

ESTABLISHMENT OF THE ARTIFICIAL INTELLIGENCE CENTRE OF EXCELLENCE FOR THE BUILT ENVIRONMENT

1. The Ministry of National Development (MND), in partnership with the Singapore University of Technology and Design (SUTD), is launching a new S\$30 million Artificial Intelligence Centre of Excellence for the Built Environment (BE AI CoE) tapping on NRF's Research, Innovation, and Enterprise (RIE) funds.
2. Artificial Intelligence (AI) has advanced rapidly, with the potential to transform processes and boost competitiveness across many domains. Within the Built Environment (BE), AI can enable the development of smarter and more efficient solutions to address national challenges, including:
 - a. Manpower shortage in the labour-intensive construction and facilities management (FM) sectors through AI-augmented robotics and automation;
 - b. Climate change impacts through advanced multi-objective modelling and simulation that enable faster, more comprehensive analysis of environmental impacts, energy efficiency optimisation, and adaptive design strategies for severe weather events.
3. AI is also a critical enabler to ensure that MND's key priorities, such as large-scale estate rejuvenation, are effectively met. Estate rejuvenation is a complex, long-term endeavour that can benefit from AI-enabled tech solutions across all stages of the BE lifecycle, from upstream urban planning to downstream facilities management.
4. The BE AI CoE will adopt a collaborative approach to bring together Government agencies, academia and progressive industry partners to advance applied AI research and co-develop BE solutions whilst fostering innovation partnerships between the public and private sectors.
5. The CoE will also strengthen Singapore's long-term research and industry capabilities by attracting and nurturing "AI bilinguals" — professionals with both technical AI expertise and practical understanding of BE sector challenges. Through joint project collaborations across leading researchers and progressive BE firms, the CoE will facilitate effective knowledge transfer between academia, Government agencies and industry, and uplift the entire BE ecosystem.
6. The desired outcomes for the BE AI CoE are to:
 - a. **Transform work processes** throughout the BE lifecycle by developing AI solutions with needle-moving impact in terms of productivity, sustainability, and liveability.

- b. **Catalyse public-private partnerships** in applied AI research and accelerate research translation and time-to-market by establishing a focal point that brings together government, academia and industry.
- c. **Build up AI capabilities** within Singapore's BE ecosystem by developing deep local expertise and anchoring talents through the CoE.