THE DYSON INSTITUTE

Module Information for 2021

dyson

Module information *Summer Series*	
Name of module	Summer Series (Year 1)
Short description and aims of module	The year 1 summer series give Undergraduates a chance to take ownership of a project and develop their engineering toolkit and leadership skills. The undergraduates will seek investment for their projects by pitching their ideas to the Institute management team. If successful they receive funding and build a team of approximately five undergraduates to develop and deliver their concept. In addition to developing their concept a number of workshops are delivered to develop their engineering skills and assist in the delivery of their project. At the end of the Summer Series they present their projects to the Institute management team.
Learning outcomes of the module *What will a student have learnt and what skills will they acquire on completion*	• Apply ideation techniques to develop and then critically assess their concepts • Develop a project plan and project implementation document • Use sketching as method to communicate their ideas • Collaborate in a team of peers to develop technology • Communicate the outcomes from the project to a team
Method of assessment and weighting attributed to each area of assessment	End of rotation poster assessed to check work meets Learning Outcomes Logbook of learning maintained by student and collated at end of rotation

Name of module	**Summer Series (Year 2)**
Short description and aims of module	The year 2 summer series gives our Undergraduate Engineers an opportunity to run a project to a brief provided by the wider Dyson organisation, usually on a not-for-profit, or CSER-related subject. The aim is for the Undergraduates to apply the engineering tools they have developed so far, while taking more direct ownership of the project to allow them to develop their leadership skills The undergraduates divide themselves into functional teams to develop and deliver a system to meet a business or customer need. They lead the management of the project and technical delivery. At the end of the Summer they will have a chance to test their system and present results to senior stakeholders.
Learning outcomes of the module *What will a student have learnt and what skills will they acquire on completion*	• Undertake engineering activities in a way that contributes to sustainable development. • Solve problems across system boundaries • Manage the delivery of a project, taking responsibility for timelines and resources. • Own a project/part/system and understand the challenges of integrating systems to create a physical product
Method of assessment and weighting attributed to each area of assessment	End of rotation poster assessed to check work meets Learning Outcomes Logbook of learning maintained by student and collated at end of rotation

Name of module	Summer Series (Year 3)
Short description and aims of module	The whole cohort will travel to SEA, Dyson's manufacturing base, for between 6 and 8 weeks, provided that international travel is possible. From their base in Singapore/Malaysia, Undergraduates will experience the challenges associated with managing projects across time zones and cultures. Undergraduate Engineers will gain first-hand experience of modern manufacturing processes and the challenges associated with transitioning from product design to production. Working as part of an international, interdisciplinary team, Undergraduate Engineers will follow a product's life-cycle from UK RDD to SEA RDD.
Learning outcomes of the module *What will a student have learnt and what skills will they acquire on completion*	• Build awareness of the full product lifecycle and how early stage design decisions impact the manufacturing process. • Understand the global nature of modern technology business • Communicate effectively across multicultural teams • Understand how products are manufactured and assembled and the impact on sustainability
Method of assessment and weighting attributed to each area of assessment	End of rotation poster assessed to check work meets Learning Outcomes Logbook of learning maintained by student and collated at end of rotation