

Thailand

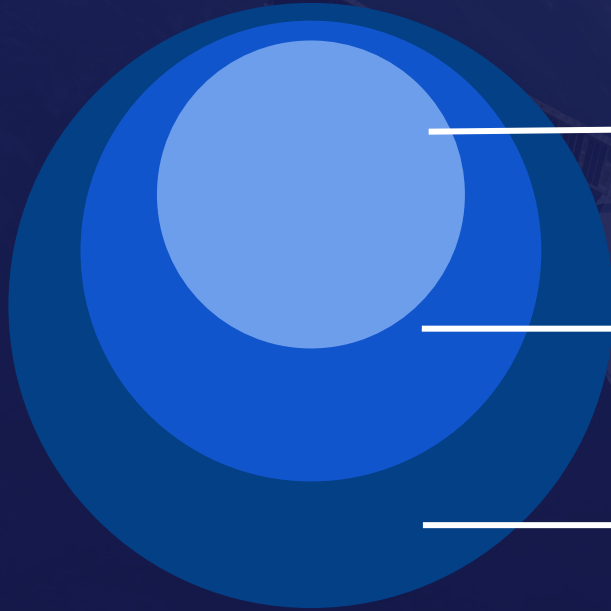
Our Mission and Vision

To **develop human resource** for Thai's space industry ecosystem.

To **elevate capabilities** of Thai space industry workforce to **international standard**.



Target Group Demographics



Serviceable Obtainable Market: 170 K
Bachelor + Master degree students in
Engineering, Science, and Technology



Serviceable Available Market: 2.1 M
All Bachelor + Master degree students



Total Available Market: 3.7 M
All College + High school students



Approaching Strategy

Understand essential space industry context via UNISEC Thailand workshops and projects.



Student Lv.1





4 Years in University



Student Lv.99



Acquire fundamental knowledges and skills for each specific occupation from university classes.

Key Results:	<ul style="list-style-type: none"> - 5 universities - 50+ members - 1 Space project documentary - 3+ Space related research journals 	<ul style="list-style-type: none"> - 10 universities - 100+ members - 1 Scientific payload or technology demonstration - 1 Team Funding 	<ul style="list-style-type: none"> - 20 universities - 300+ members - First nano satellite - Open source study materials - Online courses 	<ul style="list-style-type: none"> - 50 universities - 1000+ members - Participate in Artemis - 1 Deep space exploration project
	<p>150 K (TBH)</p> 	<p>500 K (TBH)</p> 	<p>2 M (TBH)</p> 	<p>5 M (TBH)</p> 
Theme Year:	2021 Set the Norm	2022 Catching Dreams	2023 Escape the G	2024 Moon Shot

UNISEC-Thailand Activities

MIC 7th



The 7th
**Mission
Idea
Contest**

For Deep Space Science
and Exploration

National Qualification Round



THE 7TH MISSION IDEA CONTEST
FOR DEEP SPACE SCIENCE AND EXPLORATION WITH NANO/MICRO SATELLITE

UNISEC Thailand

**OPEN REGISTRATION
TODAY - 14 MARCH 2021**

ABSTRACT SUBMISSION

MISSION OBJECTIVE
CONCEPT OF OPERATION
KEY PERFORMANCE PARAMETER
ADDITIONAL CONSIDERATION (OPTIONAL)
REFERENCE

VIDEO IDEA PRESENTATION (3-5 MINUTES) - TH/EN

FOR DETAILS

UNISEC THAILAND 

2
FEB

Open Registration

Close Registration and
Abstract Submission

28
MAR

4
APR

Semi-Finalist Announcement
14 Teams

Semi-Final Submission

2
MAY

9
MAY

Finalist Announcement
5 Teams

Final Submission

9
JUN

28
JUN

Final Presentation
@NARIT, Chiang Mai

Sputnik Bootcamp

2-days bootcamp for students who are interested in working in space industries. This activity covers some of fundamental knowledge about space and future path for space related careers.



UNISEC Thailand
University Space Engineering Consortium

SPUTNIK BOOTCAMP

ค่ายसानฝันนักวิศวกรรมอวกาศสำหรับผู้เริ่มต้น

ไม่มีพื้นฐาน
ด้านอวกาศ
ก็สามารถสมัครได้

ขอเชิญชวน น้อง ๆ ม.ปลาย และนักศึกษาทั่วประเทศไทย
มาร่วมออกเดินทางสู่อวกาศไปพร้อมกับ
วันที่ 10-11 เมษายน 2564

REGISTER NOW

QR CODE

INSTED NARIT

UNISEC Thailand
University Space Engineering Consortium

Talk เล่าประสบการณ์การแข่งขัน
MISSION IDEA CONTEST



พินิต



พีธีร์

ผู้เข้าร่วมการแข่งขัน MIC ครั้งที่ 6

วันอาทิตย์ที่ 7 กุมภาพันธ์ 2564 เวลา 14.00 - 16.00 น.

