renac
renewables academy

Renewables Academy Blended Learning

Green Energy Finance Specialist

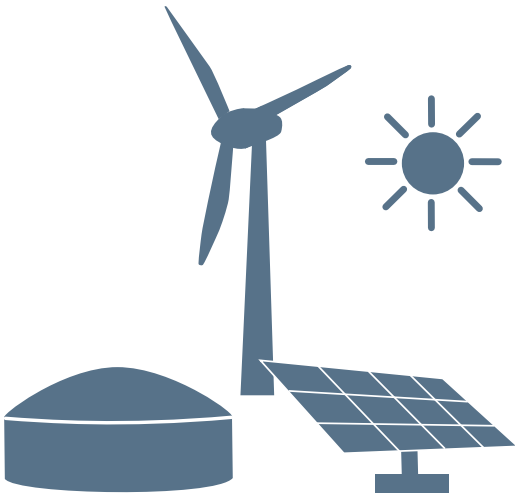
In-depth knowledge on RE and EE finance topics,
Blended Learning concept including final exam and graded certificate








Green Energy Finance Specialist



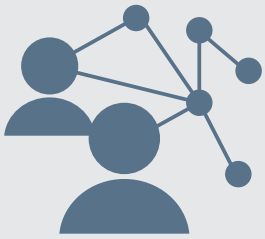
Impressum

Content and layout:
Renewables Academy

In cooperation with:

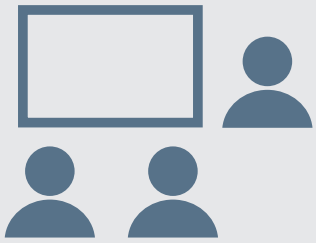
ADFIAP
financing sustainable development

Blended Learning: Online and face-to-face training combined



RENAC Online:

- Study with flexibility following your own schedule
- Learn at any time and from any location
- Extensive support & interactive learning through videos, graphics, self-evaluation exercises, discussion forum and virtual classrooms



RENAC Face-to-face:

- Interactive and many-sided training concept
- Exchange with experienced lecturers working in the field
- Practical training at RENAC's Training Center and field trips
- Exchange platform with participants from multiple countriess

RENAC staff are:

- Certified trainers
- Experienced professionals
- In direct contact with the industry

CERTIFIED EUROPEAN E-LEARNING MANAGER

What is the "Green Energy Finance Specialist" Blended Learning?

Green Energy Finance Specialist (GEFS) is tailored to deliver comprehensive, in-depth knowledge on green energy finance topics through a combination of a 20-week online training and a 3-day face-to-face seminar. It provides insights into financing of renewable energy and energy efficiency projects particularly from the bank's perspective.

Introductory courses

Each participant will have access to short introductory courses on energy and electricity topics to learn or revise some physics basics.

Courses

The online courses and the seminar topics include fundamentals of RE and EE technologies, political support mechanisms and market frameworks, financial appraisal and due diligence including credit application, financial modelling and project valuation, as well as climate finance and the portfolio context of RE investments.

This training suits you if you:

- Want to specialise in RE and EE project financing (e.g. as Credit Analyst, Project Finance Specialist, Client Relationship Manager)
- Have to evaluate RE or EE projects and related credit requests
- Seek to establish a green energy finance or climate finance unit within your organisation

After the GEFS programme, participants will be able to:

- Evaluate relevant RE and EE technologies as well as respective projects
- Use financial models and to develop term sheets for RE and EE projects
- Identify options for international climate finance and how to access such funds
- Develop and evaluate portfolios of RE and EE projects

After successful completion of the GEFS programme, Alumni may compliment/continue their education with a distance-learning Master programme offered by the Berlin School of Economics and Law (HWR) in collaboration with RENAC: Master of Science in Business Management - Green Energy and Climate Finance. All completed modules of the GEFS count as credit points in this master programme.

