

ADVANCED TRAINING WITH FRAUNHOFER



continuing education

vidareutbildning

직업평생교육

वयस्क शिक्षा

melanjutkan pendidikan

Weiterbildung

further education

formation continue

professional education

Továbbképzés

职业继续教育

pós-graduação

educación continua

繼續教育

التعلم المستمر

voortgezet onderwijs

formazione continua





Preface

ADVANCED TRAINING – THE FRAUNHOFER APPROACH

Fraunhofer is the leading organization for applied research in Europe. Its research activities are conducted by 69 institutes and research units at locations throughout Germany. The Fraunhofer-Gesellschaft employs a staff of 24,500, who work with an annual research budget totaling 2.1 billion euros. Of this sum, 1.9 billion euros is generated through contract research. More than 70 percent of the Fraunhofer-Gesellschaft's contract research revenue is derived from contracts with industry and from publicly financed research projects. Fraunhofer's core task is to carry out research of practical utility in close cooperation with its customers from industry and the public sector. In this way, the Fraunhofer-Gesellschaft shapes the innovation process in Germany and drives forward the development of key technologies.

The Fraunhofer Academy is the Fraunhofer-Gesellschaft's specialist provider of continuing education and part-time training for people in employment. Through a range of training programs, the Fraunhofer Academy passes current Fraunhofer Institutes' research knowledge and expertise on to private sector business enterprises seeking to provide their employees with the best possible qualifications. After all, applied research is useful only if new research finds its way into industry and is then turned into innovations. This is the only way companies can remain competitive in the global market.

In cooperation with renowned partners and partner universities, the Fraunhofer Academy offers part-time study programs, certificate courses and multi-day seminars. The Fraunhofer Academy's continuing education portfolio is divided into five topic areas: Energy and Sustainability, Information and Communication, Manufacturing and Testing Technology, Technology and Innovation, Logistics and Production.

Create the foundation for your next career move!

Best wishes,

Dr. Roman Götter

Head of the Fraunhofer Academy



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Celebration of ten successful years!

ABOUT FRAUNHOFER ACADEMY

The Fraunhofer Academy is the Fraunhofer-Gesellschaft's specialist provider of continuing education and part-time training for working professionals.

In 2016, the Fraunhofer Academy celebrated its 10th anniversary and was founded in response to the German government's Pact for Research and Innovation. This led to the creation by Fraunhofer of a special unit dedicated to continuing education, with the aim of promoting the transfer of knowledge between research and industry.

We offer specialists and managers outstanding part-time courses of study, certificate courses and seminars based on the research activities of the Fraunhofer Institutes in collaboration with selected and prestigious partner universities.

FRAUNHOFER ACADEMY OFFERS MORE THAN 40 ADVANCED TRAINING PROGRAMS IN 5 THEMATIC AREAS:



CONCEPT FOR SUCCESS

Fraunhofer is synonymous with excellence in applied research. The organization's mission and values determine our actions. Wherever new technologies and processes are implemented, the Fraunhofer Academy helps companies to establish a new innovation culture based on continuing education that will assure their future business success.

We train and qualify specialists and managers and strengthen organizations

Learning formats and useful content adapted to individual needs

Putting knowledge into practice

High-quality knowledge transfer



FACTS AND FIGURES

An overview of our last year

10 YEARS

of Fraunhofer Academy guarantee
qualified training programs

> 80.000

visits on our Website each year

11

part-time courses of study
are offered in cooperation
with German universities

77 APPS

were created with iAcademy,
a mobile learning technology
made by Fraunhofer

Ø 150

courses of continuing
education programs
are conducted through
Fraunhofer Academy
each year

