

Chemical and Petroleum Engineering

Project Title	Booth Number	Location	Category
Ammonia-To-Hydrogen Decomposition	129	Basement Robot Display	Chemical
Anhydrous Ethanol Production Using Membrane Technology	104	Infront of ENG 24	Chemical
Closed Loop Geothermal Facility Design for End-of-Life Oil and Gas Wells	40	Engineering Student Lounge	Chemical
Cryo-purification as a Water Treatment System	85	ENG 24	Chemical
Drive To Net Zero Emissions in the Natural Gas Value Chain	92	ENG 24	Chemical
Eco-Methanol: Sustainable Methanol from Woody Biomass and Green Hydrogen	53	Engineering Atrium	Chemical
GLIXO - Synthesis of an HPMC-g-PEA Hydrogel for Chronic Wound and Burn Care Applications	44	Engineering Student Lounge	Chemical
Green Hydrogen as an Additive to Natural Gas Pipelines	100	Infront of ENG 24	Chemical
Large Scale Bio-Succinic Acid Production	64	Engineering Atrium	Chemical
Large-Scale Production of Exosomes for Targeted Therapeutics	41	Engineering Student Lounge	Chemical
P2P Ltd: Waste to Hydrogen	102	Infront of ENG 24	Chemical
Scalable Negative Emissions	84	ENG 24	Chemical
Upscaling an Antimicrobial Biopolymer via a Novel Co-Culture Process	71	ENG 24	Chemical
Waste Heat Recovery at Suncor East Tank Farm	16	Infront of ENC 201	Chemical
Viking Kinsella U Mannville C (Krex) Formation Development	39	Engineering Student Lounge	Petroleum

Civil Engineering

Project Title	Booth Number	Location	Category
194 Avenue over Macleod Trail Bridge	124	ENC 25	Civil
78 Avenue - Innovative Project Management Solutions	74	ENG 24	Civil
Designing the Integration of Transit and Micromobility Systems	128	ENC 25Z	Civil
Montgomery Mixed Use	138	Infront of ENG 60	Civil
S3 - Pedestrian and Cycle Bridge over the L3008	13	Infront of ENC 201	Civil
Sanitary System Design	86	ENG 24	Civil
Sustainable and Energy-Efficient Housing Design for Rural and Remote Communities	119	ENC 25	Civil
Sustainable Redesign of a Mid-Rise Office Building	91	ENG 24	Civil
Tent Mountain Pumped Hydro Energy Storage	122	ENC 25	Civil
The Next Generation of Stormwater Ponds	121	ENC 25	Civil
Transboundary Water and Irrigation in the Milk River	118	ENC 25	Civil

Electrical Engineering

Project Title	Booth Number	Location	Category
A Multilingual Access Kiosk Assistant	47	Engineering Atrium	Electrical
A Wearable Non-Invasive Device for Detecting Cortisol Levels	61	Engineering Atrium	Electrical
Canopy - Forest Environment Measurement Network	2	Infront of ENG 224	Electrical
ContinuO Centaur Robot	27	Engineering Student Lounge	Electrical
Computer Vision-Based Sleep Analysis: Understanding Short-Term Rest	52	Engineering Atrium	Electrical
Deep Sea Carbon Dioxide Separator Prototype	130	Basement Robot Display	Electrical
Development of an Electrical and Software Solution for the Automated Enforcement of Bus-Only Lanes and Bus-Only Crossings	36	Engineering Student Lounge	Electrical
Electroencephalography (EEG) Minor Traumatic Brain Injury (mTBI) Detection Device	51	Engineering Atrium	Electrical
EZEV - Dynamic EV Charger Loading System	3	Infront of ENG 224	Electrical
Flying Probe Data Acquisition PCB	88	ENG 24	Electrical
GaN-based Driver for Magnetic Bearing Levitation	34	Engineering Student Lounge	Electrical
I-sole: Smart Non-Invasive Insole for Diabetic Care	6	Infront of ENG 224	Electrical
Large Channel Count Arbitrary Waveform Generator (AWG) With Electrical Impedance Tomography (EIT)	38	Engineering Student Lounge	Electrical
Qube Lite: Expanding Access to Emissions Monitoring	48	Engineering Atrium	Electrical
Re-Inventing the Wheel	127	ENC 25Z	Electrical

