Pavement Investigation, Design and Construction Testing

Domestic Fees
$995 +GST per person

International Fees
$995 +GST per person

Intakes
20/05/2026
19/08/2026
18/11/2026

Campus
Auckland
Auckland
Auckland

Duration
1 day

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Best practice guidelines for investigation and design of pavements will be introduced. This includes flexible and rigid pavement for roads, industrial developments and subdivisions. Most cost effective and environmentally friendly design solutions will be covered for new and existing pavements. Calculation of pavement deflection and curvature function will be introduced in the course with examples using the design and analysis program Circly to meet Auckland Transport EPA technical and TDM new design requirements.

Mechanistic pavement design will be presented with applications using Circly software. Pavement design will cover flexible (structural asphalt, thin asphalt and granular pavement modification and stabilisation).

The course covers for new pavement design and introduce pavement rehabilitation options.

Topics include

- Best practice guidelines for pavement investigation and testing
- Pavement testing in the field and in the laboratory
- Pavement analysis using FWD back-calculation and Circly
- Pavement Failure types and causes
- Mechanistic-Empirical-pavement design and treatment options
- Surfacing types
- Flexible and rigid Pavement design
- Calculation of design deflection and curvature to meet ATCOP EPA technical requirments
- Introduction of Circly 6 program with design examples
- Pavement layers Moduli
- Construction monitoring and testing requirements

On completion of this course participants will

- Specify best practice pavement geotechnical investigations for pavement design purposes
- Design pavement for various traffic types and volumes
- Select the correct material Moduli to be used for pavement design for asphalt and the other pavement layers
- Calculate pavement the deflection and curvature
- Knowledge of Circly design program
- Identify what testing and surveillance is required during and post pavement construction

Who should attend

Contractors, Consultants, NZTA, Councils and Land Developers staff involved in roads, industrial development, transport containers pavement investigation, design and construction.

NZIHT reserves the rights to withdraw or adjust programmes, alter start date or fee schedules, and make any other changes as it may deem desirable or necessary, without prior notice. All programmes are subject to a sufficient number of enrolments and completion of all approval and accreditation requirements.

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