Ø 3000

participants are part of our
Fraunhofer Academy training
programs each year

YOUR BENEFITS AT A GLANCE



ADVANCED TRAINING PROGRAMS

PART-TIME COURSES OF STUDY

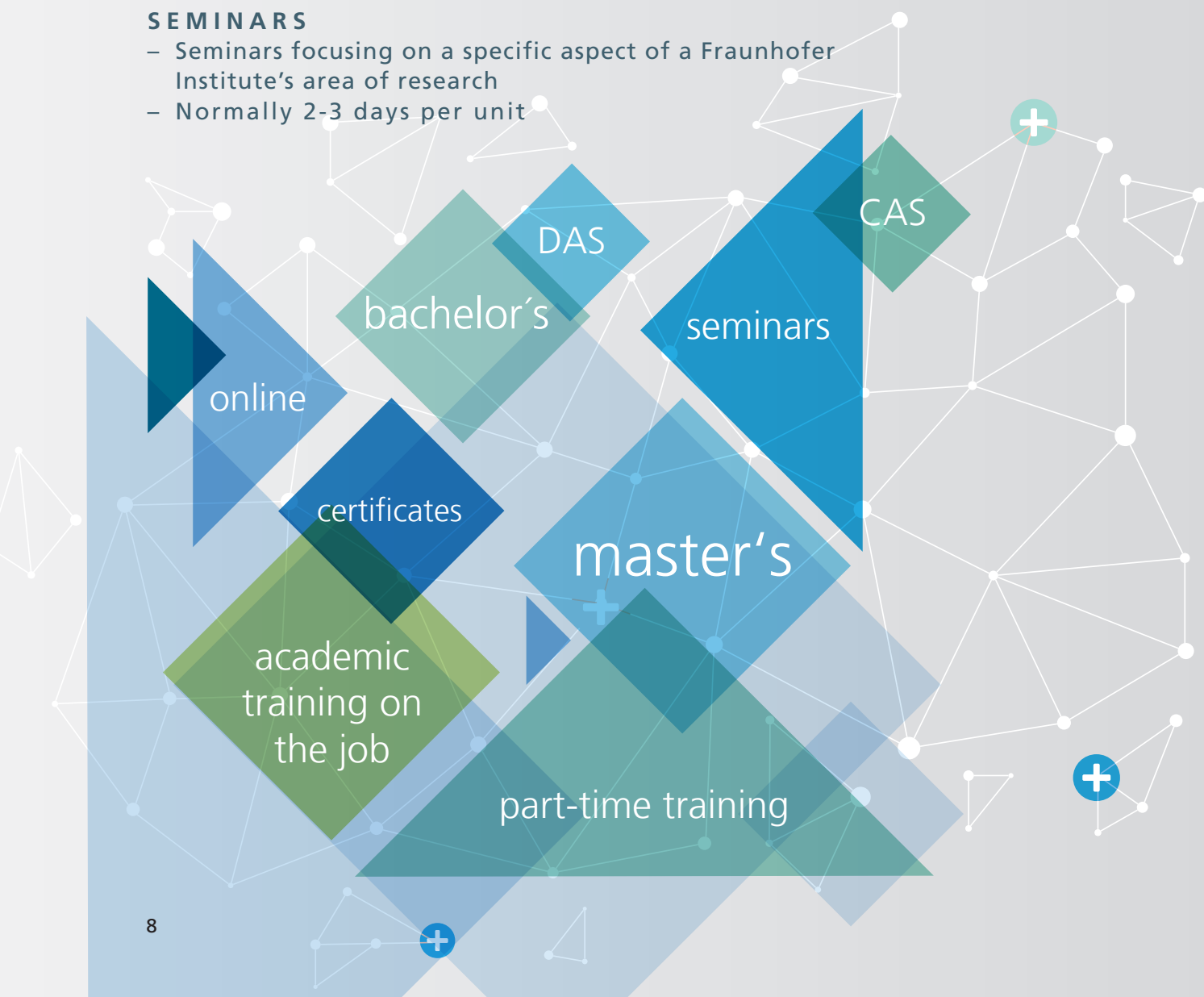
- Part-time academic training
- Initiated by a Fraunhofer Institute in cooperation with a partner university or university of applied sciences





CERTIFIED TRAINING COURSES

- Part-time training leading to a recognized, professional qualification
- At least one week long

SEMINARS

- Seminars focusing on a specific aspect of a Fraunhofer Institute's area of research
- Normally 2-3 days per unit



	PROGRAM	FORMAT	DATES
	• Online M.Sc. Wind Energy Systems	E-learning: 100%	October every year
	• Wind Energy Systems Certified Courses (Certified Training Course)	E-learning: 100%	April and October every year
	• M.Sc. Solar Energy Engineering	E-learning: ~ 90%, on-campus time: up to 5 days per semester	October every year
	• Solar Energy Engineering Certified Courses (Certified Training Course)	E-learning: ~ 90%, on-campus time: up to 5 days per semester	April and October every year
	• Master Software Engineering for Embedded Systems (M.Eng.)	E-learning: ~ 90%, on-campus time: one weekend in first 3 terms	October every year
	• Data Scientist Training Series (Seminar/Certified Training Course) – Certified Data Scientist – Training in General Methods – Training in Sector-Specific Methods	Classroom time: 100%	Regularly and on request. Course is also offered as in-house training.
	• Semantic Business Rules & Decision Models	1 day face-to-face and 1 day online learning	Twice a year and as in-house training
	• Strategic Open Government Data Provision	1 day face-to-face and 1 day online learning	Twice a year and as in-house training
	• Mastering Variant Complexity	2 days face-to-face and 1 day online learning	Twice a year and as in-house training
	• Architecting for Change	2 days face-to-face and 1 day online learning	Twice a year and as in-house training
	• Fiber-Composite Technology (Certified Training Course) – FRP Manufacturer – FRP Remanufacturer – FRP Specialist	Classroom time: 100%	Dates on request. Course is also offered as in-house training.
	• Industrial Adhesive Bonding Technology (Certified Training Course) – European Adhesive Bonder – European Adhesive Specialist – European Adhesive Engineer	Classroom time: 100%	Dates on request. Course is also offered as in-house training.
	• Intellectual Capital Statement – Made in Germany (Seminar)	Classroom time: 100%	Dates on request



Part-Time Course of Study



“There is a high demand for qualified and experienced engineers in all sectors of the onshore and offshore energy industry. To meet this demand, we have taken it upon ourselves to train highly skilled workers for this rapidly growing employment market in the international energy sector.” Prof. Dr.-Ing. Kurt Rohrig, Deputy Director, Fraunhofer Institute for Wind Energy and Energy System Technology IWES



ONLINE M.SC. WIND ENERGY SYSTEMS

Further Information

Format

International distance learning master's program (100% online)

Starting date

October every year

Duration

7 semesters (part-time)

Course fee

€14,000 (total)

Qualification

Master of Science (M.Sc.)

Program overview

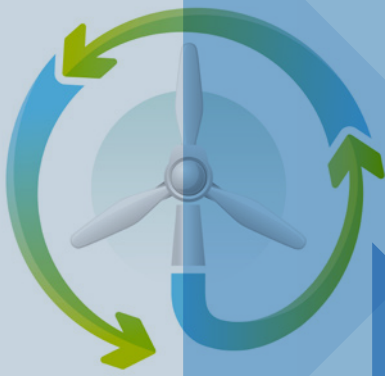
The main objective of the master's program for Wind Energy Systems is capacity building in the field of wind energy for research and industry with the experience of wind power research conducted by a unique education alliance: the University of Kassel, Germany's leading university for sustainability as well as the Fraunhofer Institute for Wind Energy and Energy System Technology. The program also establishes learning alliances with industrial companies.

