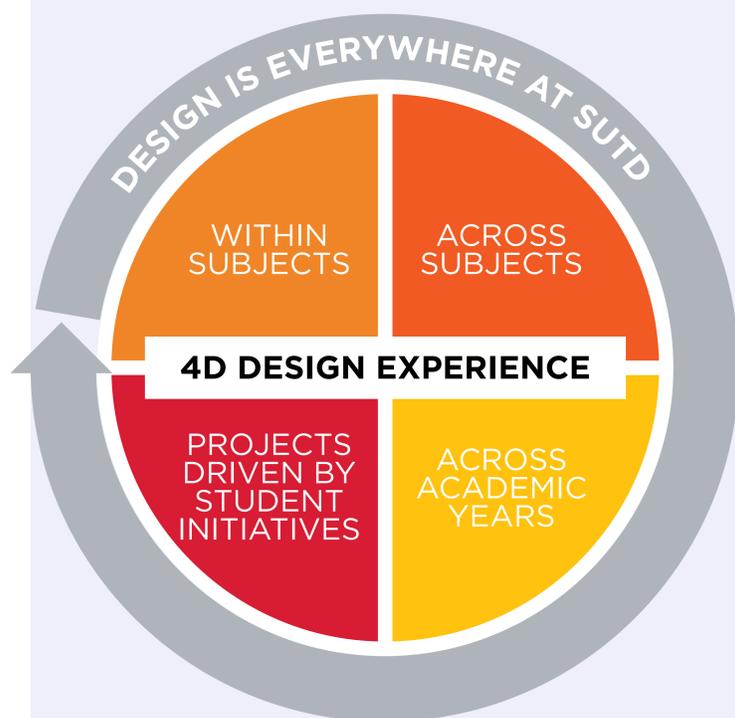


Developing technically-grounded leaders who will contribute to society through technology and design and make an impact on the world.

Our academic programmes are designed with an ‘outside-in’ approach that starts with considering industry’s needs and delves deeply into the challenges the world faces today. Based on the concept that society needs products, processes, systems and services, SUTD is structured not via traditional disciplines, but into five majors (i.e. core areas of focus) that are integrated with the study of Humanities, Arts and Social Sciences (HASS).

4D BIG-D FRAMEWORK



BIG-DESIGN

Design is a critical element in our curriculum. In addition to providing a strong technical grounding, through the Freshmore terms and in the pillars, and cultivating creativity and a perceptive mind through Humanities, Arts and Social Science (HASS), design is literally everywhere at SUTD.

Students are not mere spectators in their own learning in SUTD where a vibrant design and hands-on culture within and outside the classroom is supported by the 4-Dimensional Big-Design (4D Big-D) framework.

1D: In each subject, students develop a full understanding of key “1D” concepts through hands-on and active learning activities.

3D: In the pillar years, foundation knowledge is built upon for deeper technical training and understanding of more advanced concepts. Research and data developed during one term are used and built upon in a subsequent subject in a later term. In addition, students of different specialisations bring prior years’ knowledge and training to solve “3D” Thematic Design Projects.

2D: Once armed with 1D concepts, students begin to make connections across subjects within the same term and apply them in interdisciplinary design projects called “2D” Designettes.

4D: Students make their own opportunities outside of the formal curriculum to explore their design interests, be involved in research, be entrepreneurial and innovate. Examples include Undergraduate Research Opportunities Programme (UROP), Fifth Row clubs such as Electric Vehicle (EV) Club, Mechanical Designer Club, Digital Design and Development Club (3DC) and many more.



CAPSTONE PROGRAMME

A key element of SUTD’s learning philosophy, the Capstone Programme is an integrated design experience spanning across two terms for senior year undergraduate students from the different majors (ASD, EPD, ESD, ISTD, and from 2023 onwards - DAI). A Capstone Project involves students from at least two majors and is a team-based effort of 5-7 students working to solve real-world design challenges from either industry-sponsored or entrepreneurship projects. This design experience crystallises various learnings of a student and gives them a cumulative mastery of all their experiences at SUTD.

The Programme is mostly project-based with short modules that enhance Capstone learning. Each team will have tangible deliverables specific to their project, such as simulation, scale models, functional prototypes, analyses, recommendations and software programmes.