Renewables Academy Blended Learning

Green Energy Finance Specialist

Blended Learning Programme

Online Phase
20 weeks
8 modules (with assignments)
1 Oct 2019 – 22 Feb 2020

Face-to-Face Seminar
3 days
Final exam
10 – 12 March 2020

Fee: 2,190 € incl. VAT
Duration: 5 months
Study time: 220 hours / 10 hours a week

Online Phase

The online phase is designed to offer insight information into Green Energy and Climate Finance for self-study. A series of virtual classrooms, short assignments and forum discussions will make the programme interactive and vivid. Among others the preparation of a term sheet for a specific model case is a prerequisite to participate in the F2F seminar.

- The GEFS Online Training lasts 20 weeks; participants will need approx. 10 hours study time per week
- The participation in the online courses includes access to all course materials (videos, self-assessment tests, lectures delivered via virtual classrooms, technical and organisational support)
- Participants will receive a copy of the course materials
- The course language is English

The online phase is divided into 8 modules with the following topics:

- Introduction to green finance
- Political and legal market framework
- Energy efficiency projects
- RE project financing
- Project contracts & financial modelling
- Special issues in project evaluation
- International green finance
- RE projects in portfolio context

Face-to-Face seminar

In the F2F seminar participants will activate the previously studied content and dive into deepening discussions, group work and hands-on exercises using a modelling tool. Furthermore, the seminar focusses on the exchange of experiences from RENAC experts as well as among the participants.

- The participation in the seminar includes materials, coffee / tea breaks, lunch for the duration of the seminar
- The location of the seminar will be announced
- Travel and accommodation costs have to be covered by the participant
- The course language is English

The topics covered in the F2F seminar comprise:

- Overview of the global RE market
- Climate Finance
- Applied Due Diligence for RE projects (group work)
- Financial modelling (exercise)
- Energy efficiency financing

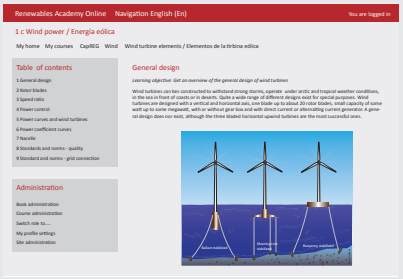
The F2F seminar will terminate with a written exam which covers the full scope of the online phase and F2F training. Successful participants will receive a printed certificate including a final grade.

RENAC Online: Highlights & Features

Self-study material

1 Text and Images

Courses are structured in small, illustrated units of instruction; learners are guided through the material step-by-step.

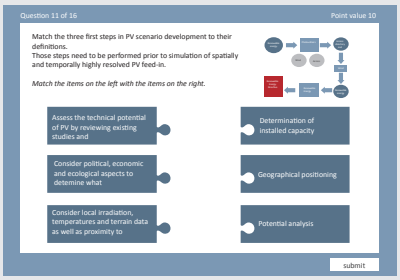


2 Videos

Video lectures explain some of the most important topics in a visual and entertaining way.

3 Tests

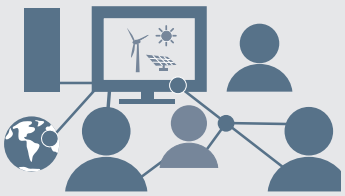
Many self-assessment tests within each course help participants to test their knowledge.



Extensive support

1 Forum

Support and communication take place in a discussion forum. RENAC monitors the forum constantly. RENAC experts are ready to give assistance and discuss the course topics.



2 Assignment

After studying each course, participants are asked to answer an assignment question. RENAC gives individual feedback for these assignments.

3 Virtual classroom

Participants should attend the live virtual classroom sessions (webinars). These are conducted by renewable energy experts. During and after the presentation participants are invited to discuss in the live chat.

Certificate

All participants who score above 70% during the F2F seminar will receive a printed certificate recognized by FAA within the title “Green Energy Finance Specialist”.

Renewables Academy Blended Learning

Green Energy Finance Specialist

Schedule

Course dates:

- Online: 1st Oct. 2019 – 22nd Feb. 2020
- 3-day face-to-face Seminar 10th – 12th March 2020 in Manila

Recommended study time:

10 hours per week

Resulting duration:

5 months for the entire training (20 weeks online phase, 3 days F2F seminar soon afterwards).