Who should enroll

Target groups for the master's program are natural scientists and engineers who hold a bachelor's degree and wish to extend their knowledge in the field of wind energy. The program is taught 100% online and so provides professionals and career changers with on-the-job training in the emerging research and business field of Wind Energy Systems.

Key benefits

- International master's degree program with 100% online teaching
- Work and study simultaneously and balance your study and family time
- Unique and experienced education alliance with the University of Kassel, Fraunhofer IWES and industrial partners
- Introduce your own professional input into the curriculum since the course has a problem-solving focus



Certified Training Course

“As a senior engineer in the wind energy industry, I was looking for consolidating my knowledge while broadening it in specific aspects. I found both the contents of the WES Master and the online learning concept, as well as its flexibility in duration, a great opportunity for this twofold purpose” *Francisco Fillols, participant in the certified training course Wind Energy Systems*



CERTIFICATES IN WIND ENERGY SYSTEMS



Program overview

The University of Kassel and the Fraunhofer Institute for Wind Energy and Energy System IWES established seven independent certified training programs which are also part of the master's program Online M.Sc. Wind Energy Systems but can be studied individually. In these certificates very specific aspects of wind power will be treated. The acquired knowledge of each certificate should enable our participants to extend their knowledge in very specific parts of the wind energy. These range from fundamentals of wind energy systems to integration of wind power in the electricity supply system. The knowledge transfer in each certificate takes place on a university level. All modules of the certificates are accredited by the ASIIN.

Who should enroll

Target groups are engineers and bachelor's degree holders who wish to extend their knowledge in the field of wind energy.

Key benefits

- International certificate program with 100% of online teaching
- Study at the cutting edge of applied research in wind energy
- Solve the current and future challenges of wind energy development and be part of the world-wide increase of renewable wind energy
- Start with one certificate and use these modules for crediting to the master's program

Further Information

Format

International distance learning
Certified Training Course
(100% online)

Starting date

April and October every year

Duration

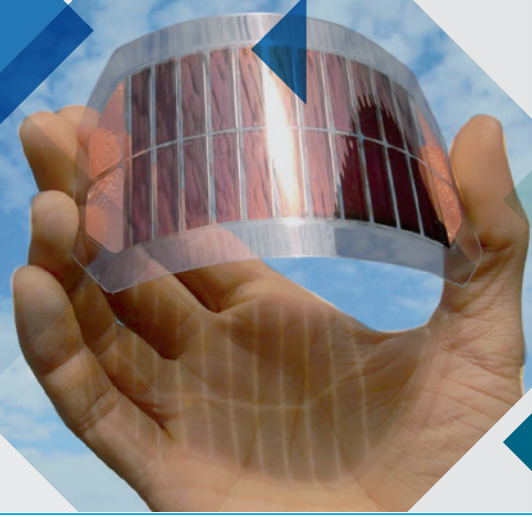
6 months (each certificate)

Course fee

€6000 (each certificate)

Qualification

Certificate of Advanced Studies (CAS) from the University of Kassel in collaboration with the Fraunhofer Institute IWES



Part-Time Course of Study

“The solution lies in renewable energies and photovoltaics in the modern world, even for developing countries.[...] The seminar has opened my eyes to new things. Some of the concepts we are studying are completely new to me and they are amazing.”

Ronald Yiga, student, M.Sc. Solar Energy Engineering (formerly Master Online Photovoltaics)

M.SC. SOLAR ENERGY ENGINEERING



Further Information

Format

International distance learning master's program

Starting date

October every year

Duration

4–6 semesters

Course fee

€3800 (each semester)

Qualification

Master of Science (M.Sc.)

Program overview

The M.Sc. Solar Energy Engineering offered by the University of Freiburg in cooperation with the Fraunhofer Institute for Solar Energy Systems ISE is an international distance learning program that focuses on solar energy research, development, production and manufacturing. It provides participants with the skills they need to develop, design and optimize photovoltaic and solar thermal systems. The program explains the technological and physical foundations of harvesting solar energy resources and provides a comprehensive overview of the interrelated economic and ecological aspects of renewable energy.

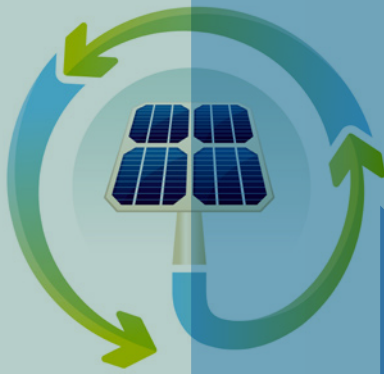
Who should enroll

The master's program is aimed at people who wish to expand their knowledge and skills in the field of solar energy and at companies that are looking to upskill their employees. The program is designed for professionals with an academic degree in a scientific or technical field and at least one year of professional experience.

Key benefits

- Gain proficiency in photovoltaics and solar energy engineering
- Study part-time and by using e-learning tools
- Earn Master of Science degree awarded by University of Freiburg in cooperation with Fraunhofer Institute for Solar Energy Systems
- Study with leading experts in industry and research





Certified Training Course

“What I liked best about my particular course (fundament of pv-systems) was the quality of the e-lectures. I found it extremely well structured! It is the first time that I’ve worked with e-lectures, so it’s a new experience.”

