

# Module 03: Foundations of Causal and Generative Models

FCIT 607: Data, Methods, and Models for Future Cities

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**Abstract**

This learning module ...

# Module Overview

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“No causes in, no causes out!” - Nancy ([cartwright1989nature?](#)), *Nature’s Capacities and Their Measurement*. Oxford: Clarendon Press.

## Learning Objectives

**i** By the end of the course module, students will be able to:

1. Coming soon...
2. Coming soon...
3. Coming soon...

## Module Topics

- We Can Do Better Than the Status Quo!
  - Centring Causality and Uncertainty with Causal and Bayesian Inference
- What are models? What is Causal Inference?
  - Making Our Assumptions Explicit (Part 1): Graphical Models
- What is Bayesian Inference?
  - Counting and the Reallocation of Credibility Across All Possibilities
- Conceptual Causal Models Come First, Statistical Models Come Second

## Assigned Reading + Lecture Slides

- [Foundations of Causal and Generative Models](#)
- [Module 3 Slides](#)

## Lab

Coming soon...

## **Questions, Tasks, and Challenges**

Coming soon...

## **Recommended Additional Resources**

- Coming soon...

## **References**