previously agreed before the attendance.

**New Training**

**Sales training**

Special training planned for sales, will support the commercial distributors teams with technical skills. We offer the latest theoretical and practical knowledge directly from the manufacturer. To ensure effective training, we keep a balance between the theoretical and the practical.

**Integration training**

This product focused training provides with the necessary information to designers and integrators to help in the guidance and knowledge for a correct application of the manipulation instructions of the engines and gensets.

\* Bilbao airport (BIO) for Spain Training Centre

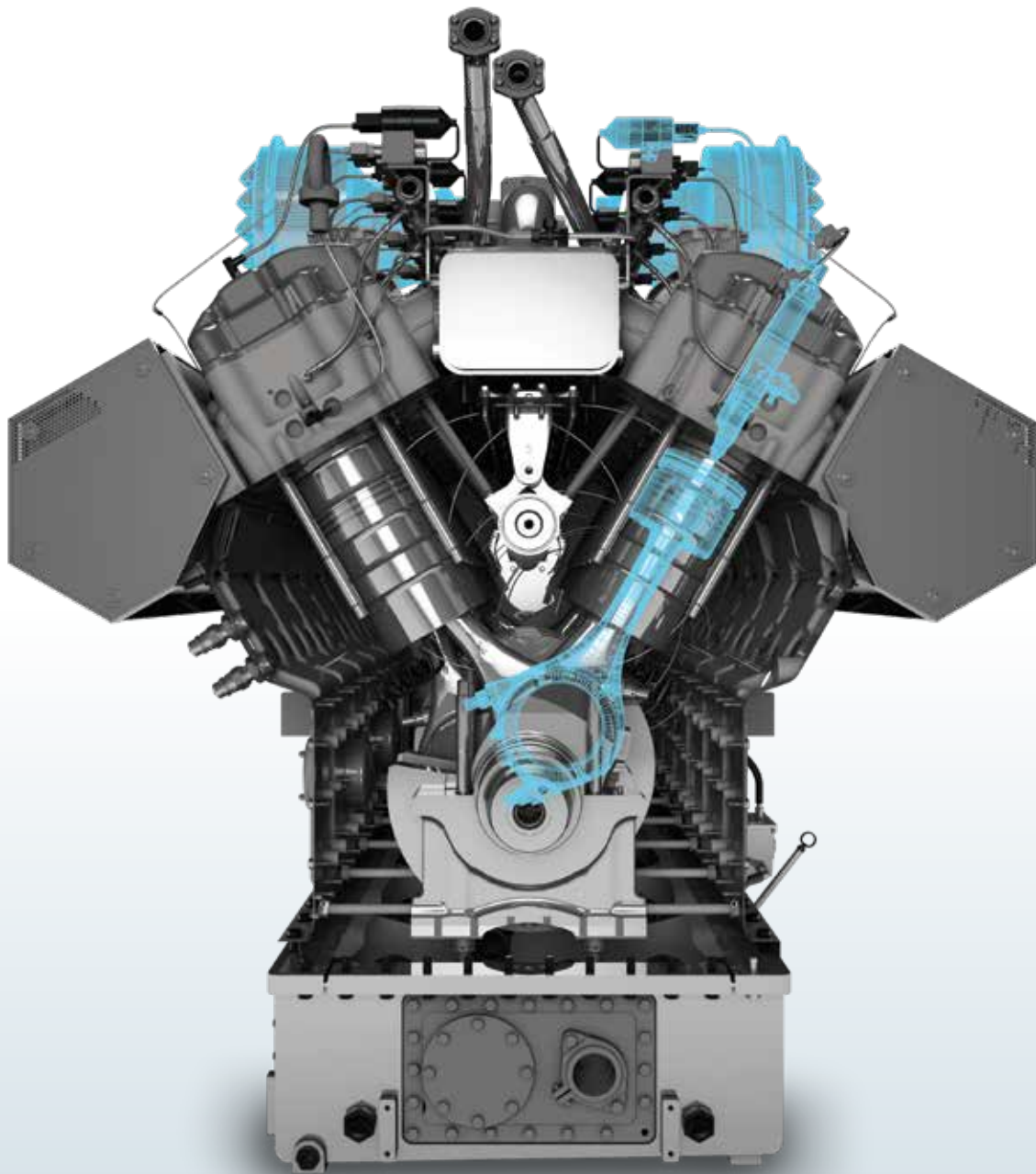
\*Hartford airport (BDL) for USA Training Centre

# A level Basic

## Goal: Identify key elements and uses

The basic level course is recommended for students with little to no knowledge of the internal combustion engine. The course covers the basics of engine mechanics, a brief overview of the control system and provides application guidance on the use of our engines and generator sets.

- Internal combustion engines.
- Scope of supply. Engine applications.



