

Basic Course in Pavement Engineering

Subject area: Civil Engineering/Architecture

University: DTU
Level: BA3, BA4
Teaching mode: completely online, at specific time
Instructor(s): Eyal Levenberg

Short description

This course serves as an introduction to the design and construction of asphalt pavements; its main objective is exposition of the students to the scope and complexity of the pavement engineering discipline.

Full description

<https://kurser.dtu.dk/course/12415>

Learning outcomes

A student who has met the objectives of the course will be able to: (i) Classify pavement types; (ii) Understand expected pavement roles; (iii) Use basic pavement terminology adequately and correctly; (iv) Appreciate the importance of proper compaction of pavement layers; (v) Perform basic pavement mechanics calculations involving material properties; (vi) Perform basic pavement mechanics calculations involving traffic loads; (vii) Identify common asphalt pavement distress types; and (viii) List probable causes of common distress types in asphalt pavements.

Recommended in particular for students of the following study programmes

Civil Engineering/Geotechnics/Infrastructure

General information

Contact hours per week: This course can be delivered fully online, but with real-time remote interaction.

Total workload: 135 (in student hours for the whole course)

ECTS credits: 5

| | |
|------------------------------------|---|
| Language: | English |
| Course start date: | 31 July 2023 |
| Course end date: | 16 August 2023 |
| Add. info about start date: | In DTU this is a 3-week course delivered in August. |
| Weekly teaching day/time: | Expected 4 hours per day - but start time flexible, and will be arranged together with students in the course |
| Time zone: | CET (Denmark, Germany, France, Netherlands, Switzerland, Czech Republic) |
| Further information: | This course is scheduled for 3-week period in August. It is based on short pre-recorded video clips, each followed by a real-time Q&A session. Teaching hours are flexible. |
| Prerequisites: | Prior knowledge in basic mechanics of materials and in soil mechanics |
| Activities and methods: | Lectures, Self-study, Exercises, Tutorial sessions |
| Presence on campus: | Not required |

Final examination

| | |
|--------------------------------|-----------------|
| Form: | oral |
| Date: | 45156 |
| Location/format: | online |
| Re-sit possibility: | yes |
| Transcript available: | on request |
| Add. info/requirements: | All aid allowed |

Registration

To register for this course, follow the registration requirements of your **home university** as specified here: www.euroteq.eu/courses-registration.

Administration

| | |
|------------------------------|---------------|
| Number of places: | no limitation |
| Minimum participants: | no minimum |
| Internal course code: | 12415 |

Contact: eylev@dtu.dk

This course is part of the EuroTeQ Engineering University joint course catalogue 2023. This is a collaborative activity of the partner universities DTU, L'X, TU/e, TalTech, CTU, TUM as well as Technion. Students from these universities can participate in the offered courses. It is the responsibility of the student to check if you fulfil the requirements to participate in a specific course. Students are also advised to check with their home institution how to get recognition of the ECTS credits gained in courses of the EuroTeQ course catalogue. For further information about EuroTeQ Engineering University, visit www.euroteq.eu or get in touch with the above-mentioned point of contact.