

# Your **PATHWAY** to learning

Careers in Materials for Manufacturing & Infrastructure:

- Material Production, Processing and Heat-treating
- Manufacturing
- Corrosion & Failure Analysis

Where you'll go: automotive, aerospace, energy and infrastructure sectors

1 What is a Material?

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

2 Material Production

- Low temperature processing of functional and biomaterials (MATLS 3B03)
- High temperature processing (MATLS 3F03, 4C03)
- Sustainable Material Production (4I03)

3 Structure Property Relations

- Strength, Deformation & forming of Materials (MATLS 3M03, 3MF3)
- Alloy Design and Microstructure manipulation (MATLS 3C03, 3E04, 3T04)
- Aerospace and Automotive alloys (MATLS 4LA2, 4LS2, 4T03)
- Corrosion (MATLS 4D03)

4 Materials Selection & Industrial Capstone

*"The Manufacturing stream of Materials Engineering allows me to have an impact on the industry and society by making cars safer, more fuel efficient and more corrosion resistant."*

**Chris Thomsen**  
Materials Engineering