SatHAT	131	Basement Robot Display	Electrical
Smart Agriculture: Remote Monitoring of Soil Quality and Sunlight Using Embedded Sensors	78	ENG 24	Electrical
Solar Photovoltaic Portfolio Centralization and Optimization	60	Engineering Atrium	Electrical
Storm Drain Basin Monitoring System	50	Engineering Atrium	Electrical
Thumbs up - Research Project	32	Engineering Student Lounge	Electrical
Ultrasonic Transducer Driving Module	137	Infront of ENG 60	Electrical
Whole Home Energy Management System	114	Basement Robot Display	Electrical

Entrepreneurial Engineering


Project Title	Booth Number	Location	Category
FetchFinder: Play Beyond Sight	10	Infront of ENC 201	Entrepreneurial
IoT Data Platform: Real-Time Edge AI Computing and Cloud Integration	4	Infront of ENG 224	Entrepreneurial
MilkGizmo: DNA Extraction Device	117	ENC 25	Entrepreneurial
StormWise Solutions	66	Engineering Atrium	Entrepreneurial
STUDIQU: Summarized Text and User-Driven Interactive Quizzes	94	ENG 24	Entrepreneurial
TrainWise AI - Automated Workout Logging using AI	96	ENG 24	Entrepreneurial
TrapEase	83	ENG 24	Entrepreneurial
Vitalize: The Fetal Monitor	22	Above ENC 70	Entrepreneurial

Geomatics Engineering

Project Title	Booth Number	Location	Category
Abridged Human Activity Monitoring using Smartphone Sensors and Neural Networks	93	ENG 24	Geomatics
Autonomous Indoor Mapping and Environmental Detection Using a Parrot Mambo Toy Drone	97	ENG 24	Geomatics
EV Route Guidance App	20	Above ENC 70	Geomatics
ReRoute - Dynamic Smart Routing	98	ENG 24	Geomatics
Retracement and Expansion of the University of Calgary High Precision Survey Network with specialized focus on High Precision Surveying Methods and Network Design	1	Infront of ENG 224	Geomatics
Local warming in the City of Calgary communities	57	Engineering Atrium	Geomatics

Mechanical Engineering

Project Title	Booth Number	Location	Category
Advancing Heat Transfer Efficiency in Solid-State Lighting	18	Infront of ENC 201	Mechanical
Aerodynamic Analysis and Development for UAV Dynamics and Control Law Synthesis	109	Infront of ENG 60	Mechanical
Algae Deterrent Pump System	126	ENC 25Z	Mechanical
Bearing Life Prediction Model for Surge Feed Conveyor Belt	103	Infront of ENG 24	Mechanical
Characterization and Optimization for Liquid Cooling Technology	9	Infront of ENC 201	Mechanical
Creating an Automated Cell Culturing Machine	56	Engineering Atrium	Mechanical
Design and development of a quasi-passive biarticular exoskeleton to increase ankle power during walking	120	ENC 25	Mechanical
Design of a Pick and Place Controller for the Kinova Gen3 Arm with an Educational Tutorial	24	Engineering Student Lounge	Mechanical
Electric Vertical Takeoff and Landing Drone with Outboard Horizontal Stabilizers	105	Infront of ENG 24	Mechanical
Flexible Tensegrity Wing Design and its Application in Underwater Vehicles	116	ENC 25	Mechanical
HexaReach Robotics: Revolutionizing UAVs with Agile Robotic Arm Solutions	26	Engineering Student Lounge	Mechanical
Lift System for Multi-Legged Robots.	28	Engineering Student Lounge	Mechanical
Lunar Facility Heat Exchanger	70	ENG 24	Mechanical
LWSC Water Filtration	125	ENC 25	Mechanical
Mobile 3D Printer	23	Engineering Student Lounge	Mechanical
Modular Lab-Scale Wind Turbine Prototype For Aerodynamic Research	29	Engineering Student Lounge	Mechanical



Novel Grease Gun Design	73	ENG 24	Mechanical
Optimizing a Tabletop Pipeline System Network	75	ENG 24	Mechanical
Performance Evaluation and Potential Upgrade of the Calgary International Airport Geo-Exchange System	72	ENG 24	Mechanical
Recirculation Effects in Sorbent Beds for Direct-Air Carbon Capture	133	Basement Robot Display	Mechanical
SAMPE Bridge Competition	80	ENG 24	Mechanical
Solar Thermal Hut	111	Bottom of Social Staircase	Mechanical
Team 25: Retrofitting an Existing Bicycle for Individuals with a Unilateral Lower Extremity Amputation	37	Engineering Student Lounge	Mechanical
The Design of New Acoustical Musical Wind Instruments	59	Engineering Atrium	Mechanical
Torque pedal, sponsored by Garmin Canada	113	Basement Robot Display	Mechanical
Underactuated Robot Hand with in-hand Manipulation	58	Engineering Atrium	Mechanical

