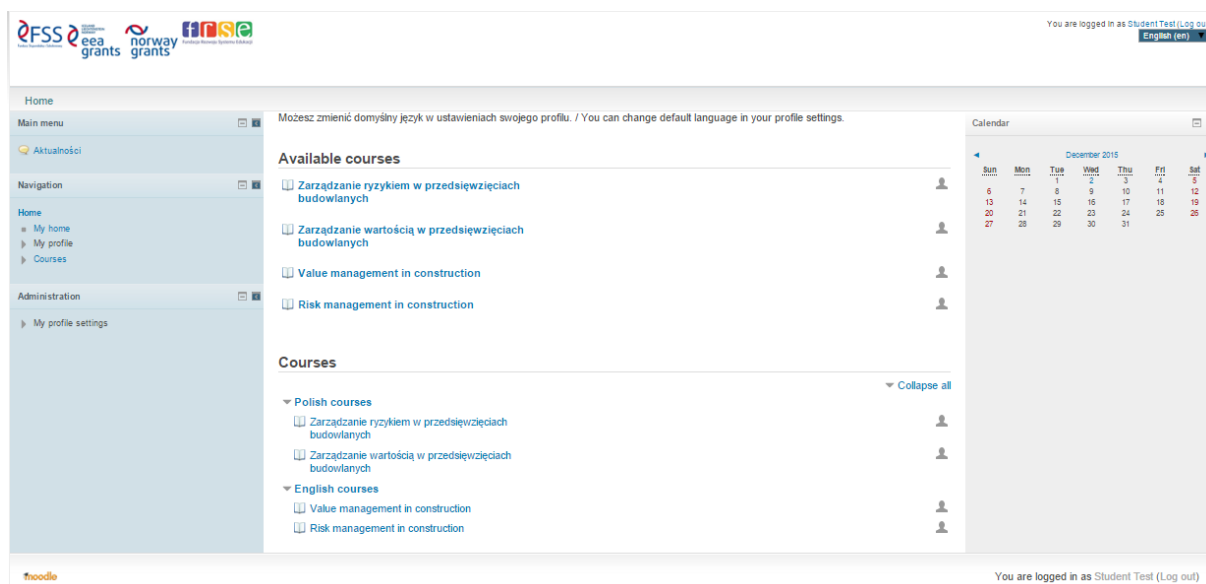


# Platform guide

## 1. Introduction

Welcome on internet training platform created during the project „Distance Learning Within Management In Construction”. This guide will introduce platform’s interface and show the structure of courses. We encourage you to familiarize with information below in order to fully benefit from available materials.

## 2. Interface



The screenshot shows the Moodle main page interface. At the top, there are logos for FSS, EEA grants, Norway grants, and FRSE. The user is logged in as 'StudentTest' and the language is set to 'English (en)'. The main content area is divided into several sections:

- Home:** A message about changing the default language in profile settings.
- Navigation:** A sidebar menu with options like 'Aktualności', 'Home', 'My home', 'My profile', 'Courses', and 'Administration'.
- Available courses:** A list of courses with icons and user avatars, including 'Zarządzanie ryzykiem w przedsiębiorstwach budowlanych', 'Zarządzanie wartością w przedsiębiorstwach budowlanych', 'Value management in construction', and 'Risk management in construction'.
- Courses:** A section with a 'Collapse all' button, showing 'Polish courses' and 'English courses' with their respective course titles and user avatars.
- Calendar:** A calendar for December 2015.

The Moodle logo is visible in the bottom left corner, and the user is logged in as 'Student Test' in the bottom right corner.

Picture 1 Main page

Main page is divided into few intuitive modules. From this view you can for example:

- Log in or out
- Change language (there are two available: polish and english; buton in right upper corner)
- Go into structure of chosen course (direct access to both language versions)
- Move to editing user’s profile page (*Administration -> My profile settings -> Edit profile*)

Picture 2 Profile editing

Profile editing view allows to alter basic account information (name, surname, e-mail address), personalize and adjust account through eg. adding a photo, website address or telephone numer. All changes have to be confirmed by clicking *Update profile* button. In order to return to main view, click *Home* button in *Navigation* panel.

