

The Mega-Meter project aims to create one lab instrument capable of providing the capability of the four primary pieces of lab equipment, the oscilloscope, multi-meter, function generator, and power supply.

The Mega-Meter has the potential to let hobbyists and professionals have access to digital lab equipment at home for a competitive cost. The computer interface helps to reduce cost and offload processing to more powerful processors. The device itself is comprised of modules plugged into a mainboard. Each module is capable of providing a specific function to the end user. Such functionality includes but is not limited to regulated power supplies, function generators, oscilloscopes, and digital metering.



Clayton Singh and Tim Rollerson have a diverse skill set. Clayton is a third-year Camosun College student having experience in programming, electronics, drafting, design, mechanical, and robotics; Spending several years participating in Skills Canada Robotics Competition and FIRST Robotics Competition during high school. Clayton has received numerous awards in the fields of drafting, electronics, and robotics.

Tim compliments the team by providing experience from his co-op work terms. During these work terms he created a Gas Turbine Engine Simulator, over a total of nine months, using *NI LabView* and *NI C-DAQ*. Tim has received awards in information technology, chemistry, physics, and an award of excellence at Camosun College. He is also a third-year Camosun College student and holds a Certificate as a robotics technician.



Thank you to *Camosun College* for enabling the design and development of this project.
“Coming together is a beginning. Keeping together is progress. Working together is success.”
~ Henry Ford