



*"I am fascinated by how everything is interconnected in Materials Engineering and excited about how intelligent data analysis can be used to transform the way we develop new materials."*

**Magdalena Laurien**  
Materials Engineering

Courses on bonding, crystallography, mixing of materials and equilibrium (MATLS 2A04, 2B03, 2D03)

- Statistics for Materials Engineers (MATLS 3J03)
- Big Data Analysis (CHEM ENG 4B03)
- Machine Learning (MATLS 4ML3)

- Microstructure Modelling (MATLS 4NN3)
- Process Modelling (MATLS 4NP3)
- Finite Element Modelling (MECH ENG 4T03)

1  
What is a Material?

## Your PATHWAY to learning

2  
Data Analytics

Careers in Data Analytics & Computational Materials Engineering:

- Process simulation and optimization
- Accelerated material discovery/design
- Image/data processing

Where you'll go: petrochemical, manufacturing, energy and healthcare sectors

3  
Microstructure and Process Simulation

4  
Materials Selection & Capstone

