

sludge

- Energy recovery: basic concepts

5. Landfilling

- Types of landfill

- Construction of a landfill and subsequent exploitation

- Collection of landfill gas and leachate; appropriate landfill gas valorization and leachate treatment systems

- Clean-up of disused landfill site; material reuse by landfill mining

Initial competences

Basic knowledge of chemistry, physics

Final competences

1 Have basic insights into solid waste material flows and their collection.

2 Have basic insights into the available techniques for recovery of solid waste with emphasis on maximum material reuse and/or energy recovery.

3 Have basic insights into the available techniques for final disposal of solid waste.

4 Formulate proposals to prevent, usefully reuse or dispose of a specific material or solid waste stream

Conditions for credit contract

Access to this course unit via a credit contract is determined after successful competences assessment

Conditions for exam contract

This course unit cannot be taken via an exam contract

Teaching methods

Excursion, Lecture

Extra information on the teaching methods

Theory consists of lectures. Practical examples of management of specific waste or material streams are illustrated by means of company visits.

Study material

Type: Slides

Name: Slides of the course

Indicative price: Free or paid by faculty

Optional: no

Language : English

Number of Slides : 250

Oldest Usable Edition : 2024

Available on Ufora : Yes

Online Available : Yes

Available in the Library : No

Available through Student Association : No

References

Tchobanoglous, G., Kreith, F (2002). Integrated solid waste management, 2nd Ed. McGraw-Hill, Inc., New York - Williams P (2005). Waste treatment and disposal. Wiley, England.

Course content-related study coaching

The lecturer is available during and after the lectures for questioning, feedback and guidance. Additionally, the lecturer can be consulted electronically through e-mail, or personally upon making an appointment

Assessment moments

end-of-term and continuous assessment

Examination methods in case of periodic assessment during the first examination period

Written assessment with open-ended questions

Examination methods in case of periodic assessment during the second examination period

Written assessment with open-ended questions

Examination methods in case of permanent assessment

Participation, Assignment

Possibilities of retake in case of permanent assessment

examination during the second examination period is possible in modified form

Extra information on the examination methods

The evaluation consists of a closed-book written exam, with open questions

Calculation of the examination mark

Students who eschew period aligned and/or non-period aligned evaluations for this course unit may be failed by the examiner.