Milan Padilla, participant in the certified training course Solar Energy Engineering



SOLAR ENERGY ENGINEERING CERTIFIED COURSES



Program overview

In cooperation with the Fraunhofer Institute for Solar Energy Systems ISE, the University of Freiburg offers continuing education courses in the field of photovoltaics. The convenience and flexibility of the advanced e-learning environment, combined with personal and enjoyable voluntary workshops in Freiburg, will ensure that both employers and employees benefit from this educational program. The certified training course includes topics such as solar cells and photovoltaic systems, photovoltaics and the renewable electricity grid, crystalline silicon photovoltaics, material and solar cell characterization and modelling, non-conventional cell concepts and advanced processing.

Who should enroll

The target group ranges from engineers, working professionals and decision-makers in the field of photovoltaics to interested newcomers, teachers and journalists. Participants hold a first academic degree and should be familiar with semiconductor physics, semiconductor devices and power electronics.

Key benefits

- Widely-recognized certificate creditable for master’s degree
- Up to date content highly relevant to industrial working environment
- Personal support and communication through online meetings and forums
- Workshops and lab courses at the University of Freiburg and the Fraunhofer Institute for Solar Energy Systems ISE

Further Information

Format

International distance learning
Certified Training Course

Starting date

April and October every year

Duration

6 months (part-time,
workload: 250-300 hrs)

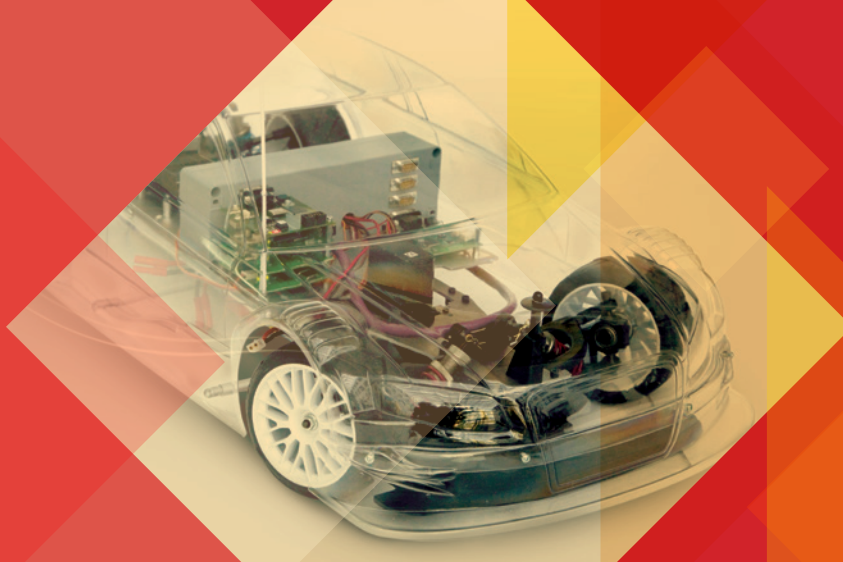
Course fee

€2500 (each certificate)

Qualification

Certificate from the University of Freiburg in collaboration with the Fraunhofer Institute for Solar Energy Systems ISE





Part-Time Course of Study



“Engineers for embedded systems need to master mechanics, electronics and – increasingly – software. In this course, experienced engineers will learn state-of-the-art software engineering for embedded systems.”

Prof. Dieter Rombach, Executive Director,

Fraunhofer Institute for Experimental Software Engineering IESE



MASTER SOFTWARE ENGINEERING FOR EMBEDDED SYSTEMS

Further Information

Format

International distance learning master's program

Starting date

October every year

Duration

4 semesters (part-time)

Course fee

€7800 (total)

Qualification

Master of Engineering (M.Eng.)

Program overview

In cooperation with the Fraunhofer Institute for Experimental Software Engineering IESE, the Distance and International Studies Center (DISC) of the University of Kaiserslautern offers a unique part-time master's program for engineers for embedded systems. On the course, participants will first complete four fundamental course modules that will provide them with the basic knowledge in software development and project management for embedded systems. After that, they take a more development-oriented software engineering course designed to prepare students for work in the technical field of software development or to switch to more development-based activities.

Who should enroll

The program targets graduates of engineering disciplines such as electrical, mechanical, and industrial engineering, graduates of IT disciplines such as computer science and business informatics and graduates of non-engineering disciplines, such as mathematics and physics.

Key benefits

- High-quality learning materials that reflect not only state-of-the-art science, but also the software engineering requirements of industry in the embedded systems domain
- High-ranking experts and researchers who are recognized in industry because of their profound practical experience
- Acquire new competencies that will help to improve products and processes in organizations
- Gain a better understanding of software engineering principles and how to assess and select the best technologies



Seminar and Certified Training Course

“More and more companies are realizing the potential of the wealth of data available today and are beginning to redefine themselves as data-driven companies. Using predictive modeling, they can distill data into forecasts for decision-making. To do this, they require teams that have a particular mix of expertise, and data scientists – who know how to apply IT, statistical and mathematical concepts and techniques – are in great demand.” *Dr. Dirk Hecker, Managing Director, Fraunhofer Big Data Alliance*



DATA SCIENTIST TRAINING SERIES

Program overview

The Fraunhofer Big Data Alliance applies expertise derived from research and industrial practice. The alliance trains data scientists in the fundamental principles, methods and best practices involved in processing big data, in a vendor-neutral approach that combines theory and practice. This makes it possible to develop big-data solutions that offer a high level of data protection and security. In the training series, the following courses are offered: certified data scientist program, training in general methods and sector-specific methods.

Who should enroll

This training program is aimed at managers, project managers and other IT professionals, such as business developers, analysts, data managers and application developers, who wish to obtain qualifications as a data scientist.