Assessments:

The courses are designed for a continuous participation from the beginning until the exam. There is an assessment for each online module, which counts towards the final grade. Assessment tasks need to be handed in by the deadlines. Assessment tasks are short written essays, quizzes, development of a term sheet as well as a financial modelling exercise.

Scheduled exam dates:

Participants take the exam during the F2F seminar only.

Module 1

Introduction to green finance

- Introduction to RE/EE projects
- Market overview
- Elective: PV, wind, biogas, hydro, geothermal
- Elective: EE industry, EE buildings I

Module 2

Political & legal frameworks

- RE/EE support mechanisms
- EE support mechanisms
- Elective: Political and market frameworks for RE & EE in the respective country

Module 3

Energy efficiency projects

- Systematic approach to energy saving
- Financing energy efficiency projects and ESCOs
- Optional: EE buildings II

Module 4

RE project financing

- Project finance of RE projects
- Debt financing process
- Optional: Business cases

Module 5

Project contracts and financial modelling

- Project contracts
- RE Project Evaluator
- Optional: Negotiation skills

Module 6

Special issues in project evaluation

- Insurance in project finance
- Environmental and social standards
- Optional: O&M Strategies

Module 7

International green finance

- Climate finance
- Climate finance options
- Optional: Accessing the Green Climate Fund (GCF)

Module 8

Project in portfolio context

- RE portfolio management
- Optional: Investment vehicles for RE projects

Module 9

3 day seminar in Manila
Final exam

Live virtual classrooms (webinars)

During the online phase, six live virtual classrooms are part of the training. These live events are not mandatory, but participation is strongly recommended. Each session takes approx. 1 hour. It will be recorded so participants can watch it later.

Webinar 1
Intro to RENAC Online
First week of the training

Webinar 2
RE support mechanisms
Module 2

Webinar 3
Energy efficiency finance
Module 3

Webinar 4
RE project cash flow
Module 4

Webinar 5
RE Project Evaluator
Module 5

Webinar 6
Climate Finance
Module 7

Registration and discounts

Registration:

You can register for the Blended Learning training via the registration form at:

www.renac.de/trainings-services/trainings/open-trainings/produkt/green-energy-finance-specialist-gefs-in-asia/

Deadlines:

Early bird deadline: 20thAugust 2019

Registration deadline: 27th September 2019

Participants who are not able to finish the online training in one semester can book an extension of 6 months (following semester) at a 80 % reduced course fee

Discount:

Early bird 10 %; group (2 or more) 5 %; combination of both 15 %

Payment:

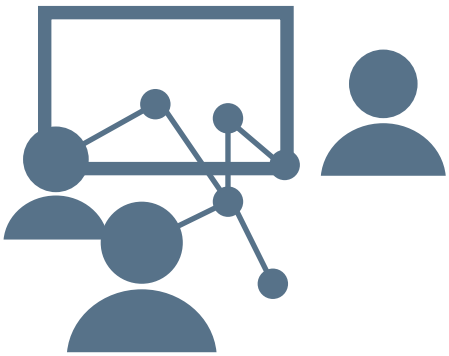
VISA, MasterCard, American Express, invoice

Technical information

You need to provide an e-mail address, which you check regularly. Furthermore you need a computer with a stable internet connection (at least 2 Mbit/s). For webinars, the AdobeConnect add-in or app should be installed, and a headset or speakers are required to listen to the presentation.

Demo course

For a first impression of our online platform, have a look at:
http://renewables-online.de/blocks/demologin/logindemo.php?course=Demo



Green Energy Finance Specialist

Learning objectives and content of the online courses

Module 1 – Introduction to green finance

Courses

- Introduction to renewable energy projects
- Introduction to energy efficiency projects
- Market overview of global RE and EE financings

Select one of the following courses on renewable energy technology

- PV - application
- Wind power
- Biogas – application
- Small hydro power
- Geothermal power generation – application

