Training center programs
Siemens engines & gen-sets
## Training Courses Schedule

### Welcome & Sales Integration Training

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Duration</th>
<th>Description</th>
<th>SPAIN Training Center</th>
<th>USA Training Center</th>
<th>On-site</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANN-01</td>
<td>SEB Welcome training</td>
<td>2 days</td>
<td>Identify ICE components, basics of engine mechanics and controls</td>
<td>500 € / person</td>
<td>550 $ / person</td>
<td>4.000€ / 4.400$ groups up to 10 people</td>
</tr>
<tr>
<td>SNN-01</td>
<td>SEB product sales training</td>
<td>2 days</td>
<td>Basic technical concepts, scope of supply, sales support</td>
<td>500 € / person</td>
<td>550 $ / person</td>
<td>4.000€ / 4.400$ groups up to 10 people</td>
</tr>
<tr>
<td>SNN-02</td>
<td>Integration of SEB product</td>
<td>2 days</td>
<td>Requirements for integration of engines and gensets into client scope/products.</td>
<td>500 € / person</td>
<td>550 $ / person</td>
<td>4.000€ / 4.400$ groups up to 10 people</td>
</tr>
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</table>

### Technical Service

#### SGE - Gas Engines

**Operation & Maintenance level**  
**Prerequisite: Mechanical and electronic profile**

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<tbody>
<tr>
<td>BNG-02</td>
<td>Operation for SGE-SL/SM/HM</td>
<td>2 days</td>
<td>Maintenance E0</td>
<td>700 € / person</td>
<td>770 $ / person</td>
<td>6.000€ / 6.600$ groups up to 6 people</td>
</tr>
<tr>
<td>BNG-03</td>
<td>Operation for SGE-EM</td>
<td>2 days</td>
<td>Maintenance E0</td>
<td>700 € / person</td>
<td>770 $ / person</td>
<td>6.000€ / 6.600$ groups up to 6 people</td>
</tr>
<tr>
<td>CNG-02</td>
<td>Operation &amp; Maintenance for SGE-SL/SM/HM</td>
<td>5 days</td>
<td>Maintenance E0, E1, E2, E3, diagnosis and troubleshooting</td>
<td>1.750 € / person</td>
<td>1.925 $ / person</td>
<td>15.000€ / 16.500$ groups up to 6 people</td>
</tr>
<tr>
<td>CNG-03</td>
<td>Operation &amp; Maintenance for SGE-EM</td>
<td>5 days</td>
<td>Maintenance E0, E1, E2, E3, diagnosis and troubleshooting</td>
<td>1.750 € / person</td>
<td>1.925 $ / person</td>
<td>15.000€ / 16.500$ groups up to 6 people</td>
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**Experienced Technical Service**  
**Prerequisite: verifiable experience and C level certification**

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<tr>
<td>DMG-01</td>
<td>Overhaul technical service SGE-SL/SM/HM</td>
<td>5 days</td>
<td>Maintenance R1, R2 and R3</td>
<td>1.750 € / person</td>
<td>1.925 $ / person</td>
<td>15.000€ / 16.500$ groups up to 6 people</td>
</tr>
<tr>
<td>DMG-02</td>
<td>Overhaul technical service SGE-EM</td>
<td>5 days</td>
<td>Maintenance R1, R2 and R3</td>
<td>1.750 € / person</td>
<td>to be announced</td>
<td>15.000€ / 16.500$ groups up to 6 people</td>
</tr>
<tr>
<td>DCG-02</td>
<td>Engine Commissioning SGE-SL/SM/HM/EM</td>
<td>3 days</td>
<td>GCS-E engine control commissioning</td>
<td>1.050 € / person</td>
<td>to be announced</td>
<td>9.000€ / 9.900$ groups up to 6 people</td>
</tr>
<tr>
<td>DCG-03</td>
<td>Engine &amp; Genset Commissioning SGE-SL/SM/HM/EM</td>
<td>4 days</td>
<td>GCS-E engine control, GCS-G control panel and auxiliary Systems commissioning</td>
<td>1.400 € / person</td>
<td>to be announced</td>
<td>12.000€ / 13.200$ groups up to 6 people</td>
</tr>
</tbody>
</table>

**SLE - Diesel engines**

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**SEB Upgrade Training**

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</tr>
</thead>
<tbody>
<tr>
<td>UNN-01</td>
<td>Renew certification expired training</td>
<td>2 days</td>
<td>New product features and certification test</td>
<td>700 € / person</td>
<td>Check availability</td>
<td>6.000€ / 6.600$ groups up to 6 people</td>
</tr>
<tr>
<td>UNN-02</td>
<td>GCS-Engine from basic to commissioning</td>
<td>2 days</td>
<td>New features, service tool and unit configuration</td>
<td>700 € / person</td>
<td>to be announced</td>
<td>6.000€ / 6.600$ groups up to 6 people</td>
</tr>
<tr>
<td>UNN-03</td>
<td>SGE-EM upgrade from basic to overhaul</td>
<td>5 days</td>
<td>Characteristics, tools and procedures for EM series engines</td>
<td>1.750 € / person</td>
<td>to be announced</td>
<td>to be announced</td>
</tr>
<tr>
<td>UNN-04</td>
<td>On the job - Training</td>
<td>5 days</td>
<td>Get experience doing services with the mentoring of one of our trainers</td>
<td>1.750 € / person</td>
<td>to be announced</td>
<td>15.000€ / 16.500$ groups up to 6 people</td>
</tr>
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*The minimum number of participants for every course is 4 people*
Product training
Siemens is concerned about its distribution and service network and offers product training sessions of their engines and gensets. 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

Engine Overhaul

Goal: Advanced maintenance

This course is intended for experienced mechanics, engineers and supervisors who provide system operation and technical support. The course includes hands-on training and covers maintenance operation types R1, R2, and R3.

- R1, R2 & R3. Engine overhaul.

Engine & Genset Commissioning

Goal: Autonomy on commissioning

This course offers an intense workshop with deep concepts of engine controls, updates and configuration settings. This training involves hands-on experience maintenance on commissioning.

- Engine & Gensets Commissioning

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.