Key benefits

- Participants learn more about the typical issues associated with big data analysis in one- or multi-day seminars
- Selected introductory workshops, focused on your company's specific business environment, provide an overview of the possibilities offered by big data analysis together with current trends and the associated challenges



Further Information

Format

Seminar and Certified Training Course

Starting date

Regularly and on request;
also in-house training

Duration

1-5 days

Course fee

€950 (per day)

Qualification (after the 5-day training program)

Certified Data Scientist –
Basic Level



Blended Learning Seminar



"In response to the overwhelming and constantly ever-increasing demands being placed by the industry on adaptive and fast IT change cycles, companies are looking for highly qualified experts with experience in the fields of business logic automation by semantic AI technologies, business rules and decision models. With the completion of this course, you will be one of them!" *Prof. Dr. Adrian Paschke, Director Data Analytics Center, Fraunhofer Institute for Open Communication Systems FOKUS*



SEMANTIC BUSINESS RULES AND DECISION MODELS

Further Information

Format

Blended Learning Seminar

Starting date

Two times a year and on request as in-house training

Duration

2 days

 1 day face-to-face and

 1 day online learning

Course fee

€1450

Partner

In collaboration with EIT Digital

Program overview

This blended learning course addresses the understanding of semantic technologies, standards and tools for the representation and automation of business rules and decision models.

Participants will understand how semantic knowledge representation and reasoning work and how they can be used to automate business rules and decision models.

Who should enroll

The course is for practitioners, IT professionals, business professionals, managers and decision makers who want to learn how to use the power of semantic (business) rule technologies and decision models to accelerate knowledge-based decisions, processes and projects.

Key benefits

- High-quality learning materials that reflect state-of-the-art science
- High-ranking experts and researchers who are recognized in industry because of their profound practical experience
- Acquire new competencies that will help to automate business decisions and actions, to overcome slow IT change cycles, and to enhance and accelerate business logic and processes.



Blended Learning Seminar

“Structured information is a key asset of knowledge based organizations in the public sector. With the proliferation of open government and open data approaches the demand for easily accessible data is growing. In this course, organizations learn what the technical requirements, tools, and processes are for the publication of public sector information. With this course, you will know why open data is an organizational asset.” *Dr. Jens Klessmann, Deputy Head of the Business Unit Digital Public Services, Fraunhofer Institute for Open Communication Systems FOKUS*



STRATEGIC OPEN GOVERNMENT DATA PROVISION



Program overview

This course addresses the organization and technical understanding of open data, a strategic approach to data management and provides useful tools for practical implementation. Thus aims at the promotion of knowledge on appropriate organizational and strategic requirements in public administration fostering publication of public data resources as open data and linked data.

Who should enroll

The course is geared towards middle management working in the public sector without any or much prior knowledge on open data provision. It is also created for IT and organizational development professionals in public sector bodies.

Key benefits

- Start designing an open data strategy in alignment with your organization's objectives
- Bring forward the process of opening up of the public sector body
- Improve your understanding of the relevance of open data and systematic data management for your organization

Further Information

Format



Blended Learning Seminar

Starting date

Two times a year and on request as in-house training

Duration

2 days

-  1 day face-to-face and
 -  1 day online learning
-

Course fee

€1900

Partner

In collaboration with EIT Digital





Blended Learning Seminar



“Providing and maintaining customized solutions, while keeping the pace of the market in terms of speed, cost, and quality is pivotal these days. In this course, professional product managers and engineers learn how to survive the variant jungle of software-intensive systems.”

Dr. Martin Becker, Fraunhofer Institute for Experimental Software Engineering IESE



MASTERING VARIANT COMPLEXITY

Further Information

Format

Blended Learning Seminar

Starting date

Two times a year and on request as in-house training

Duration

3 days

2 days face-to-face and

1 day online learning

Course fee

€1200

Partner

In collaboration with EIT Digital

Program overview

The course “Mastering Variant Complexity” addresses a key challenge of software and systems engineering these days: providing and maintaining customized solutions of increasing complexity, while keeping the pace of the market in terms of speed, cost, and quality. . The course provides best practices, proven industrial strength approaches including methods and tools in the area of strategic reuse, system and software product line engineering, platform engineering, and variant complexity management. The course content is illustrated along examples from different application domains.

Who should enroll

Target participants are professionals working as product (line) managers, system architects, embedded system and software engineers, innovation managers and marketing experts. The course delivers learning content which supports the participants in addressing the variant complexity challenges in their daily work.

Key benefits

- The blended learning course format (a combination of online learning with face-to-face expert coaching) provides a flexible learning experience that adapts to your individual needs.
- Relevant professional development provided by Fraunhofer Experts
- High quality learning content and hands-on approaches that will enable you to apply the acquired knowledge in your daily work context.



Blended Learning Seminar

“One of the key characteristics of Cyber-Physical Systems is inevitable change. In this course, professional system and software architects learn means to support change in the architecture, e.g. with adaptable systems or modular product structures. Participants typically like the practical approach of the course and the experience exchange the most.” *Dr. Pablo Oliveira Antonino, Senior Engineer, Fraunhofer Institute for Experimental Software Engineering IESE*



ARCHITECTING FOR CHANGE

Program overview

“Architecting for Change” is a dynamic course designed by experts from the Fraunhofer Institute for Experimental Software Engineering IESE, where you will learn to properly design cyber-physical systems’ architectures and how to deal with an inevitable element: change. At the heart of the course are best practices and proven industrial strength approaches centered on architecture and product line engineering techniques to adequately support change in Cyber-Physical-Systems. Among them are runtime configuration and adaptation support, as well as modular product structures. The course content is illustrated along examples from different application domains including transportation, health, and industrial automation.