Select one of the following courses on energy efficiency

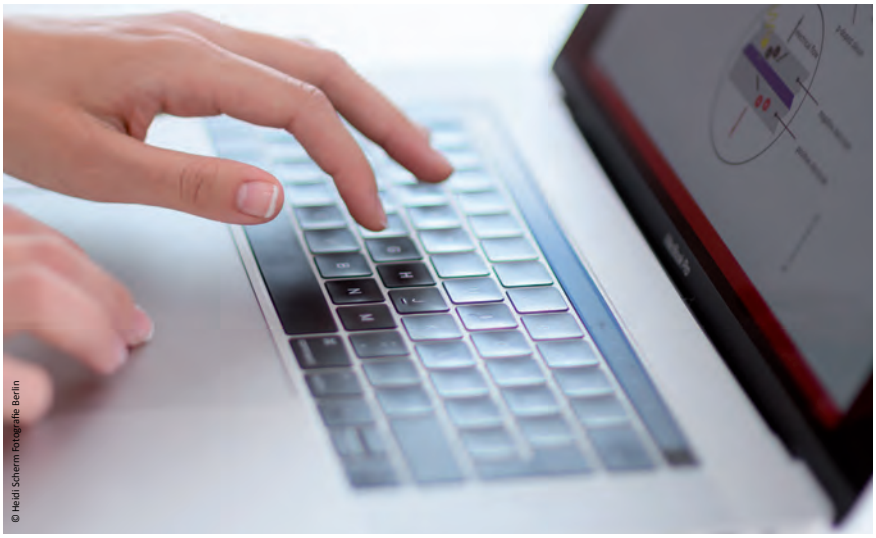
- Energy efficiency in the industry – application
- Energy efficient buildings – application

Learning outcome – students will be able to:

- Demonstrate principles of commonly used renewable energy technologies
- Breakdown the principles of renewable energy and energy efficiency projects
- Summarise the global and regional market development for renewable energy and energy efficiency investments
- Assess the potential of renewable energy technologies and energy efficiency sectors in their country

Assessment

The assessment comprises an assignment with a couple of questions relating to renewable energy and energy efficiency perspectives in the different countries.



Module 2 – Political and legal market framework

Courses

- Support mechanisms for renewable energy projects
- Support mechanisms for energy efficiency projects
- For selected countries, learning material on specific political and market frameworks is available and may be used for further reading

Learning outcome – students will be able to:

- Categorize different policy measures for renewable energy and energy efficiency
- Discuss the pros and cons of different policy measures and propose suitable policy measures for your country
- Assess the political and market framework regarding renewable energy and energy efficiency deployment in their country

Assessment

The assessment comprises an assignment with a couple of questions relating to policy measures for renewable energy and energy efficiency in the different countries.

Module 3 – Energy efficiency projects

Courses

- Systematic approach to energy saving
- Financing of energy efficiency projects and ESCOs

Optional courses

- Energy efficient buildings – technology

Learning outcome – students will be able to:

- Demonstrate two different approaches for companies how to achieve energy savings
- Explain the special features of energy efficiency finance and ESCO models
- Appraise an energy efficiency project in detail, also under the use of the ESCO model

Assessment

The assessment comprises an end-of-module exam.

Module 4 – RE project financing

Courses

- Renewable energy project finance
- Debt financing process and credit risk management

The following courses are an optional course for interested participants:

- Business case studies
- Loan syndication for RE projects

Learning outcome – students will be able to:

- Demonstrate two different approaches for companies how to achieve energy savings
- Perform a risk assessment for renewable energy projects
- Develop a term sheet for a renewable energy project
- Amend bank-internal procedures for credit evaluation in a way that they are suitable for renewable energy projects

Assessment

The assessment of this module consists of the development of a term-sheet. It is simulated that a project sponsor of a RE (wind/solar) project submits some data on one of his projects and he/she wants to receive a loan from a bank. The participants are now in the position of the credit officer of the bank. He/she has to make a proposal to the project sponsor and thus develops a term sheet.

