



## COURSE DATASHEET

|                                |   |
|--------------------------------|---|
| <b>Semester:</b>               | 2014/15/2                               |
| <b>Course:</b>                 | Safety Technics and Risk Assessment II. |
| <b>Code:</b>                   | VEMKKVM422B                             |
| <b>Responsible department:</b> | Department of Environmental Engineering |
| <b>Department code:</b>        | MKKV                                    |
| <b>Responsible instructor:</b> | Róbert Kurdi                            |

---

### Course objectives:

In-depth knowledge in the practical solutions of risk analysis and control, introducing risk management.

### Course content:

1. Calculating statistical data in order to handle work-related accidents and ill health.
2. Treating the intensity distribution of answers to impacts assuming Gauss-distribution.
3. Probit method to linearize impact-answer equations (fires, explosions, physical impacts, toxication).
4. Judging flammability, explosivity and toxicity of compounds based on their components.
5. Calculation of bearable noises.
6. Source models of hazardous and polluting materials.
7. Transport models of hazardous and polluting materials.
8. Classification of processes based on their hazardousness, defining Dow Fire and Explosion Index.
9. Hazard and operability analysis.
10. Fault tree analysis.
11. Quantitative risk assessment.

### Requirements, evaluation and grading:

According to the requirements of fulfillment.

### Required and recommended readings:

Kuhlmann, A.: Einführung in die Sicherheitswissenschaft. Verlag TÜV Rheinland GmbH. Köln, 1995.  
Haubert G.: A munkahelyi kockázatértékelés és kezelés gyakorlati kézikönyve. MKK. Budapest, 2003.  
MSZ 28001 és 28002: Munkahelyi egészségvédelmi és biztonsági irányítási rendszerek. MSZT, Budapest, 2003.  
Crowl, D. A., Louvar, J. F.: Chemical Process Safety: Fundamentals with Application. Prentice Hall, Englewood Cliffs (N.J.), 1990.



# UNIVERSITY OF PANNONIA

## COURSE DATASHEET

|                                |   |
|--------------------------------|---|
| <b>Semester:</b>               | 2014/15/2                               |
| <b>Course:</b>                 | Safety Technics and Risk Assessment II. |
| <b>Code:</b>                   | VEMKKVM422B                             |
| <b>Responsible department:</b> | Department of Environmental Engineering |
| <b>Department code:</b>        | MKKV                                    |
| <b>Responsible instructor:</b> | Róbert Kurdi                            |

---

### Required and recommended readings:

Varga Z.: Veszélyforrás-elemzés a vegyiparban. Veszprémi Egyetemi Kiadó, Veszprém, 1998.  
OMIKK: Védekezés ipari katasztrófák ellen. Gyakorlati kézikönyv. OMIKK, Budapest, 1990.