Multidisciplinary Engineering

Project Title	Booth Number	Location	Category
3D motion visualization for 6-axis IMU sensor data	77	ENG 24	Multidisciplinary
Airsense: Empowering Health and Environmental Awareness with Personalized Air Quality Monitoring.	67	ENG 24	Multidisciplinary
AislePilot Inventory Automation	123	ENC 25	Multidisciplinary
Battery Manufacturing Facility Feasibility Study	11	Infront of ENC 201	Multidisciplinary
Breath Analyzer for Detection of Biomarkers from Breath	87	ENG 24	Multidisciplinary
Design of a Long-Range Surveillance VTOL Unmanned Aerial System	108	Infront of ENG 60	Multidisciplinary
Net Zero Buildings	69	ENG 24	Multidisciplinary
Focused Wireless Recharging System	15	Infront of ENC 201	Multidisciplinary
Inert Gas Recirculation System	7	Infront of ENG 224	Multidisciplinary
Next-Generation Intelligent Solutions for Commercial and High-End Residential Spaces	115	ENC 25	Multidisciplinary
Optimization of a Table-Top Pipeline Model	21	Above ENC 70	Multidisciplinary
Passive Autonomous Intestine Mucosal-Targeting Capsule	99	Infront of ENG 24	Multidisciplinary
Rotary Platform for Predictive Maintenance	62	Engineering Atrium	Multidisciplinary
Search and Rescue Drone	110	Bottom of Social Staircase	Multidisciplinary
The Compostable Cooler	8	Infront of ENG 224	Multidisciplinary
Thrust Vector Control System and Ground Validation	30	Engineering Student Lounge	Multidisciplinary

Virtual Reality Accessory Solutions	19	Above ENC 70	Multidisciplinary
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Software Engineering

Project Title	Booth Number	Location	Category
AI-Driven Evaluation of Human Code: Leveraging Artificial Intelligence for Review Processes	31	Engineering Student Lounge	Software
CVHIP	65	Engineering Atrium	Software
Design of Efficient Software Tools for the Control of Life-sized Humanoid Robots	46	Engineering Student Lounge	Software
Development of a Machine Learning (ML) Pipeline to Determine Predictive Fatigue and Erosion on Coil Tubing	17	Infront of ENC 201	Software
Big Data Queries for IoT Metrics	35	Engineering Student Lounge	Software
Development of an iOS & Android Application for Mobile Commerce	95	ENG 24	Software
Drill Tech Mobile	68	ENG 24	Software
HeartLens	90	ENG 24	Software
Heat Pump Calculator	89	ENG 24	Software
HomeSphere: A Housing Optimization App for Northeast Calgary	76	ENG 24	Software
Humanoid Robot sensor interface systems	45	Engineering Student Lounge	Software
International Funding and Researcher Matching V2.0	54	Engineering Atrium	Software
IoT Clinical Task Tracking	82	ENG 24	Software
Locked In: Development of an autonomous goal-based route planner for drone missions	63	Engineering Atrium	Software
Motiv Assist	79	ENG 24	Software



Ocpp over Cloud	33	Engineering Student Lounge	Software
Optical Tracking System for Focused Ultrasound Neuronavigated Procedures	55	Engineering Atrium	Software
Rainforest Data Accumulation and Monitoring System	5	Infront of ENG 224	Software
Realtime Analysis of Distributed Network Data Streams	106	Infront of ENG 24	Software
Real-Time Weather Event Monitoring System	49	Engineering Atrium	Software
RepXcel	112	Bottom of Social Staircase	Software
Revamped Calgary Co-Op Handheld Scanner Application	12	Infront of ENC 201	Software
Sensory Monitor System	132	Basement Robot Display	Software
Wah Hing Online Retailer Application	101	Infront of ENG 24	Software
Wrist-based Gesture Recognition on Garmin Smartwatch	14	Infront of ENC 201	Software