Who should enroll

Target participants are Cyber-Physical Systems architects on system and software level. Furthermore, product and project managers, as well as requirements engineers, developers, quality assurance experts and integrators can also benefit from the course.

Key benefits

- The blended learning course format (a combination of online learning with face-to-face expert coaching) provides a flexible learning experience that adapts to your individual needs.
- Acquire new competencies that will enable you to understand industrial trends and the respective change drivers in Cyber-Physical Systems
- Learn cutting-edge hands-on approaches ready that you can implement in your daily job.



Further Information

Format

Blended Learning Seminar

Starting date

Two times a year and on request as in-house training

Duration

3 days

 2 days face-to-face and

 1 day online learning

Course fee

€1200

Partner

In collaboration with EIT Digital





Blended Learning Seminar



“Big Data brings not only new possibilities, but also new challenges especially regarding how to design and run your systems securely and compliant with data protection regulations. Our lectures raise sensitivity for privacy and data protection and address security technologies in the Big Data context.” *Prof Martin Steinebach, Media Security & IT Forensics, Fraunhofer Institute for Secure Information Technology*



SECURITY & PRIVACY FOR BIG DATA

Further Information

Format

Blended Learning Seminar

Starting date

Two times a year and on request as in-house training

Duration

1-3 days (depending on chosen modules)

Course fee

€149 (online course only)
€1200 – €1900

Partner

In collaboration with EIT Digital

Program overview

This two-day course sensitizes regarding security and data protection and provides basic knowledge for the application of security solutions in big data environments. You will discover cryptographic principles, mechanisms to manage access controls in your big data system, privacy preserving methodologies, as well as data protection regulations and concepts. By the end of the course, you will be ready to plan your next big data project successfully, ensuring that all security and privacy related issues are under control. You will look at big data projects with privacy-aware and security-skilled eyes, being able to recognize dangers of data breaches or data leakage. This will allow you to improve your systems to a grown and sustainable level.

Who should enroll

If you are an ICT professional or someone who designs and manages systems in big data environments, this course is for you! Knowledge about big data and IT is advantageous, but if you are for instance a product manager just touching the surface of big data and security, this course will suit you as well.

Key benefits

- Flexible blended learning modules, which can be booked separately depending on your interests and needs.
- Learn about security and data protection issues that are crucial for your next big data project!
- High-ranking experts and researchers who are recognized in industry because of their profound practical experience



Certified Training Course



“It is a common error to conceive structures as if they were made of steel, rather than considering the specific features of fiber composites. To ensure product quality, personnel need to be specifically trained in the particularities of this new class of material.”

Beate Brede, Head of the Training Center for Fiber Composite Technology, Fraunhofer Institute for Manufacturing Technology and Advanced Materials IFAM



FIBER-COMPOSITE TECHNOLOGY

Further Information

Format

Certified FRP Manufacturer

Duration

5 days (40 hrs)

Course fee €1230 (total)

Format

Certified FRP Remanufacturer

Duration

5 days (40 hrs)

Course fee €1230 (total)

Format

Certified FRP Specialist

Duration

3 one-week sessions (120 hrs)

Course fee €4595 (total)

FIBER-REINFORCED PLASTIC (FRP) MANUFACTURER

The course promotes understanding of the special features of FRPs and trains participants to identify and avoid errors when manufacturing and using FRP materials. The course participants learn about the key aspects of manufacturing FRPs, various FRP applications and manufacturing methods. **Who should enroll:** People whose work involves handling or fabricating fiber-reinforced plastics and others interested in entering this technical field.

FIBER-REINFORCED PLASTIC (FRP) REMANUFACTURER

Course participants are trained to repair fiber composites and to work in industrial production. The training course qualifies participants to follow work instructions effectively for their particular work tasks. After successful completion of the course, they are able to process and repair high-quality fiber-composite structures. **Who should enroll:** People whose work involves independently maintaining, repairing, and processing fiber composites to order.

FIBER-REINFORCED PLASTIC (FRP) SPECIALIST

The course provides training for people involved in designing fiber-reinforced plastics and planning their industrial manufacture. The course teaches the participants how to select suitable raw materials and manufacturing methods in order to meet the requirements of the given FRP product. **Who should enroll:** Industry employees whose work involves planning the manufacture of FRPs and implementation in the process chain and others interested in entering this technical field.

All programs are also offered as in-house training courses.



Certified Training Course

“It sounds trivial, but people who know what they do, make less mistakes! Particularly taking into account the ever-increasing importance of product liability, workforce qualification in the field of adhesive bonding as a central component of quality management is an absolute necessity and helps to create trust in that technology.”

Dr. Erik Meiß, Head of the Training Center for Bonding Technology, Fraunhofer Institute for Manufacturing Technology and Advanced Materials IFAM



INDUSTRIAL ADHESIVE BONDING TECHNOLOGY



EUROPEAN ADHESIVE BONDER

This certified training course is for employees at companies that use adhesives and specialists employed by adhesive manufacturers. Successful participants acquire the skills they need to perform adhesion processes independently and professionally. **Who should enroll:** Employees at companies that use or make adhesives and that independently carry out bonding work to order.

EUROPEAN ADHESIVE SPECIALIST

The Adhesive Specialist training program is offered to employees at companies that use adhesives in industry and the skilled trades sector, as well as companies involved in adhesive manufacturing and distribution. Successful completion of this training program qualifies participants to guide and instruct trainees and adhesive bonders in the theory and practice of adhesive bonding technology. **Who should enroll:** Employees in companies that use or make adhesives or trade in adhesives.

