INFRASTRUCTURE

The province of Ontario has embarked on an ambitious infrastructure plan and is investing more than $200 billion to build schools, hospitals and public transit. The delivery of these projects will require highly skilled talent from Ontario's universities including engineers, ecologists and architects among many other disciplines, in addition to skilled trades and apprenticeships.

According to a study by Stokes Economics, from 2021- 2030, Ontario will need 9,533 civil engineers, 3,653 architects, 2,096 urban and land use planners, in addition to thousands of other jobs that require a university education that will be essential to the delivery of Ontario's critical infrastructure projects.

With a goal to shape the future of sustainable construction, one **Brock University** researcher is using engineered bamboo as a sustainable alternative to steel and concrete, aiming to innovate construction with fast-growing, durable and eco-friendly materials through advanced fabrication techniques.

To help modernize Ontario's infrastructure through digital twinning, Infrastructure Ontario is leveraging **Toronto Metropolitan University** researchers' digital twins expertise to test innovative solutions for more efficient delivery of public infrastructure. The partnership addresses provincial goals such as building transit, highways and housing faster; creating climate resiliency; and examining how existing infrastructure solutions can be leveraged to create a network of digital twins.

Designed to boost job prospects for students, the **University of Windsor**, with community partners, is launching a series of career-building workshops tailored to enhance the skills of those in the Master of Engineering (MEng) and Master of Applied Computing (MAC) programs. This series brings together insights from industry and community organizations, including research from Europe and Australia, that will support students as they embark on careers.

To tackle sustainability, housing density, and better integration of natural assets, **Carleton University** architecture students have partnered with the City of Cornwall. This partnership offers students hands-on experience, giving them an opportunity to work on projects that have an immediate and tangible need in a city while learning how architecture can contribute to the future of Cornwall.