



ENGINEERING SYSTEMS AND DESIGN (ESD) INDUSTRY COLLABORATION



Students in Engineering Systems and Design (ESD) are trained from Day One to tackle sophisticated real-world challenges, which will nurture them into innovative and technically-grounded professionals. A major part of their training is founded on industry collaborations with our trusted partners. Our goal is to connect you with ESD's expertise and talents, through channels tailored to your organisation's needs.

COMMISSION A PROJECT

Three-month long course projects are crucial tests of every ESD student's ability to put theory into practice. By commissioning a project, you will oversee students with multi-disciplinary capabilities in their process of solving existing problems or innovating alternatives.

Projects are needed in every semester, and can cover topics such as data analytics, optimisation, process analysis/improvement and predictive modelling. We are happy to work with you on specific Non-Disclosure Agreement and Intellectual Property arrangements.

DONATE TO AN AWARD

Focus track and course awards are given to the most outstanding students in their respective areas. Donors will have awards named after them and gain access to the profiles of prospective award recipients. You will also be invited to attend award days and graduation events to present the award to the student winners.

These awards are effective ways to increase corporate visibility and encourage students to consider pathways into your industry.

Currently we offer five focus tracks - Business Analytics, Financial Services, Operations Research, Supply Chain and Logistics, and Urban Infrastructure Systems - as well as more than 25 courses. We appreciate donations in the following forms:

- A minimum of \$5,000 per year for focus track awards
- A minimum of \$2,500 per year for course awards

CONDUCT A SEMINAR

Industry leader seminars inspire talented students to consider pursuing a career in your sector. Senior executives from various fields are invited to share their vision and wealth of expertise with students, researchers and faculty members alike. Through these seminars, students learn about the latest developments in industry and discover possible career pathways.

DELIVER A LECTURE

Guest lectures supplement our rigorous curriculum. Through these lectures, you will be able to engage with our students personally by sharing real-world insights, broadening student perspectives of their curriculum content and enlivening the classroom with different points of views in the process.

HOST A FIELD TRIP

Field trips and site visits provide students with a better understanding of and appreciation for your organisation. By hosting trips, you will be able to share about your operations, work culture and environment to the right candidates with the interest and technical know-how to join your workforce after graduation. Such trips help to reinforce students' classroom learning by offering practical insights through observing real-world system engineering challenges.



ABOUT ESD

Engineering Systems and Design (ESD) is one of four academic pillars at SUTD. The ESD pillar focuses on the study of large-scale complex systems whose performance and function depend both on the technology and the socio-economic context within which they operate.

Our ESD graduates are equipped with core skills in probability, optimisation, statistics, modelling, analytics and economics. In addition, they have in-depth knowledge in specific application areas such as business analytics, operations research, financial services, supply chain and logistics, and urban infrastructure systems, depending on the elective courses they have taken.

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EXAMPLES OF INDUSTRY PROJECTS

Crowd Flow Modelling at MRT Interchange Station

Dynamic Pricing for Car Club Operations

Taxi Boarding Operations Efficiency

Which Products Sell Well with Each Other in a Store

Time Study of Packing Process in Distribution Centre Asia

Paediatric Ultrasound Process Analysis

Cost and Environmental Benefits of Recycling vs. Incinerating Food Waste

Predictive Model for Air Freight Volumes/Pricing from Asia

Maximise Revenue per Available Time-based Unit

Inventory Cost Optimisation for Keppel Warehouse

Improving Order-picking Efficiency

Preventive Maintenance Optimisation to Reduce Bus Breakdown Rate and Minimise Maintenance Cost

Data Mining to Predict Operational Outcome

Defects Anticipation during Check Maintenance for B777 Aircraft

Simulating Train Seat Capacity

Site Selection for Retail Stores

PARTNERS

Accenture Pte. Ltd.

Car Club Pte. Ltd.

Changi Airport Group

Google

Infineon Technologies

KK Women's and Children's Hospital

National Environment Agency

Panalpina

Park Avenue Hotels & Suites

PSA Corporation Limited

RedMart

SBS Transit

Sembcorp Industries Limited

SIA Engineering Company

SMRT Corporation

Teralytics Pte. Ltd.

WHAT OUR INDUSTRY PARTNERS SAY

“ What the students have done is quite amazing and things are very practical. It gives us new ideas on how to improve our business and how to fine-tune some of our business models to match the customer demands.

Lewis Chen, General Manager,
Marketing and Operations, Car Club

“ I am personally very impressed with what the students from SUTD ESD have done. We're so impressed that we are hoping that some of these students will actually go on to join us as interns in the coming summer or even join us as full-time employees.

Lin Zhihao, Head of Asia, Teralytics