Module 5 – Project contracts & financial modelling

Courses

- Project contracts
- RE Project Evaluator

The following course is an optional course for interested participants:

- Negotiation skills

Learning outcome – students will be able to:

- Utilize a provided financial model (RE Project Evaluator) for a renewable energy project
- Assess the financial attractiveness, financial viability as well as pricing of a renewable energy project by using the provided financial model
- Choose and analyse different types of contracts required in renewable energy project finance

Assessment

The assessment of this module consists of a financial modelling exercise. In continuation from the term sheet development, it is simulated that the bank now has to undertake a due diligence for the project. The project sponsor of the previously presented RE project accepted the term sheet offer. The participants are again in the position of the credit officer of the bank and have to use the Excel-Model "RE Project Evaluator" to see if the project is viable and the projected returns are sufficient to cover the installements of the loan.

Module 6 – Special issues in project evaluation

Courses

- Bankable insurance cover for international renewable energy projects
- Environmental and social standards in RE projects

The following course is an optional course for interested participants:

- Bankable O&M strategies for RE systems

Learning outcome – students will be able to:

- Assess the impact of insurance programmes on the risks encountered in a renewable energy project
- Utilize insurance programmes to reduce the risks for all concerned stakeholders
- Compile a checklist of internationally recognized standards to which larger renewable energy and energy efficiency projects have to comply

Assessment

The assessment comprises an end-of-module exam.to cover the installements of the loan.

Module 7 – International green finance

Courses

- Climate finance energy projects

The following course is an optional course for interested participants:

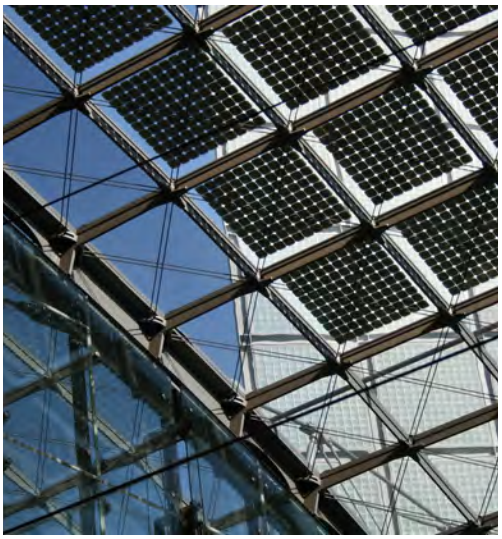
- Climate finance options
- Accessing the Green Climate Fund (GCF)

Learning outcome – students will be able to:

- Assess the current climate finance landscape including the current institutions, sources of finance and mechanisms
- Organise procedures to receive funding from domestic or international climate finance sources
- Carry out a study to identify the most suitable climate finance option for their organization

Assessment

The assessment comprises an assignment with a couple of questions relating to international climate finance options for renewable energy and energy efficiency projects



Module 8 – RE projects in portfolio context

Courses

- Portfolio management in renewable energy

The following course is an optional course for interested participants:

- RE investment vehicles and the aggregation of projects

Learning outcome – students will be able to:

- Assess a renewable energy project portfolio
- Structure a renewable energy project portfolio

Assessment

The assessment comprises an end-of-module exam.

Learning objectives and content of the Face-to-Face seminar

Module 9 – Face-to-Face seminar

SESSION 1: WELCOME

The first session of the seminar is meant to introduce participants to each other as well as to clarify expectations of the participants towards the facilitators and vice versa. Moreover, the global RE market development will be presented and discussed.

Duration: 1.5 hours

SESSION 2: REVIEW OF ONLINE COURSE CONTENT

Learning objectives

- Outline the most important aspects of the online courses studied previously
- Identify connections and interdependencies of the different topics presented in the online courses

Methods

- Individual and group work

Content

- Query participant´s knowledge
- Identify and answer open questions
- Develop a “big picture” comprising all topics related to this programme

Duration: 1.5 hours

SESSION 3: CLIMATE FINANCE

Learning objectives

- Evaluate and prioritize different climate finance options based on mutual exchange of experiences
- Develop new ideas how to access climate finance options

Methods

- Brainstorming and group work

Content

- International Climate Funds
- Availability and accessibility of funds in partner country
- Climate Finance schemes in partner country

