UNISEC-Hands-on Training during the pandemic

ARLISS and CLTP

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ARLISS 1999-2019
A Rocket launch for International Student Satellites

• CanSat experiment and competition
  – AeroPAC (amateur rocket group) provides rockets (up to 4 km) in Blackrock desert, Nevada, USA
  – About 100 students attended from Japan every year and students from more than 10 countries joined.

No ARLISS in 2020
Not sure In 2021

Ken Biba of AeroPAC will present ARLISS on March 20
CanSat Experiment in Asagiri plateau in Shizuoka (near Mt. Fuji) in 2020 Dec

- UNISEC-Japan students found a new location for CanSat experiments in Japan.
- Using balloon for “launch.”
- What is needed should be considered with innovative, imaginative spirits.
CanSat Leader Training Program (CLTP)

**Objective:** CLTP is a training program for professors/instructors to learn how to conduct CanSat (or HEPTA-Sat) training by experience. Participants are expected to teach their students after training. It has contributed to capacity building in basic space engineering and technology.

**Launched:** October 2010 (1st CLTP was held in 2011)

**Offered:** Annually

**Graduated:** 96 participants from 46 countries
CLTP History & Participants (1)

CLTP1 (Wakayama Univ. in Feb-March, 2011)
12 participants from 10 countries, Algeria, Australia, Egypt, Guatemala, Mexico, Nigeria, Peru, Sri Lanka, Turkey (3), Vietnam.

CLTP2 (Nihon Univ. in Nov-Dec, 2011)
10 participants from 10 countries, Indonesia, Malaysia, Nigeria, Vietnam, Ghana, Peru, Singapore, Mongolia, Thailand, Turkey.

CLTP3 (Tokyo Metropolitan Univ. in July-August, 2012)
10 participants from 9 countries, Egypt (2), Nigeria, Namibia, Turkey, Lithuania, Mongolia, Israel, Philippines, Brazil.

<2013~ iCanSat kit CLTP4-7>
CLTP4 (Keio Univ. in July-August, 2013)
9 participants from 6 countries, Mexico(4), Angola, Mongolia, The Philippines, Bangladesh, Japan.

CLTP5 (Hokkaido Univ. in Sept 8-19, 2014)
7 participants from 5 countries, Korea (2), Peru, Mongolia, Mexico (2), Egypt.

CLTP6 (Hokkaido Univ. in August 24-Sept4, 2015)
8 participants from 8 countries, namely Angola, UN(Austria), New Zealand, Tunisia, Turkey, Egypt, Bangladesh, Mexico

CLTP7 (Hokkaido Univ. in Sep 21 - Oct 1, 2016)
8 from 7 countries, namely Egypt, Myanmar, Peru, Nepal (2), Mongolia, Serbia, Dominican Republic
Training Programs: Educational Kits

HEPTA-Sat
(CLTP8-10, HEPTA-Sat Training Workshops)

i-CanSat (CLTP3-7, CTP)
CLTP History & Participants (2)

<2017~ HEPTA-Sat Kit: CLTP8-10>

CLTP8 (Nihon Univ. in Sep 7 - Sep 16, 2017)
9 from 7 countries, namely Bolivia, Egypt, El Salvador, Malaysia, Nepal, Turkey (+Japanese Students)

CLTP9 (Nihon Univ. in August 20- August 31, 2018)
8 from 6 countries, namely Argentina, India, Japan, Malaysia, Mongolia, UAE (+Japanese participants for 3-day teaching practice)

CLTP10 (Nihon Univ. in August 19-August 30, 2019)
15 from 11 countries, namely Australia, Bhutan, Bulgaria, Cambodia, Colombia, Kenya, Morocco, Myanmar, Peru, Rwanda, Zimbabwe

96 participants from 46 countries

No CLTP in 2020
Not sure In 2021

Congratulations!
Online Hands-on Training?

• Developing HEPTA-Sat Lite (simple kit)
• Planning to develop online course material
• Hardware prototype – slow development
  – Original plan – August in 2020
  – Reality – March in 2021?
• What is Online Hands-on Training?
  – Hardware delivery to participants?
  – Remote teaching through internet?
  – Realtime teaching or recorded teaching?
  – Is it effective?
Guiding Principles for UNISEC-Global

1. Be honest regarding project feasibility – openly recognize the technology and schedule risks that may impact success.

2. Build a system that can work as designed in an environment where subsequent fixing is impossible.

3. Only when you did your best to succeed, you could learn something even if you failed.

4. Remember that there are rules that you must follow – from the Outer Space Treaty to through internal rules in your project.

5. Refer to the achievements of others in the past and build your own achievement on that background.

6. Setup appropriate and realistic targets considering your capability and capacity.

7. Recognize the pressure in other team members working to demanding deadlines on challenging projects; support and help reduce their stress wherever possible.

8. Evaluate your results realistically and reflect them to your subsequent activities.

9. Use imaginative and innovative ways of achieving the maximum result using available personnel, technical and financial capabilities even if they are limited.

10. Identify and work with your rivals and compete to stimulate innovation & mutual growth.

11. Recognize other people's successes and use these to stimulate yourself further.

12. Respect a spirit of mutual assistance. Seek ways to contribute to others, not only seeking help for yourself.

Let’s get out from a small box and be innovative and imaginative!

http://www.unisec-global.org/guidingprinciples.html