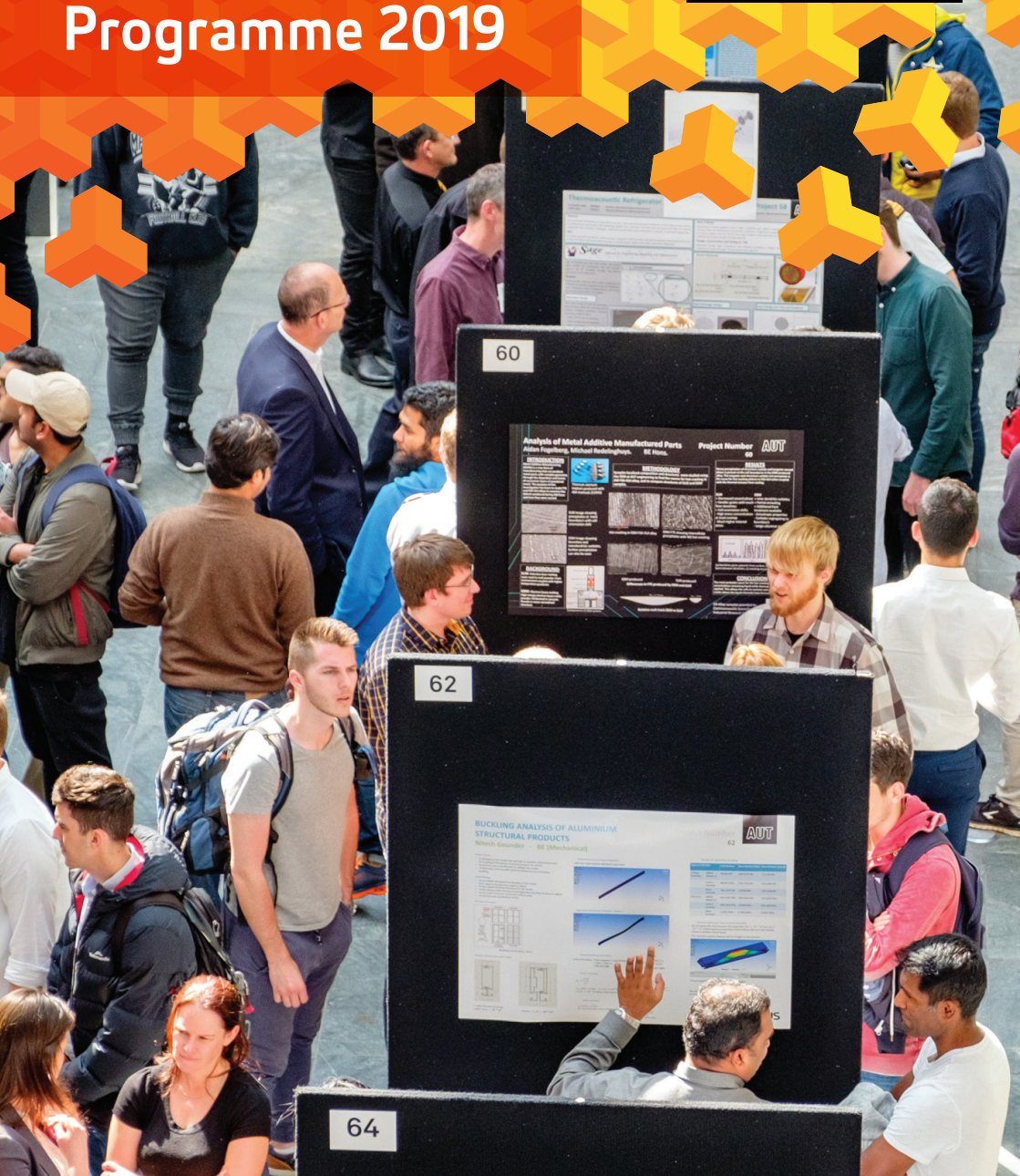


Engineering Project Exhibition Programme 2019

AUT



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Analysis of Metal Additive Manufactured Parts
Mimi Foghery, Michael Haddadpour, EE Hons. Project Number 60

INTRODUCTION

METROLOGY

CONCLUSION

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BUCKLING ANALYSIS OF ALUMINUM STRUCTURAL PRODUCTS
William Gauderer - EE (Mechanical). Project Number 62

INTRODUCTION

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EVENT SCHEDULE

3 October 2019

Location:

AUT, WZ Building, 6 St Paul St, Auckland

3.30pm-5.30pm, Project exhibition

Exhibitions:

- Bachelor of Engineering (Honours)
 - Electrical and Electronic Engineering
 - Mechanical Engineering
 - Mechatronics Engineering
 - Software Engineering
 - Construction Engineering (Built Environment)
 - Architectural Engineering (Built Environment)

- Bachelor of Engineering Technology
 - Electrical and Electronic Engineering
 - Mechanical Engineering
 - Computer & Mobile Systems Engineering
 - Network & Communications Engineering

- Postgraduate Diploma in Engineering
 - Mechanical Engineering
 - Electrical & Electronic Engineering

