

Energy Friendly Renovation Processes



■ ABOUT THE COURSE

Learn how to improve the energy efficiency of dwellings through the successful implementation of sustainable, stakeholder-inclusive renovations.

Do you find housing retrofits involving energy efficient improvements incredibly complex? The goal of this online course is to increase the probability of success of such projects by making this complexity more manageable.

To address climate change, the world needs to drastically reduce the use of fossil fuels. The construction sector is one of the biggest producers of CO2 emissions. One of the best ways of reducing the amount of energy used by households is by integrating energy efficient improvements within housing renovation schemes. This course is unique because it focuses on the needs and attitudes of different stakeholders. Their collaboration can make or break the implementation of such measures.

Creating a sustainable housing stock is a worldwide challenge. The way this challenge is addressed differs from country to country. By using energy efficient refurbishment examples from the Netherlands as conversation starters, participants are invited to share and discuss experiences from their own countries. The course design triggers a lively dialog in which practices and experiences are compared and contrasted. Examples used will be mainly from Europe and North America, but the course is open to professionals from all countries.

Technology and finance are important, but successful collaboration in renovation processes is a third essential factor which is often neglected. Projects frequently fail because they are too focused on technical and financial aspects alone. In this course you will use insights from the behavioral sciences to plan more ambitious energy retrofits through merging the interests of all stakeholders involved.



Professional
Education Certificate



Fee:
€ 395



Course Length:
7 weeks



Course Effort:
4-5 hours per week

This course is not just about increasing knowledge, it is very much focused on applying that knowledge in your own context. You can integrate your personal learning goals into the case study you develop step-by-step during this course. You will have the opportunity to interact with peers from different countries and institutions and you will receive feedback from lecturers.

■ Course Highlights

- Learn how to successfully collaborate in energy-efficient renovation processes
- Incorporate multiple stakeholders' perspectives
- Combine energy friendly renovations with circular economy principles
- Learn from best practices in other countries and interact with peers from different countries and institutions
- Receive feedback from lectures from top universities

■ IS THIS COURSE FOR YOU?

This course is a 'must' for professionals and consultants working for housing providers, architects, construction companies, or municipalities interested in gaining knowledge and skills they can immediately apply to sustainable housing renovations.



■ DIRECT BENEFITS FOR YOU

- You will be better able to identify the interests of residents and thereby increase both their enthusiasm and the chances of your renovation project to be successful.
- You will be able to bring together and connect the interests of different stakeholders by using the Mergers of Interest approach.
- You will improve your overview of the complex playing field of actors in the energy efficient housing renovations domain and thereby operate more effectively.
- You will be able to more effectively steer and influence complex decision-making processes whilst improving collaboration between actors.

■ COURSE STRUCTURE

WEEK 1 Energy friendly renovation processes: an introduction

Introduction to energy friendly renovation processes; topicality and urgency of the task; setting the context: the Dutch situation in an international perspective; introduction of the case study assignment.

WEEK 2 Ambitions and the 'Merger of Interests' approach

Ambition levels in energy friendly renovations; merger of interests: people, profit and planet; stakeholder analysis.

WEEK 3 The residents' perspective

The residents' perspective: the interests of tenants and home owners; international perspectives on resident participation.

WEEK 4 Broadening the context: beyond energy efficiency

Combining energy efficiency with security, aesthetics, neighbourhood, quality, social cohesion, health and happiness; international perspectives on the context beyond energy efficiency.

WEEK 5 Combining perspectives

Collaboration in energy efficient renovations, circular economy solutions and innovations in process.

WEEK 6 Financing energy friendly renovations

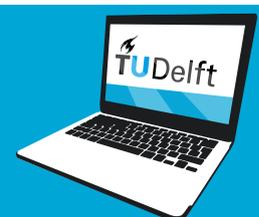
Sustainable business opportunities; financing for home-owners; phasing investments in a multi-year action plan.

WEEK 7 Recap of energy friendly renovation processes and final case study report

Conclusion and reflection on lessons learned about energy friendly renovation processes; the applicability and transferability of lessons to other contexts; finalising and submitting the case study report.

■ ENROLL NOW

For more information or to enroll go to:
<https://online-learning.tudelft.nl/courses/energy-friendly-renovation-processes/>



■ WHO DELIVERS THIS COURSE?

This course is delivered by experts from the TU Delft Faculty of Architecture and the Built Environment. The course is developed by Professor of Housing Management Vincent Gruis in close collaboration with Sustainable Building Professor Anke van Hal at Niyenrode Business University in the Netherlands. The course was shortlisted in 2016 for the prestigious Wharton Education Innovation prize. TU Delft is ranked third on the 2019 QS World Rankings of Architecture/Built Environment Universities.

■ WHAT YOU WILL ACQUIRE

- Communication and collaboration skills to successfully facilitate energy friendly renovation processes
- The ability to determine the most suitable attainment level, and develop renovation and collaboration strategies for your sustainable housing project
- Increased understanding on how to deal with the multiple perspectives of the stakeholders involved, e.g. residents, housing providers, policy makers and construction companies
- A 'total lifecycle costs' perspective and confidence in selecting appropriate financial models.