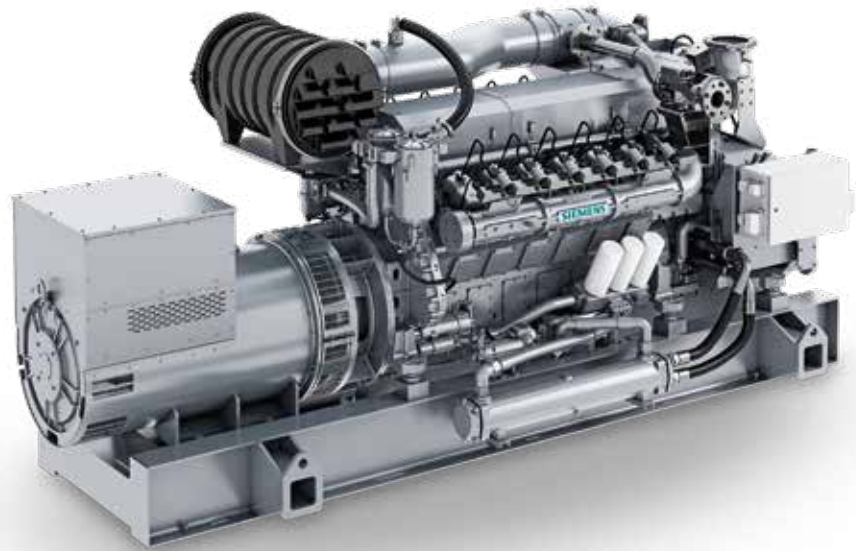
# B level

## Operation

### Goal: Safe and correct engine operation

This course teaches the student the procedures required to safely and correctly operate our engines. The course instruction will provide the student confidence in the performing of the daily operation requirements as well as a basic understanding of fault diagnostics and basic maintenance needs.

- Circuits and alarms description.
- E0 daily operations.



# C level

## Maintenance

### Goal: Operation and maintenance competence

This course emphasizes the practical aspects of engine operation and maintenance. The training covers more detailed instructions on the engine operation, safety practices, as well as engine maintenance disassembly, inspection and evaluation. This training involves some hands-on experience and covers maintenance operation types E1, E2 & E3.

- E1, E2, & E3 operations.
- Wiring diagrams. Ignition & carburation adjustment.
- Failure analysis & troubleshooting.



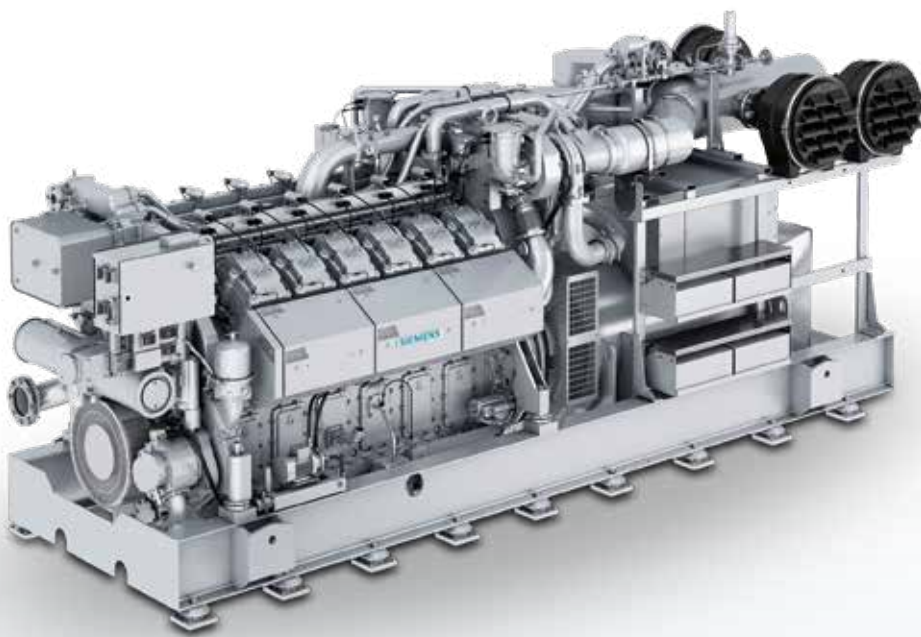
# D level

## Technical service and support

### Goal: Advanced maintenance and operation knowledge

This course is intended for experienced mechanics, engineers and supervisors who provide system operation and technical support. The course offers an intense operational workshop with deep concepts of engine operation and maintenance. The course includes hands-on training and covers maintenance operation types R1, R2, and R3.

- R1, R2 & R3. engine overhaul.
- Control update & configuration settings.



## Certifications Evaluation

By request, Siemens provides particular certifications for evaluating professional competency on engines & gen-sets manipulation. Specific requirements for successful completion include evaluation and passing of various theory and hands-on exercises.

