

# ENGINEERING PRODUCT DEVELOPMENT (EPD)

## MISSION STATEMENT

EPD prepares students for leadership in the full value chain of innovative technology-intensive systems and products, with emphasis on development that cuts across traditional disciplines.

## OVERVIEW

EPD is one of the five majors at SUTD. EPD prepares students for leadership in product design and development, giving them the skills to create a future powered by design. EPD is committed to educational and research excellence, multidisciplinary interaction and close engagement with the industry.

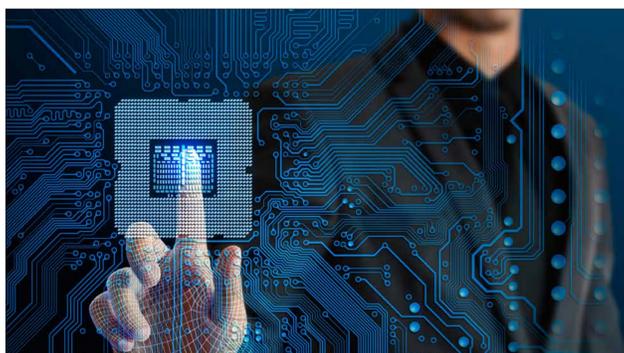
Graduates from this major will find a diverse range of career options including medical product design, prototyping, and manufacturing, rehabilitative and assistive engineering, medical robotics, MedTech entrepreneurship, healthcare consulting, and biomedical research — making a real difference in their chosen field.

## EPD TRACKS



### COMPUTER ENGINEERING

Apply mathematical and scientific principles to the analysis, design, configuration and operation of computer-related systems, such as: electronic circuits, microprocessors, Field Programmable Gate Array, computer networks, network servers, embedded systems, and operating systems.



### ELECTRICAL ENGINEERING

The study, application and product design of electrical, digital, and electromagnetism in the field of analogue and digital electronics, power engineering, communication systems, control systems, signal processing, and wireless technology.



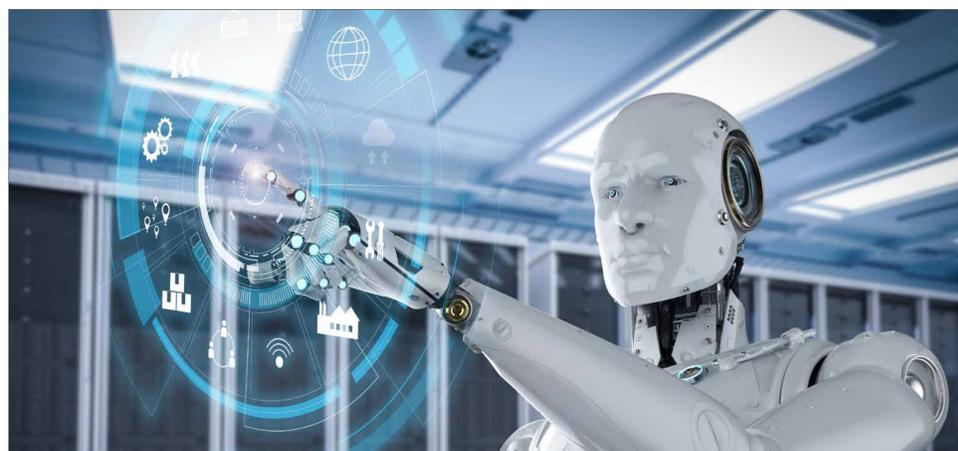
### HEALTHCARE ENGINEERING DESIGN

Apply the design concepts and principles of engineering (e.g. biomechanics, imaging) to healthcare products and applications, such as: surgical tools, surgical robots, lifesaving equipment, monitoring, diagnostic and treatment instruments.



### MECHANICAL ENGINEERING

Be equipped with mechanical concepts, thermal fluid systems, materials science, principles of design and control, and apply them to creative solutions for modern mechanical systems.



### ROBOTICS

Gain knowledge of robotics fundamentals, skills in the modelling, design and development of robotic platforms, insights into their theoretical essentials and the expertise to apply these methods to real world problems.



### SELF-DIRECTED TRACK

Option to design a personalised study plan that will arm you with the necessary knowledge (e.g. Alternative Energy Systems, Materials Science) and skills to pursue unique or non-traditional careers centred around your personal interests.



### BEYOND INDUSTRY 4.0

Combines traditional manufacturing processes and technology to improve automation, communication and use of real-time data. It merges transformational innovations of the manufacturing sectors — from advanced robotics to Industrial Internet of Things — to enable a new, powerful way of organising global operations.