

Course start date	You can enrol anytime	
Format	Online, flexible and work at your own pace	
Length	<ul style="list-style-type: none"> • Maximum 200 hours • Recommended completion in 4 to 8 months 	
Prerequisites	For Engineers (or related degree or experience)	
For Students Residing	In New Zealand	Outside New Zealand
	NZD1,200	NZD2,070
Course Fees	<i>All fees are inclusive of NZ GST, or any equivalent overseas tax</i>	
	Microcredential Course (20-pt)	Professional Development Course
Qualifications	Digital badge issued on completion	
	<i>You can claim CPD points (check with your preferred/local accreditation organisation)</i>	
Companion Text	Transition Engineering, Building a Sustainable Future, CRC Press, 2019	
	Paperback copy included and access to the eBook through UC library services, while fully enrolled	You can buy the hard copy or the eBook from your preferred provider

What others think about InTIME®?

‘Today, we have many tools mapping out our carbon transition, which are constrained by building on the way we think today, are consistently failing to deliver the scale and speed of change we need. For me Transition Engineering breaks this cycle.’

Jamie, 2020

‘A big thank you for the transition engineering course. It gave me a deep insight into the problems we have, how you can flip your perspective and also how to bust myths.’

Philip, 2018

Note: Testimonials regarding the Professional Development course delivered up to 2020, with similar content to the Energy InTIME® 6-Module course.

More testimonials on our website

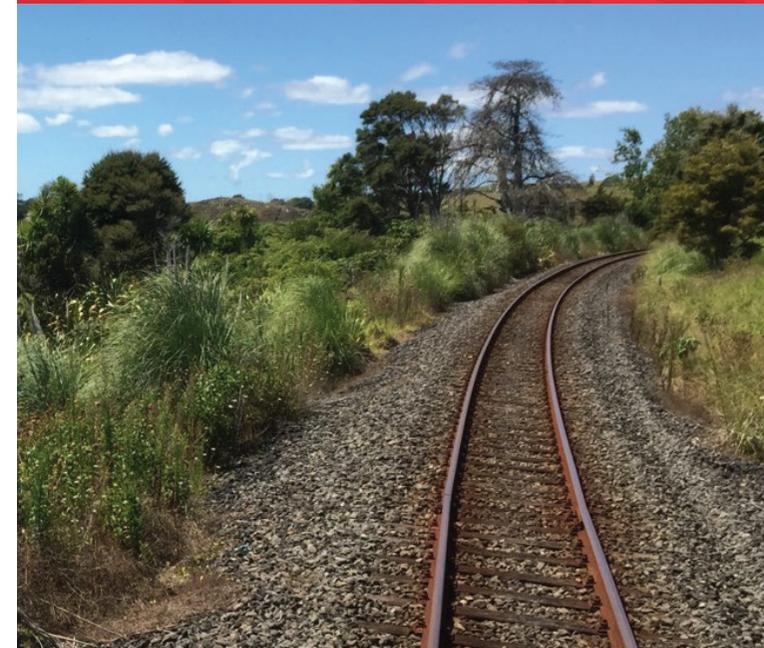
www.canterbury.ac.nz/epecentre/research-and-innovation/professional-development/

For more information

transitionengineering@canterbury.ac.nz

Energy InTIME®

6-Module Online Course



InTIME®: Interdisciplinary Transition Innovation, Management & Engineering

Learn to move your perspective, get un-stuck from the Business-As-Usual, and discover the “real” value creation in carbon downshift

Main instructor: Professor Susan Krumdieck

Online and flexible, designed for Engineers (or people with a related degree, or experience).

Up to 200 hours (recommended completion in 4 to 8 months)

This course inspires and enables discovery and realisation of effective change toward carbon emissions downshift in a variety of organisational contexts (engineering, education, business, government, non-profit organisation, and community). The course explores new quantitative understanding of the climate and resource challenges (energy, materials usage, etc) caused by unsustainable growth, by applying a mix of theory, storytelling and examples. The course guides you to advance your related capabilities, competencies, and strategies. The personal, interpersonal, organisational, and infrastructural dimensions of change leadership for energy and resource transition are addressed.

Study Energy InTIME[®] and tackle your wicked problem with a local solution

Learning outcomes

Learning outcomes include working knowledge of the Interdisciplinary Transition Innovation, Management and Engineering (InTIME[®]) Methodology and key strategic analysis tools.

You will gain confidence in the face of what seem like entrenched positions and impossible problems.

By the end of the course, you and your organisation will be much more prepared to discover opportunities for transition and to adapt to the future trends in energy and economic downshift.

Course Structure

Module 1 – Mega-Problems

The Mega-Issues of Unsustainability including accumulation of Greenhouse Gas. Focus on the problem of Peak Oil.

Module 2 – Unsustainability

The Problems of Unsustainability in Complex, Global Systems with a focus on the problem of Exponential Growth. Case studies on the Water, Energy and Food nexus and on Mining.

Module 3 – Complexity and Communication

Finding good data and exploring future scenarios is the key to cutting through the emotion and nonsense. Case study on Energy.

Module 4 – InTIME[®] Methodology

Presentation of the InTIME[®] methodology and how to use it for wicked problems. Case study on Transport.

Module 5 – InTIME[®] Models and Tools

Theory of Anthropogenic System Dynamics, Development Vector, Strategic Analysis of Complex Systems, illustrated by InTIME[®] Examples.

Module 6 – Applying Economics

The importance of Economic Decisions and Transition Economics with reminders on existing methods (Environmental Externalities, EROI, etc) and other ways to look at the future.

InTIME[®] Project - Apply your new skills to something locally relevant for you!

You will practice the InTIME[®] Methodology on a wicked problem in your own community or company.

Learning model

This course is offered online for your convenience and flexibility. You will feel part of a community and gain insights and answers to your questions from trained tutors/experts in Transition Engineering and/or other students.

Online - Self-paced:

- 20 hours of pre-recorded lectures and tutorials, delivered by Professor Susan Krumdieck and other experts in Transition Engineering
- Small assignments with regular assessments and online quizzes per module to keep you on track
- Personal work on your InTIME[®] Project using resources and templates
- Discussion forums to ask your questions and exchange with the tutors and other students
- Readings (textbook and suggested materials)
- Additional resources (podcasts, relevant and practical InTIME[®] case studies, etc)

Online – Live (additional opportunities):

- Regular online tutor-led sessions and students-led networking discussions
- Up to 12 hours of online small-group workshops with experts in Transition Engineering to support your InTIME[®] project
- Additional options for groups – contact us transitionengineering@canterbury.ac.nz

Assessment

- Online quizzes throughout the 6 Modules – 74%
- InTIME[®] Project – 26%