# Training Courses Schedule

SEB Technical Courses		Description		SPAIN Training Center	USA Training Center	On-site
A Basic level		Prerequisite: not needed				
Welcome training	2 days	Identify ICE components, basics of engine mechanics and controls	ANN-01	3.200 €	3.200 €	6.000 €
SGE - Gas Engines						
B&C Operation & Maintenance level		Prerequisite: Mechanical and electronic profile				
Operation & Maintenance for SGE-S	4 days	E1, E2, and E3 operations - EGS02/CPU95/GKCS control system	CNG-01	6.400 €	to be announced	12.000 €
Operation & Maintenance for SGE-S/H	4 days	E1, E2, and E3 operations - GCS-E (LECM) control system	CNG-02	6.400 €	to be announced	12.000 €
Operation & Maintenance for SGE-E	4 days	E1, E2, and E3 operations - GCS-E (LECM) control system	CNG-03	6.400 €	to be announced	12.000 €
Control box GCS-G for SLE/SGE	1 day	GCS-G genset ancillaries and control for SLE/SGE.	CGN-01	1.600 €	1.600 €	3.000 €
Control box GCS-P for SLE/SGE	½ day	GCS-P plant monitoring and supervision for SLE/SGE	CPN-01	800 €	800 €	1.500 €
D Technical Service		Prerequisite: verifiable experience and C level certification				
Overhaul technical service SGE-S/H	5 days	R1, R2 and R3 technical service for SGE - S/H	DMG-01	8.000 €	8.000 €	15.000 €
Overhaul technical service SGE-E	5 days	R1, R2 and R3 technical service for SGE - E	DMG-02	8.000 €	to be announced	15.000 €
Commissioning SGE-S	2 days	EGS02/CPU95/GKCS control system	DCG-01	3.200 €	to be announced	6.000 €
Commissioning SGE-H/E	2 days	GCS-E (LECM) control system for SGE engines	DCG-02	3.200 €	to be announced	6.000 €
Commissioning Control panel GCS-G	1 day	GCS-G configuration - Siemens PLC/HMI	DGN-01	1.600 €	1.600 €	3.000 €
SLE - Diesel engines						
B&C Operation & Maintenance level		Prerequisite: Mechanical and electronic profile				
Operation & Maintenance for SLE-S	3 days	E1, E2, and E3 operations	CNL-01	4.800 €	to be announced	9.000 €
Control panel Heinzmann for SLE	1 day	Heinzmann control for SLE	CCL-01	1.600 €	1.600 €	3.000 €
Control panel MCS Basic for SLE	1 day	PINE CM02/CM03 control system for SLE	CCL-02	1.600 €	1.600 €	3.000 €
Control panel MCS Advance for SLE	1 day	COMAP control system for marine applications for SLE	CCL-03	1.600 €	1.600 €	3.000 €
Control box GCS-G for SLE/SGE	1 day	GCS-G genset ancillaries and control for SLE/SGE.	CGN-01	1.600 €	1.600 €	3.000 €
Control box GCS-P for SLE/SGE	½ day	GCS-P plant monitoring and supervision for SLE/SGE	CPN-01	800 €	800 €	1.500 €
D Technical Service		Prerequisite: verifiable experience and C level certification				
Overhaul technical service SLE-S	5 days	R1, R2 and R3 technical service for SLE	DML-01	8.000 €	8.000 €	15.000 €
Commissioning SLE-S	2 days	Helenos Control	DCL-01	3.200 €	to be announced	6.000 €
Commissioning Control panel GCS-G	1 day	GCS-G configuration - Siemens PLC/HMI	DGN-01	1.600 €	1.600 €	3.000 €

## Training Courses Schedule

SEB Sales & Integration Training		Description		SPAIN Training Center	USA Training Center	On-site
		Prerequisite: not needed				
SEB product sales training	2 days	Basic technical concepts, scope of supply, SEB sales support	SNN-01	3.200 €	3.200 €	6.000 €
Integration of SEB product	3 days	Requirements for integration of engines and gensets into client scope/products.	SNN-02	4.800 €	4.800 €	9.000 €

SEB Upgrade Training		Description		SPAIN Training Center	USA Training Center	On-site
Upgrade courses for expired certifications		Prerequisite: verifiable experience and C level certification				
Renew certification expired training	2 days	New product features and certification test	UNN-01	3.200 €	Check availability	Check availability
Upgrade courses for GCS-E controls		Prerequisite: verifiable experience and C level certification				
GCS-E (LECM) control upgrade from basic to commissioning	2 days	New features, service tool and unit configuration	UNN-02	3.200 €	to be announced	to be announced
Upgrade courses for SGE-E engines		Prerequisite: verifiable experience and D level certification for S and H engines				
86/100 SGE-E upgrade from basic to overhaul	5 days	Characteristics, tools and procedures for E series engines	UNN-03	8.000 €	to be announced	to be announced

These prices are for groups of up to 6 people.

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Subject to changes and errors.

The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.

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