Panel Discussion: International Space Education using Nano-Satellites

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Space Education

- Aerospace Engineering Department, Cairo University established in 1938
- Egyptian Space Program is running by NARSS (1999 ~)
- B.Sc. in Space Engineering is Elective
- Ph.D. & M.Sc. in Space Engineering
- Lack of Practical Space Engineering Projects.
Mission Idea Contest for Micro/Nano Satellites Utilization

CLTP-1

CLTP-3

Number of Submitted Idea

- Category-1
- Category-2
- Finalist

MIC-1  MIC-2
CanSat Training Program (CTP)

For everything there is a start …

- CTP–I (July 15 – 31, 2011) – 17 Students
- CTP–II (Feb. 4 – 9, 2012) – 9 Students
Students Activities
R&D Projects

- Advanced CanSat
- Development of Simple Ground Station
- CanSat Launcher
  - QuadRotor
  - Balloon
- CubSat Subsystems
  - Communication
  - C&DH
  - ADCS
  - Payload
  - Structure
  - EPS
Advanced CanSat Project

- Rover-Back CanSat
- Fully Autonomous
- Schedule to Join Arliss 2013

1st & 2nd Conceptual Models (CM)

3rd CM
EM
FM
UNISEC-Egypt

UNISEC-International and Needs to Establish UNISEC-Egypt
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Challenges

- Lack of team work experience
- Dedicated management board
- Legal entity
- Sustainable funding
Our Future Plans

- CTPs will be mandatory to all AE students.
- Work on National CanSat Competition.
- Second round for UNISEC–Egypt meeting.
- More advanced projects (e.g. Comebacker CanSat, CubeSat, ⋅⋅⋅etc).
Thank You