

Cooper Rufus

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Skills

Development: SolidWorks, ProjectWise, Structural Drafting, Technical Drawings

Analysis: Microsoft 365, MATLAB, ANSYS Static & Fluent, AFT Fathom, MathCAD 15

Construction: Hand Tools, Shop Tools, Asphaltting, Drainage, Earthworks

Experience

Undergraduate Mech/Piping Engineer, HATCH – Brisbane

Nov 2023 – Feb 2024

- Conducted detailed engineering on a FEL-4 Rare Earths Project
- Developed models, analysis and calculations for Tanks, Pumps and Piping Networks
- Analysed and implemented vendor equipment data
- Contributed to engineering package deliverables
- Click [HERE](#) to see an overview of my work at HATCH

Civil Construction Worker, Bike Tracks Australia – Brisbane

Jan 2023 – Dec 2023

- Designed and built BMX tracks for private clubs and city councils
- Worked with diverse teams and trades professionals
- Experienced culture and procedures in Civil Construction and related trades
- Tasks included Stormwater Drainage, Machine Operation, Asphaltting & Earthworks

Structural Draftsman, The Drawing Office – Maryborough

Nov 2020 – Jan 2023

- Produced technical drawing packs for structural models
- Including Parts, Members, Rafters, Modules, Marking Plans/Elevations and BOM's
- Interpreted engineering drawings and architectural plans
- Used top-down SOLIDWORKS modeling techniques

Projects

Decarbonizing the Steel Industry with Offshore Green Hydrogen – Research Project

2024

- An ongoing research project with QUT Faculty of Mechanical, Medical and Process Engineering
- Research on the infrastructure requirements for production and distribution of offshore green hydrogen
- Development of transportation models for compressed hydrogen in the Bass Strait Region
- Research into offshore hydrogen storage methods

Education

Queensland University of Technology – Bachelor of Mechanical Engineering (Hons.)

Projected - Nov 2024

Queensland University of Technology – Secondary Major in Electrical Engineering

Projected - Nov 2024

Qualifications

CPCCWHS1001 – Prepare to Work Safely in the Construction Industry

2023

FSK20113 – Certificate II in Skills for Work and Vocational Pathways

2020

MEM20413 – Certificate II in Engineering Pathways

2019