### 3. Courses structure

Picture 3 Fragment of course structure



Courses are divided into topics including 3 files each:

1. Presentation
  2. Additional materials
  3. Test
- Presentation explains current topic in accessible, visual form.

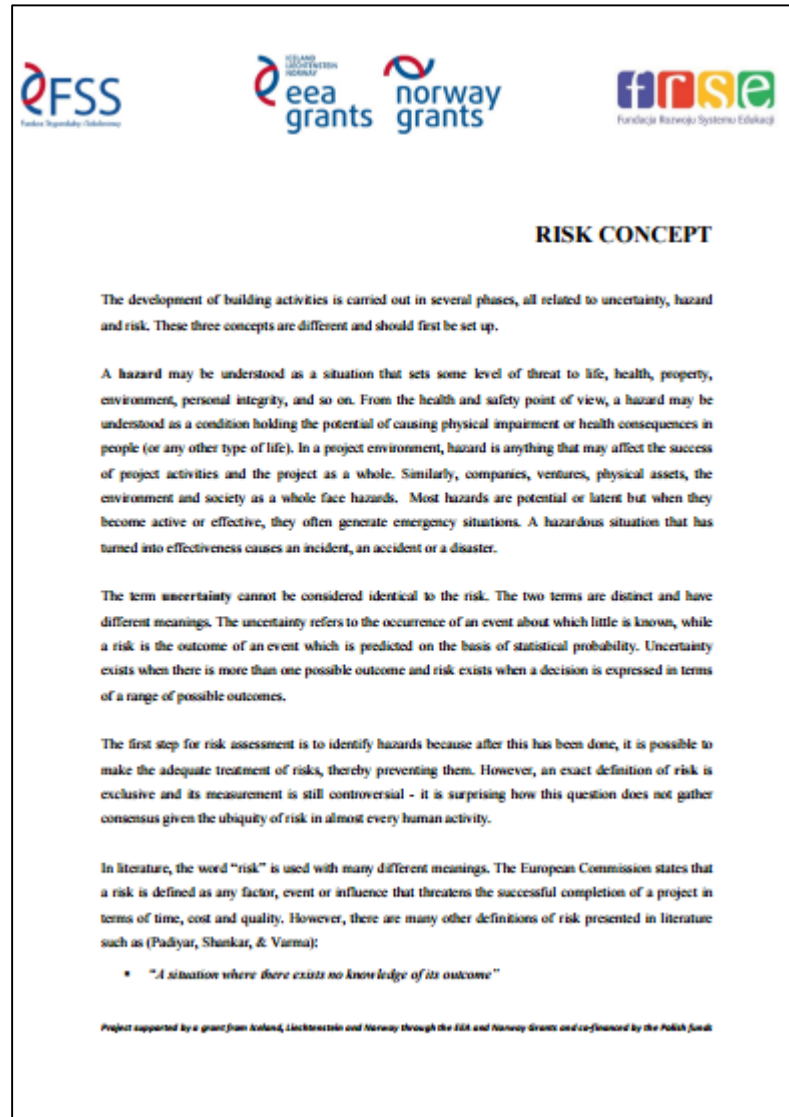
**Norwegian instrument  
PP-foils for e-learning modules for  
„Management in construction”:**

**„RISK CONCEPT, BASIC RISKS OF  
CONSTRUCTION PROJECTS”**

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Picture 4 Title slide

- Additional materials are used to revise information from presentation and further develop topic.



The document page features logos for FSS, EEA grants, Norway grants, and FRSE at the top. The main heading is "RISK CONCEPT". The text discusses the development of building activities, the definition of hazard, the distinction between uncertainty and risk, the first step in risk assessment, and various definitions of risk in literature.

**RISK CONCEPT**

The development of building activities is carried out in several phases, all related to uncertainty, hazard and risk. These three concepts are different and should first be set up.