EUROPEAN ADHESIVE ENGINEER

The course qualifies successful participants to properly manage and monitor a full range of adhesive technology aspects, ranging from product development to manufacturing and repair. Participants also examine the entire product lifecycle and learn how to apply this as a framework. **Who should enroll:** Engineers and scientists in all disciplines and sectors of industry who either currently use bonding technology or are interested in using bonding technology in the future.

European Adhesive Bonder - EAB and European Adhesive Specialist - EAS are also offered as in-house training courses.

Further Information

Format

Certified EWF European Adhesive Bonder - EAB

Duration

5 days (40 hrs)

Course fee € 1695 (total)

Format

Certified EWF European Adhesive Specialist - EAS

Duration

3 one-week sessions (120 hrs)

Course fee € 1995 (total)

Format

EWF European Adhesive Engineer - EAE

Duration

8 one-week sessions (332 hrs)

Course fee € 2430 (total)



Seminar



“The Intellectual Capital Statement (ICS) is a strategic management instrument to assess soft factors, to quantify their contribution to value creation and to enable the deduction of suitable measures for development of intellectual capital.”

Sven Wuscher, Program Manager of the Intellectual Capital Statement seminar, Fraunhofer Institute for Production Systems and Design Technology IPK



INTELLECTUAL CAPITAL STATEMENT

Further Information

Format

Seminar

Starting date

On request

Duration

2 days

Course fee

Fees available on request

Qualification

Accredited ICS Moderator

Program overview

The “Intellectual Capital Statement” (ICS) is a methodology based on international experiences and has the broadest dissemination in all branches and sizes of companies all over Europe. The Fraunhofer Institute for Production Systems and Design Technology IPK is the exclusive partner of the European small and medium-sized enterprises association CEA-PME for InCaS™ training. The ICS is a workshop-based method that does not only allow participants to get a whole new perspective on the functionality of a company, but also enables them to prioritize fields of action for the development of a company and a consistent report to communicate intangible assets. Based on European ICS quality standards, the training enables the ICS Moderator to professionally prepare, moderate and guide others through an ICS implementation process-working on the highest quality level and with a solid methodical foundation.

Who should enroll

Employees who want to secure intellectual capital in their companies and organizations.

Key benefits

- Increased transparency concerning knowledge and competences
- Detection of improvement opportunities and innovation potential
- Well-founded basis for organizational development and decision-making
- Improved external communication through visualization of corporate performance

PROGRAM OVERVIEW

*Programs available in English

TECHNOLOGY AND INNOVATION

Executive MBA from RWTH Aachen University

**Intellectual Capital Statement –
Made in Germany***

Chief Technology Manager



ENERGY AND SUSTAINABILITY

Wind Energy Systems (Master & Certificates)*

Solar Energy Engineering (Master & Certificates)*

MASTER:ONLINE Building Physics

infernum – interdisciplinary distance learning
program for environmental sciences

University Qualification in Environmental Management

Energy Data Analyst

Energy System Technology

Electromobility



MANUFACTURING AND TESTING TECHNOLOGY

Master Automotive Production Engineering

Fiber Composite Technology*

Industrial Adhesive Bonding Technology*

Bonding Wooden Construction

Quality Control for Wooden Production

Non-destructive Testing

Joining Technology in Electronics

Cleaning Technology

Safety and Security Engineering*

Generative Manufacturing



INFORMATION AND COMMUNICATION

**Master Software Engineering for
Embedded Systems***

Software Architecture

TeleTrusT Information Security Professional (T.I.S.P.)

Usability Engineer

Roberta® Teacher Training

Requirements Engineering

Data Scientist Training Series*

Semantic Business Rules and Decision Models*

Strategic Open Government Data Provision*

Mastering Variant Complexity*

Architecting for Change*

Security & Privacy for Big Data*

Cyber Security



LOGISTICS AND PRODUCTION

Diploma in Supply Chain and Logistics
Management (DAS)