 LIVE UNISEC-Thailand

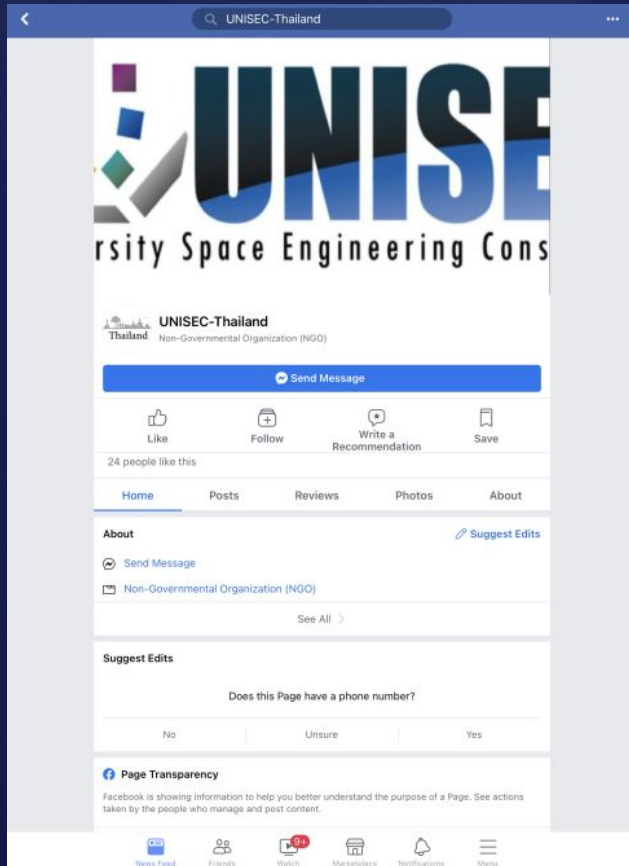
Inspiration Talks

This activity brought experts in fields of space closer to people. Usually, they talked about what do they do for their job or how to become like them or why did they choose to do this job.

Academic Contents

We wrote space related contents then post them on our Facebook page. The purpose is to clarify some of the misconceptions about space or simplify some deep knowledge so people will feel more intuitive reading them.





Facebook Page UNISEC-Thailand



Website
unisec-thailand.org





Thailand Space Activities



- Development of satellite bus system
- Development of ground control segments
- Assembly Integration and Test (AIT)



Design &
Development of
spacecraft and
mission payloads



Space
environment
testing facilities



Human capacity
building (students)
& outreach



Startup
Incubation



SPACETH.CO

SPACE ZAB

N3SPACE



MP SPACE CORP



THAICOM

Private and Startups

Development of space-related companies and products ranging from space news blog to satellites design, manufacture, assembly, integration and test to fabricating lunar regolith simulant.

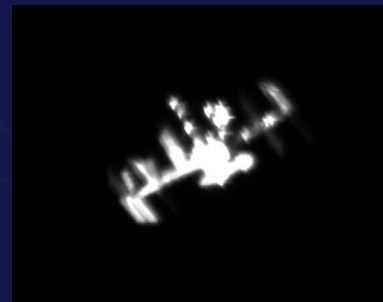
Space Situation Awareness

There is 0.7 meter optical aperture telescope at National Astronomical Research Institute of Thailand (NARIT), which is the one of Thai Robotic Telescope (TRT), to observe the space object.

If you need more information and join our project, please contact to phongsakorn@narit.or.th



0.7 meter optical aperture telescope



ISS captured on July 16th, 2019

Thailand CanSat-Rocket Competition

CanSat Competition for high school students
held by National Science Museum (NSM)
since 2017

<https://www.facebook.com/CanSat-Rocket-Thailand-285104665569883/>



SPACE FIGHT



1st PAYLOAD DESIGN COMPETITION

รับสมัครทีมเข้าร่วมการแข่งขัน
ตั้งแต่วันที่ - 6 มกราคม 2564

ผู้ชนะจะได้ส่งผลงานขึ้นไปสู่อวกาศ

"สร้างสรรคดีไทย สู่อวกาศแต่เอื้อกัน"





คุณสมบัติผู้เข้าร่วมการแข่งขัน (เบื้องต้น)

1. นักเรียนหรือนักศึกษาศึกษาอยู่ในด้านเทคโนโลยีอวกาศ และกำลังศึกษาในขั้นต้นปริญญาตรี
2. จำนวนสมาชิกในทีม 3 คน และมีวิทยากรและ 1 คน

 @spacefight.th
  @spacefight.th
  spacefight.th@gmail.com

SCAN ME !!



