Programme Schedule : Exploring New Space Technologies and Applications

Week 1	Time	Activities
Day 1 8-July-2019	8.30am	Gather at Residential College
	9am	· Opening Address · Ice-breaking session · Introduction of satellite systems and their applications
	12.30pm	Lunch
	2pm	NUS Campus Tour (Kent Ridge + Bukit Timah Campus)
Day 2 9-July-2019	9am	Space Environments & Orbits
	12.30pm	Lunch
	2pm	Students will be divided into two groups · System Tool Kit (STK) Simulations · Group Discussions on space activities in different countries
Day 3 10-July-2019	9am	Attitude Determination and Control Subsystem (ADCS)
	12.30pm	Lunch
	2pm	Students will be divided into two groups · System Tool Kit (STK) Simulations · Group Discussions on projects (project brief to be given)
Day 4 11-July-2019	9am	· Electrical Power Subsystem (EPS) · Thermal Subsystem
	12.30pm	Lunch
	2pm	· Visit to the Center for Remote Imaging, Sensing and Processing (CRISP) · Visit to Satellite Research & Technology Center (STAR)
Day 5 12-July-2019	9am	On-Board Computer (OBC)
	12.30pm	Lunch
	2pm	Visit to Singapore NEWater Center (to be confirmed)
	5.30pm	Evening Barbeque (Venue to be announced)
13 & 14 July		Weekend to explore Singapore at your own leisure

Week 2	Time	Activities
Day 6 15-July-2019	9am 12.30pm 2pm	Structure & Mechanisms Lunch Lunch Workshop on 3D Printing and Laser Cut (Making Team Logo)
Day 7 16-July-2019	9am to 5pm	Sights and Sounds in Singapore (tour of famous landmarks)
Day 8 17-July-2019	9am 12.30pm 2pm	Tracking, Telemetry and Command (TT&C) Lunch Project Discussion & Implementation
Day 9 18-July-2019	9am 12.30pm 2pm	Assembly, Integration & Verification (AIV) Lunch Project Discussion & Implementation
Day 10 19-July-2019	9am 12.30pm	Project Presentation and Award Ceremony Lunch Farewell

Programme Schedule : Design Thinking for a Better Designed World

Date	Time	Activities
Day 1 23-July-2019	8.30am	Gather at Residential College
	9.00am	· Opening Address · Ice-breaking session · Introduction of Design Thinking Summer Programme
	10.30am	Break
	11.00am	Design Thinking Bootcamp: Design a Better Experience for Your Design Partner
	12.30pm	Lunch
	2.00pm	Interview and Observation
	3.30pm	Break
	4.00pm	Hands-on: Interviewing Users
	5.30pm	Debrief
Day 2 24-July-2019	9.00am	Hands-on: Post-Interview Downloading
	10.30am	Break
	11.00am	Persona and Jobs to Be Done (JTBD)
	12.30pm	Lunch
	2.00pm	Defining a Problem: Affinity Clustering and How Might We
	3.30pm	Break
	4.00pm	Ideation: POEMS and Creative Matrix
	5.30pm	Debrief
Day 3 25-July-2019	9.00am	Visit to Urban Development Authority (URA) City Galery Q&A with City Planner
	12.30pm	Lunch
	2.00pm	Guided Tour to Red Dot Design Museum
	5.30pm	End of Tour
Day 4 26-July-2019	9.00am	Formulating Solution
	10.30am	Break
	11.00am	Prototyping Workshop: Low-Fidelity Prototype
	12.30pm	Lunch
	2.00pm	Hands-on: Prototyping

	3.30pm	Break
	4.00pm	Hands-on: Prototyping
	5.30pm	Debrief
Day 5 27-July-2019	9.00am	Testing with Users
	10.30am	Break
	11.00am	Show and Tell Preparation
	12.30pm	Lunch
	2.00pm	Show and Tell
	3.30pm	Break
	4.00pm	Show and Tell
	5.30pm	Wrap Up
	6.00pm	Evening Barbeque (Venue to be announced)

Announcing 2 Summer Programs
@ National University of Singapore

Program 1 : Exploring New Space Technologies & Applications

In this program, we will cover some basic knowledge of satellite applications, satellite motions in space, different types of satellite orbits, mission simulations, functions of satellite systems and subsystems, and design qualifications and philosophies. You will work in groups to discuss mission planning and satellite design. You will have the opportunity to construct the mockup of your own satellite using 3D printing and other construction materials.

This program is suitable for anyone who is interested to discover space technologies. No pre-requisite knowledge is expected other than some high school science.

Time :   2 weeks from 8-19 July 2019

Cost : SGD 1550 (includes accommodation and some meals)

Program 2 : Design Thinking for a Better Designed World

Design is typically associated with aesthetics and the arts. However, the drive for innovation has made designers more aware of the need to create products that meet the needs of users. Design Thinking is an iterative process to systematically extract information, construct insights and develop solutions for ill-defined problems. It is one of the strategies to enable organizations to innovate. Participants will learn and apply Design Thinking through projects. You will observe and interview users, design in studio settings, test your designs with users, and experience innovating in a design team.

Time :   1 week from 22-26 July 2019

Cost : SGD 1000 (includes accommodation and some meals)

Both programs will be conducted at NUS, including accommodation. Field trips and some visits will be organized.

Application deadline: 5 June 2019

Contact : A/Prof Loh elelohap@nus.edu.sg