

# Semantic Technology Specialist Training and Certification

## Semantic The **WEB**

Discover the hidden secrets.

Understand the meaningful foundations.

semsphere



Exploit the power of intelligent systems. Become a certified Semantic Technology Specialist.



**Semsphere** aims to be the reference education and training company, providing unprecedented expertise and comprehensive training in the specialized field of semantic technology.

**Semsphere** offers a hierarchical training and certification program targeting IT professionals and those seeking globally recognizable expertise and credentials in the field of semantic technology. The three levels of increasing complexity guarantee tailored progress through the curriculum.

# Semantic Technology Specialist Training and Certification

## Semantic Technology Specialist



The basic certification which covers the fundamentals of semantic technologies and serves as the foundation for the successive certification levels.

## Semantic Technology Professional



The intermediate certification which confirms the trainees' progressive expertise in semantic technologies and their advanced utility and application.

## Academy Trainer



The advanced certification which confirms the trainees' superior knowledge in all areas covered in the lower certification levels, affording the qualification required to successfully instruct the various levels of certification and those specialized areas for which the trainer holds a valid Semsphere credential.

## Semantic Technology Specialist Training and Certification

### Semantic Technology Specialist Certification Course

The Semantic Technology Specialist (STS) certification lasts one full week, typically running Monday through Friday. It affords participants complete knowledge about the foundations and core concepts of semantic technologies. Participants are expected to work through hands-on exercises and will need to devote a bit of time after the course hours to familiarize themselves with the concepts presented. The final exam is offered on the fifth day, after the module training sessions have been completed. Participants successfully passing the exam receive a credential as proof of their level of expertise.

### Prerequisite Qualifications

Participants require a basic level of computer literacy - background in IT development and engineering is a plus - and a keen interest in learning about the foundations of knowledge systems and the Semantic Web, ontologies and ontology development, and the extensive applications of semantic technologies.

### Modules **Module 1: Semantic Web Foundations.**

The first module focuses on increasing the participant's understanding about the origin and justification of the Semantic Web by providing an introduction to its core concepts and strengths. The lectures and complementary exercises define the conceptual framework and principles required to successfully apply semantic technologies to various domains, as is later taught in the successive STS modules and the advanced certification and specialized courses. The module begins with an overview of the history and foundations of knowledge systems, Web technologies, logical systems and the Semantic Web, and proceeds with the presentation of the maturing standards and technologies of the W3C Semantic Web Layer Cake, such as RDF(S), OWL, Rules and SPARQL.

**Further Questions?**

Check our website:

[www.semsphere.com](http://www.semsphere.com)Or send us your inquiry  
directly to[info@semsphere.com](mailto:info@semsphere.com)

semsphere

Grabenweg 68  
6020 Innsbruck  
Austria

+43 1 236 4867

+43 1 236 4867 99

[info@semsphere.com](mailto:info@semsphere.com)[www.semsphere.com](http://www.semsphere.com)

## Semantic Technology Specialist

### Training and Certification

#### Modules

**Module 2: Ontologies and the Semantic Web.**

The second module focuses primarily on ontologies, starting with a brief review of their origins and etymology, then providing trainees with insight to the ontology lifecycle and development processes, building one's understanding of the terminology used by ontology engineers, exploring the particulars of ontology modeling and learning, and introducing the most effective tools for creating ontologies. The module concludes with the presentation of several commonly used application and domain ontologies.

**Module 3: Application Development.**

The third module provides a comprehensive overview of basic concepts required for building semantic applications and the professional development frameworks used by developers and ontology engineers. The module starts by covering the fundamentals of component-based semantic application development and the creation of Semantic Web data, and continues with the presentation of several powerful semantic application components and technologies, such as GRDDL, semantic APIs, repositories, reasoners, and search engines. After completing this module, the trainee should be well equipped for the Semantic Technology Specialist certification examination and advancement to the next Semantic Technology Professional certification course.

The **Semantic Technology Specialist certification** examination is then offered after completing the three modules described above.

The **Semantic Technology Specialist course costs €1300, excl. VAT.** This includes examination and certification fees plus the lunches during the course and all the materials required.