SINGAPORE plans to maintain manufacturing at 20 per cent of its GDP but the changing nature of the industry requires a more skilled and talented workforce.

To meet this demand, JTC has teamed up with Nanyang Technological University (NTU) and manufacturing companies to launch an advanced manufacturing talent training programme for undergraduates.

"Investments in technology and infrastructure must go hand in hand with investments in our workers, so that they are equipped with the right skills to support companies in their growth and transformation," said Senior Minister of State for Trade and Industry Chee Hong Tat in his speech at the launch of the talent training programme on Wednesday.

The NTU-JTC Industry Talent Development Programme is collaborating with eight industry partners to equip students with advanced manufacturing skills and competencies through industry internships and projects.

The participating companies are: the Agency for Science, Technology and Research (A*STAR), Bosch Rexroth, ISDN Software, Konica Minolta, Delta Electronics, PBA Group, Shimano (Singapore) and Sodick Singapore.

As advanced manufacturing requires the deployment of higher technology, working with NTU allows students to be exposed at an earlier stage for talent development, said Hazel Khoo, deputy executive director of the Science and Engineering Research Council at A*STAR.

In advanced manufacturing, companies make use of innovative technologies like data analytics and artificial intelligence to have greater control over their manufacturing line, allowing them to receive more information about production quality and quantity, and even anticipate when machines need to be repaired.
As part of the programme, NTU now offers SkillsFuture Work-Study Degree Programmes (WSDPs) where students will complete three mandatory internships that span over 40 weeks during their four-year school term.

This is unlike the conventional programme where students are only required to complete one internship.

Over 200 students are expected to benefit from the programme in the first two years and NTU said that integrating learning and working would be beneficial for them and their prospective employers.

"It is a win-win formula - our students get to learn the ropes from our partner companies' wealth of experience, and at the same time, the advanced manufacturing sector continues to see a steady stream of skilled talent to meet the rising demand," said Ling San, NTU provost and vice-president, in a press statement.