A hazard may be understood as a situation that sets some level of threat to life, health, property, environment, personal integrity, and so on. From the health and safety point of view, a hazard may be understood as a condition holding the potential of causing physical impairment or health consequences in people (or any other type of life). In a project environment, hazard is anything that may affect the success of project activities and the project as a whole. Similarly, companies, ventures, physical assets, the environment and society as a whole face hazards. Most hazards are potential or latent but when they become active or effective, they often generate emergency situations. A hazardous situation that has turned into effectiveness causes an incident, an accident or a disaster.

The term uncertainty cannot be considered identical to the risk. The two terms are distinct and have different meanings. The uncertainty refers to the occurrence of an event about which little is known, while a risk is the outcome of an event which is predicted on the basis of statistical probability. Uncertainty exists when there is more than one possible outcome and risk exists when a decision is expressed in terms of a range of possible outcomes.

The first step for risk assessment is to identify hazards because after this has been done, it is possible to make the adequate treatment of risks, thereby preventing them. However, an exact definition of risk is exclusive and its measurement is still controversial - it is surprising how this question does not gather consensus given the ubiquity of risk in almost every human activity.

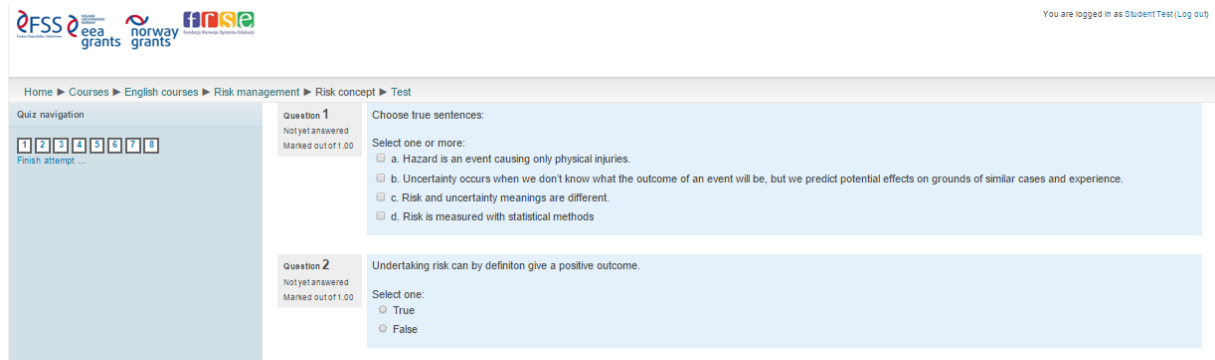
In literature, the word "risk" is used with many different meanings. The European Commission states that a risk is defined as any factor, event or influence that threatens the successful completion of a project in terms of time, cost and quality. However, there are many other definitions of risk presented in literature such as (Padiyar, Shankar, & Varma):

- "A situation where there exists no knowledge of its outcome"

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Picture 5 Additional material

- Test is automated way of checking user's understanding of current material.



Picture 6 Fragment of test

It is recommended to learn topics in order mentioned above. Structure is identical in all courses.

## 4. Topics

Available courses are divided into topics as below:

### ❖ Risk management in construction

- Risk concept
- Risk management proces overview
- Construction projects and contracting
- Risks at the tender stage
- Risk management at the construction stage
- Qualitative risk assessment and analysis
- Quantitative risk assessment and analysis
- Risk response planning
- Risk monitoring and control
- Project closure and guarantee period risks

❖ **Value management in construction**

- Introduction, definitions, techniques for Value Management
- Value management in construction
- Analysis of a construction project in the pre-decision phase, taking into account economic trends and fuzzy selection criterion
- Analysis of selection of the investment project based on effectiveness of the project to be implemented, presented in fuzzy form
- Assessment of the investment project at the stage of a feasibility study with regard to risk and probability of reaching of the NPV value
- Analysis of a multi-criteria selection of the best offer in tender procedures using expert knowledge based on fuzzy premises
- Time-cost analysis of a planned construction project taking into account risk based on expert knowledge using fuzzy sets