Automotive Engineering

How will advances in electric and hybrid vehicles impact the future of traditional internal combustion automobiles?

What is the role of humans in autonomous vehicles?

Should vehicles have the ability to communicate with each other—independently of their drivers—to improve highway safety?

How will modern vehicle design evolve and what features will distinguish them?
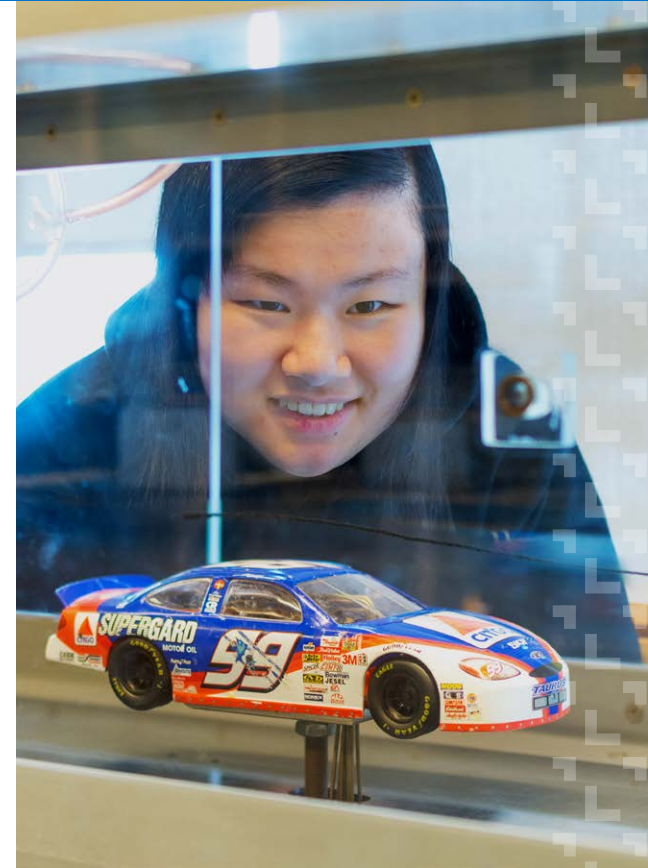
How will advances in fuel cells impact future vehicle design?

Will the automotive industry reshape its business approach to compete with new and sustainable fuel vehicle manufacturers?

Our curriculum emphasizes the design and manufacturing of automobiles—and their related components—including engines and their analysis and design, vehicle dynamics, and autonomous vehicle technologies.

Accredited by the Canadian Engineering Accreditation Board, graduates from this program meet the academic requirements for registration as a licensed professional engineer in Canada.

We offer the only Automotive Engineering program in Canada. This program prepares engineers to meet the advances of the automotive sector by accelerating research and developing alternative technologies (e.g. electric and fuel-driven vehicles).

What will I study?

- Automotive Structural Design
- Chassis System Design
- Combustion and Engines
- Control Systems
- Electric Circuits
- Kinematics and Dynamics of Machines
- Machine Design
- Mechanical Vibrations
- Powertrain Design
- Vehicle Dynamics and Control

Your final-year Capstone project emphasizes communication, teamwork and project management.

What can I do with my degree?

- Automation, control and active safety
- Automotive design, production, maintenance, repair and testing
- Automotive research and development
- Engineering sales and marketing
- Manufacturing of vehicles and components
- Systems engineering and integration
- Trucking industry and transportation systems

Want more information?

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