MASTER:ONLINE in Logistics Management

Bachelor of Science in Logistics Management

Value Stream Engineering

Lean Logistics

Master Industrial Production Management

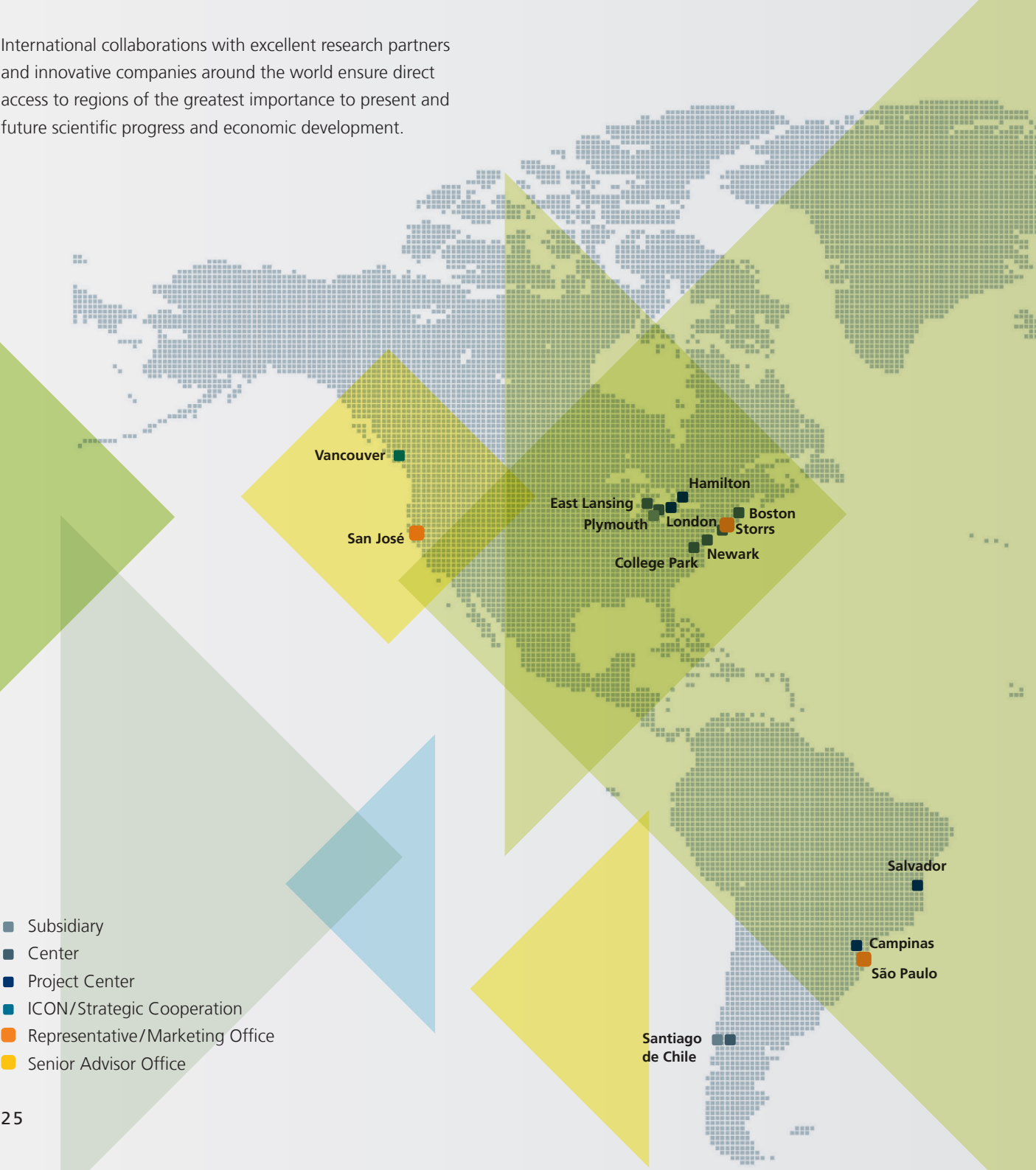
Inventory Management

Variation Management

Product Lifecycle Management

FRAUNHOFER INTERNATIONAL NETWORK

International collaborations with excellent research partners and innovative companies around the world ensure direct access to regions of the greatest importance to present and future scientific progress and economic development.







iAcademy and GLOBE



“The Fraunhofer Academy has based its program of continuing education in the MINT fields on an intelligent combination of classroom teaching, laboratory training and e-learning, known as blended learning. While making use of advanced learning management tools offered by the best providers in the sector, Fraunhofer also develops its own solutions – such as the innovative iAcademy learning platform – which help make the learning process more efficient.” *Dr. Roman Götter, Head of the Fraunhofer Academy*



INNOVATIVE LEARNING TECHNOLOGIES

We make targeted use of new technologies and innovative teaching and learning methods to create a professional development environment that corresponds to the modern lifestyle. The ability to choose where and when you study provides space for learning alongside personal and professional commitments.

iAcademy

Mobile devices are useful in many everyday situations and help people to use their time efficiently, for example when traveling. A smartphone can be used to arrange appointments and a tablet PC or laptop enables urgent e-mails to be sent from anywhere. The same applies to continuing education, where course participants want access to learning material not only at home, but also when on the move.

The mobile app and application-specific editor developed by the Fraunhofer Academy in collaboration with Ziemann.IT makes it possible to learn efficiently using a mobile device. The iAcademy app organizes the teaching content of the continuing education programs in a learning map based on modular units, with quizzes to monitor learning progress and additional multimedia content in the form of videos, graphics and learning games. The iAcademy Editor software makes it easy for authors to create their own learning apps. It includes an “Assessment” module that enables you to create realistic assessments with multimedia content and configurable duration and scoring. As participants in the “Advancement through education: open universities” initiative sponsored by the German Federal Ministry of Education

"We see mobile platforms as the future of learning materials and teaching methods. It is already evident that mobile devices are a popular means of learning during the journey to and from work. Suitable adapted content would make it possible to derive the full benefit from these otherwise unproductive working hours."

Eva Poxleitner, Education Consultant and Head of the Mobile Learning Projects, Fraunhofer Academy



and Research (BMBF), the ongoing development of iAcademy is accompanied by research into topical issues in the broad field of instructional design and educational technology.

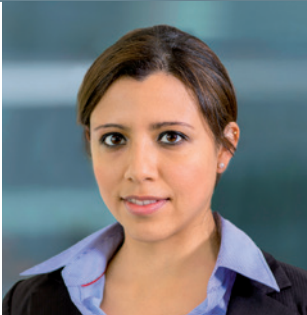
Apps for iOS and Android can be downloaded from www.iacademy.mobi/en, where you can also register for our authoring tool. You are welcome to contact us if you need any more information.

E-LEARNING PLATFORM GLOBE

GLOBE is a web-based e-learning platform developed by the Fraunhofer Academy to facilitate knowledge transfer. It complements our existing range of training programs and provides ideal support for periods of self-study. GLOBE presents realistic learning scenarios in an easily assimilated way. Its intuitive, interactive functions enable users to build up their knowledge of a wide range of complex topics in numerous different ways.



Contact



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If you have any queries or require further information about any of our programs, do not hesitate to contact the Fraunhofer Academy team.



Contact us

- by e-mail: academy@fraunhofer.de
- by visiting our website:

www.academy.fraunhofer.de/en

Or follow us on
Facebook, Twitter,
Google+ and Xing

