



Construction & Civil Engineering

- 1** Development of new materials to meet mechanical property requirements (e.g. strength, tension, shear strength) by a specific design criteria or regulation.
- 2** Significant reduction of waste, material usage and/or costs through innovative design of specific construction phases and techniques.
- 3** Building process design and development to overcome difficulties of access to construction site, including precast concrete design & implementation.
- 4** Building process design and development to intelligently distribute a building's load across fragile terrain, including innovative floor slab, raft foundation & cavity shell design.
- 5** Modifications made to construction processes and equipment to overcome challenges of listed buildings around construction sites, including sophisticated propping techniques.
- 6** Innovative development of novel building tools and equipment used in preparing site terrain and laying down building foundations, including scaffolding & temporary works.
- 7** Breakthroughs and achievements made in the use of the latest building technologies; e.g. post-tensioning, innovative formwork designs or temporary works, and modular construction.
- 8** Soil remediation processes, geotechnical survey analysis, ground and foundation reinforcement used to overcome technologically challenging site constraints.