First Name	Last Name	Title	Poster #
BACHELOR OF ENGINEERING (HONOURS) IN MECHANICAL ENGINEERING			
Ziyad	Adam	Standing Desk	1
Haneen	Alqam	Design a Smart Surgical Suture with Smart Memory Polymers	2
Abdullah	Bajuayfir	Design a Device to Support a Leg Weak Muscle for Poliomyelitis Disease	3
Dalton	Clark	Rotational Moulding of Silicone Arteries	4
Fletcher	Clark	Feasibility of Heat Recovery in an HVAC Refrigeration System	5
Sam	Croft	Motorcycle Frame Design	6
Beau	Daley Roberts	Heat Dissipation for Stirling Test Rigs	7
Patrick	Domett	Knee Unloading Implant	8
Ghader	Egebarah	Design Optimisation of Radiofrequency Tissue Ablation using Simulation	9
Liam	Foley	Cardiovascular Simulator Resistance	10
Sam	Givan	Design of a Minimally Invasive Surgery Device to Treat PAES	11
Jose Marie	Inoncillo	Recycling/Upcycling of Hardboard Sheets	12
Nick	Jones	Design of Novel Stent for Hemorrhage Control	13
Matthew	Kingsford	Fatigue & Failure Characteristics of Ti 15-3	14
Oscar	Mahy	Upcycling Milk Bottle Machine Design	15
Nabeel	Mazhar	Design & Performance of a System to Collect Plastic Waste from the Ocean	16
Matt	Cotton	Design & Performance of a System to Collect Plastic Waste from the Ocean	17
Darren	Travers	Design & Performance of a System to Collect Plastic Waste from Coastal Areas	18
Joel	Mercer	Analysis of the Flow past Insects and other Small Organisms	19
Andrew	Murdoch	Self Bailer Development	20
Tarun	Nallur	Bike Dynamics Investigation	21

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Berj	Panossian	Uniflow Opposed Piston Engine Stress Analysis	23
Zac	Hyde	Design of Minimally Invasive Traction Device	24
Sagar	Patel	Textile Sensor to Measure Breathing & Heart Rate	25
Divya	Ranchhod		
Jonathan	Rabey	Piston Cylinder Bore Dynamic Analysis	26
Dylan	Shepherd	Piston Seals	27
Ajay	Singh	Multi-layered, Insulating Manifold Design for IC Engines	28
Hannah	Tyrell	Feasibility Study to Explore Polymer/ Metal Waste Separation by Cold Waste Utilisation	29
Nick	Van Der Geest	Design an Artificial Wing for a Sea Turtle	30
Jing Hui	Wong	Fatigue Properties of Solid Parts & Lattice Struts	31
Shuo	Xu	Validate the Bolt FEA Tool within Solidworks against VDI2230	32
Jiaxu	Niu	Industrial Robot (ABB) Programming	33
**Jesse Zixi	Wang		
Mitch	Bridges	*Telecommunications Cabinet Cooling	35
Samuel	Farmer	*Cooling Tunnel	36
Thomas	Henson	*eBicycle Development - Seat Support Structure & Suspension	37
Romney	Koraua	*Superconductor Saddle Coil, Assembly Design	38
Adam	Murley	*Additive Manufacturing for Industrial Spares	39
Bas	Pengpala	*Chocolate Melt Rate	40
Marc	Spires		
Bryce	Saavedra	*Packaged Part Counting	41
Brad	Shanks	*Heatpipe/ Thermosyphon Performance	42

*These posters are confidential and are displayed in WZ421

**Student is from MECHATRONICS ENGINEERING major

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Sanket	Dhemare	TIG Welding of Boron/ Boron Free Steels	45
Markkumar	Patel		
Abin	Thomas		
BACHELOR OF ENGINEERING TECHNOLOGY IN MECHANICAL ENGINEERING			
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Miguel	Rasalan		
Ishara	Kuruvita	*Cooling Tunnel	51
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Nasser	Aldosari	Design & Fabrication of Metallic Bipolar Plates for Proton Exchange Membrane Fuel Cell	55
Fahad	Algethami		
Sriwantha	Hewage		
Parth	Patel	Design & Fabrication of Metallic Bipolar Plates for Proton Exchange Membrane Fuel Cell	56
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Mohammad	Alshammari		
Etienne	De Haan		
Faisal	Alqahtani	Design a Minimally Invasive Skull Traction Device	57
Eugene	Clarkson	Alternative Motorcycle Front Suspension	58
Evan	Dcruze	Fishing Rod Strike & Reel Combo	59
Mitchell	Donnelly	Rugby Scrum Machine	60
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Junjie	Xu		
Roshan	Tayalan		

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Wen Jun	See		
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Amritpal	Kaur		

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**Student is from MECHATRONICS ENGINEERING major

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Paul Christian	Apino	*Project Raptor - VR Enhancement	126
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Hao	Gong	Black Ladder Construction Apartments	130
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Timothy	McGeever-Heap		
Matthew	Yau		

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School of Engineering, Computer & Mathematical Sciences

Level 1, WZ Building

6 St Paul Street

Auckland Central, New Zealand

www.aut.ac.nz