"One Satellite Multi-Payload"

Bus System




- Communication
- OBC
- EPS
- Antenna

Multi-Payload (10 Slots)

- Designed and developed by users

Space-Proven Parts

3U CubeSat Multi-Payload Platform
Designed and developed by

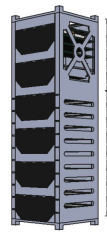
  

Ride-Sharing Concept

Shared Launch and Testing Fees Among Riders

Fully Supports on License and Safety Review

Focused on Payload Development Not Satellite Development



1st SpaceFight Payload Competition

1st Payload Design Competition in Thailand

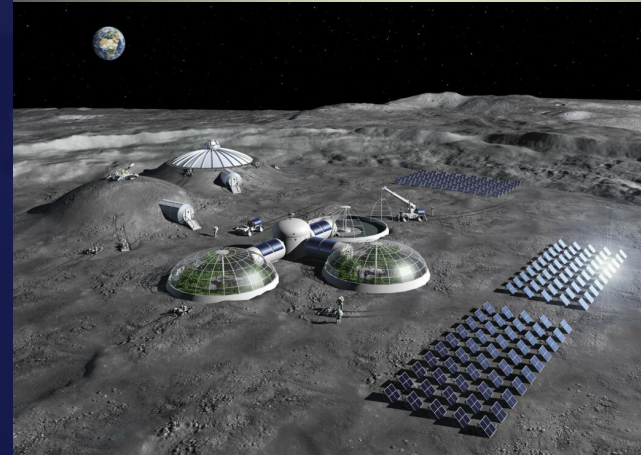
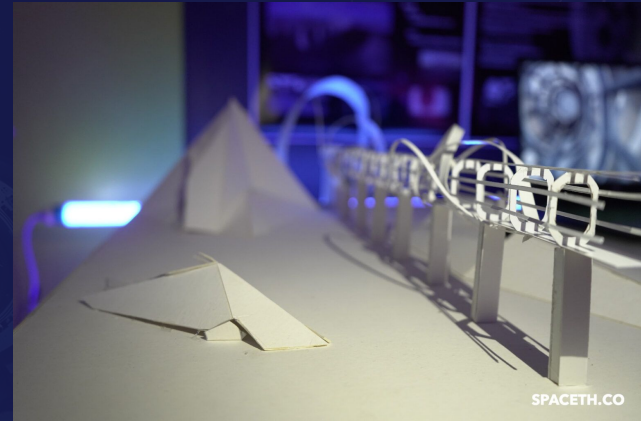
- The winner will be launched to space using Multi-Payload CubeSat Platform (MPCP)
- Launch in Q1 2022

<https://www.facebook.com/spacefight.th>

SPACE*LAB: Lunar Architecture

Collaboration workshop between Spaceth.co
with School of Architecture, Bangkok
University under the challenge to design
facilities on Lunar surface

<https://spaceth.co/bu-arch/>



Design Contest Convenience Store on Mars

Collaboration workshop between Spaceth.co with Faculty of Architecture, King Mongkut's Institute of Technology Ladkrabang (KMUTL) the challenge to design facilities on Lunar surface
<https://www.facebook.com/archkmitl/>





BCCSAT-1

The World First Educational Multispectral
Cube-sat Build By High-School Student

BCCSAT-1

- First multispectral camera cubesat developed by high-school student
- Launch: 20th March 2021 by Soyuz-II at Baikonur Cosmodrome, Kazakhstan
- Ground station located at Bangkok Christian College
- Callsign: **HSOW**
- Uplink 145.880 MHz band (VHF)
- Downlink 435.635 MHz band (UHF)

<http://bccsat.bcc.ac.th/>





Space Related Research

Thai Lunar Simulant (TLS)

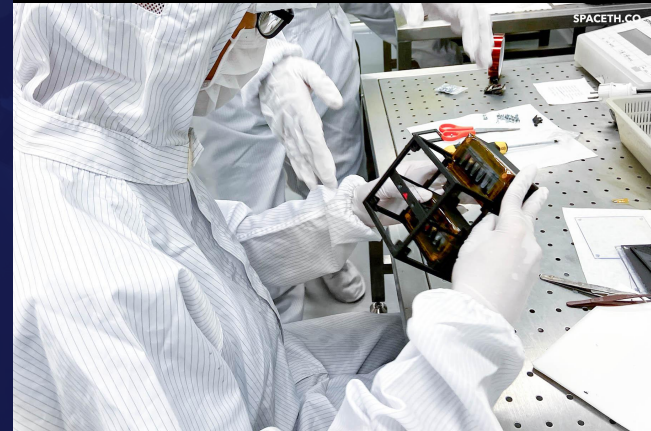
Thai Lunar Simulant is a lunar regolith simulant developed by Spacezab company based on samples from Apollo projects.
<http://www.spacezab.com/tls/>



Molecular Encoded Storage for Space Exploration (MESSE)

The Molecular Encoded Storage for Space Exploration explores the possibility of preserving human knowledge in space DNA by implementing an algorithm to encode the musical notation into DNA storage and launch the pieces of DNA into space on a sub-orbital flight.

<https://spaceth.co/messe/eng/>



Members



Person of Contact



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National Astronomical Research
Institute of Thailand (NARIT)

phongsakorn@narit.or.th

Student Council



Book

President



Tan

Vice President



Boom

Event Organizer/Secretary



Meen

Activity Leader



Min

Art Director



Tantan

Graphic Designer/Accountant



Neo

Media Director