Duration: 1.5 hours

SESSION 4: DUE DILIGENCE AND RISK EVALUATION IN RE PROJECT FINANCE

Learning objectives

- Identify various risks involved in RE project finance
- Develop risk mitigation measures for RE project finance risks

Methods

- Group work and presentation of results

Content

- Main risks of particular RE technologies (e.g. wind, PV, bioenergy)
- Prioritizing of such risks according to their importance in the context of a financial due diligence (DD) process
- Discussion about differences in the focus of the DD

Duration: 1.5 hours

Learning objectives and content of the F2F seminar

SESSION 5 / 6: APPLIED DUE DILIGENCE: CONTRACTS IN RE PROJECT FINANCE

Learning objectives

- Identify pitfalls and traps in contracts for RE projects
- Improve contracts for RE projects such that they are bankable

Methods

- Group work and presentation of results

Content

- Screening of sample RE project contracts
- Identification of important information needed as input factors for financial models und clauses and wordings that might be considered critical in the context of a bankability assessment
- Results are shortly presented to facilitate in-class discussions

Duration: 3 hours

SESSION 7 / 8: FINANCIAL MODELLING

Learning objectives

- Improve modelling skills with the RE Project Evaluator tool
- Perform sensitivity analysis with the financial modelling tool

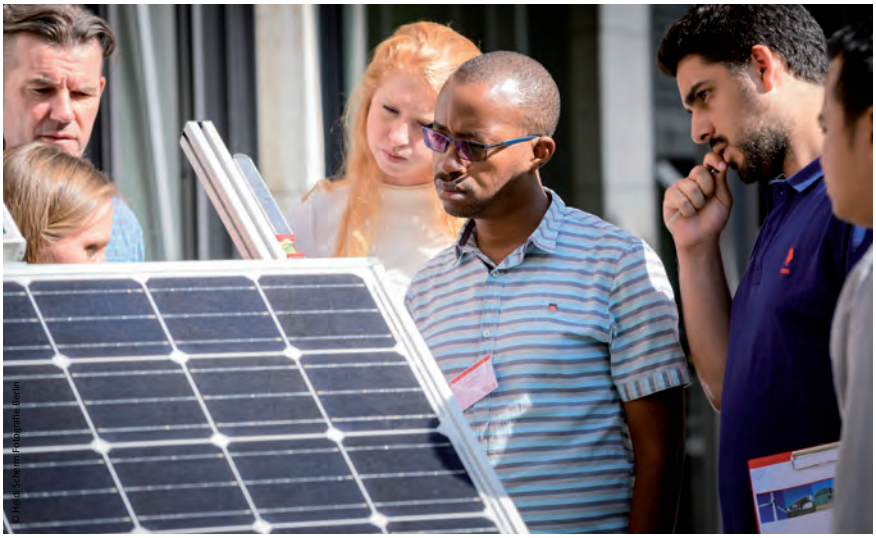
Methods

- Practical computer-based exercise (individual work)

Content

- Discussion of results of the financial modelling exercise from the online course
- Interpretation of key financial project ratios related to the exercise
- Sensitivity and scenario analysis with the financial model

Duration: 3 hours



SESSION 9 /10: ENERGY EFFICIENCY FINANCE

Learning objectives

- Investigate the feasibility and performance of energy efficiency projects
- Discuss the advantages of systematic approaches to energy efficiency for providers of finance

Methods

- Presentation, Discussion, Partner Work

Content

- Fundamentals of EE technology
- Feasibility study on EE projects
- Performance analysis of EE projects
- Energy Management
- ESCOs
- Financing EE

Duration: 3 hours

SESSION 11 / 12: EXAM AND EVALUATION

The last two sessions of the seminar contain the final exam, which will be taken by all participants at the computer/laptop. Afterwards, the participants have time for a personal evaluation of the seminar.

Duration: 3 hours

Assessments

Registration

There are different methods of assessment for this training programme. There is an assessment for each online module as well as a final exam during the face-to-face training. The assessments for each module can be a short assignment, an online test or a practical exercise (development of a term sheet and financial modelling). The total points which you can earn during the online phase will make up one third of the final mark. The final exam will make up two thirds of the final mark. For details, see the table below.

Element	Credit points	Share of total grade	Passing mark
Module 1 – Assignment	1 Score point	2.78%	n.a.
Module 2 – Assignment	1 Score point	2.78%	n.a.
Module 3 – End-of-Module Exam	1 Score point	2.78%	70%
Module 4 – Term sheet	2 Score points	5.56%	*)
Module 5 – Financial modelling	4 Score points	11.11%	*)
Module 6 – End-of-Module Exam	1 Score point	2.78%	70%
Module 7 – Assignment	1 Score point	2.78%	n.a.
Module 8 – End-of-Module Exam	1 Score point	2.78%	70%
Total for Modules 1 – 8	12 Score points	33%	n.a.
Final Exam (during seminar)	24 Score points	66%	70%
Total	36 Score points	100%	

Short assingment

Participants have to write a short essay of approx. 200 words (minimum 150). They have to answer between one to three specific questions in which they have to show their analytical skills. For example, participants have to connect the content that they have learned with the current situation in their job or country or suggest solutions for a given problem. The text has to be submitted in a special forum within the online course. Participants can see the answers of other participants only after they have posted their answer. Participants should work on the assignment for approx. 30 minutes.

If participants do not submit anything, if their answer is too short or if the content of the answer is inappropriate, no credit points will be granted. There is no guarantee that a detailed feedback is given to each answer submitted.

End-of-module exam

The end-of-module exam is a self-evaluating test on the online platform. This test contains a selection of exercises that are also included in the self-tests of the courses that belong to that module. The selected exercises cover questions that relate to the main learning objectives of the module. Participants should finish the end-of-module exam within 30 minutes.

One end-of-module exam comprises of 15 exercises. The types of questions can be multiple choice, multiple select, sorting, gap text, drag & drop into image or matching exercises. Participants can take the exam during the last five days of the respective module. The passing score is 70%. If a participant scores less than 70%, he/she fails this test and can take one re-sit. Feedback will not be given to the exam questions. The re-sit may contain at least partially of different questions compared to the original exam.

Term sheet development

Participants have to develop a term sheet based on a specific case that is provided to all participants. Participants can work alone or in groups which are formed by voting on the online platform. Participants will have access to a collaborative working space (wiki) in which they can develop their work continuously. Besides information on the case, participants receive the structure of a sample term sheet which has to be completed with the individual results. The final term sheet has to be submitted as a pdf-file until the last day of the respective module.

Each participant has to submit himself/herself his/her own work or the work of his/her group. The submission of the term sheet is a requirement to continue the training programme and be eligible for the face-to-face seminar that takes place after the end of the online training.

Financial modelling

Participants have to use a financial model based on MS Excel®, they have to insert data from an elaborated case study into the model and submit the results of the modelling process as a pdf-file. RENAC provides the model free of charge for the duration of the training programme. Each participant has to submit his/her own results; however, group discussions are allowed in the forum of the course. Results have to be submitted as a pdf file which can be easily created from the Excel-model.

The submission of the financial model is a requirement to continue the training programme and be eligible for the face-to-face seminar that takes place after the end of the online training.

Final exam

The final exam is taking place at the end of the face-to-face seminar. Participants have to do it online on a laptop while sitting in the seminar room. Similar to the end-of-module exams, the final exam is a self-evaluating exam with different types of exercises (multiple choice, multiple select, sorting, gap text, drag & drop into image or matching exercises).

The final exam will comprise of 80 exercises, participants have 120 minutes to answer them. There are exercises for each of the modules. The exercises are partly taken from the self-tests from the courses and partly designed specifically for the final exam in which participants have to show an overall understanding of the content and context.

Participants may not use other resources (course material in printed or digital form, online sources etc.), which has to be ensured by the supervisors throughout the exam.

In case a participant fails, he/she may take one re-sit at a defined date and place which has to be announced by RENAC at the beginning of the online training. This date will be typically 1 or 2 weeks after the face-to-face seminar. The exam will take place at one of RENAC's service providers who will be supervising the exam.

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www.renac.de/trainings-services/trainings

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