SEE6999 Dissertation

Dr. Wen ZHOU
1. Long term changes in diurnal temperature range in Hong Kong

Dr. Keith NGAN
2. Orographic enhancement of precipitation in Hong Kong

3. Sub-kilometre Simulation of Terrain-disrupted Airflow at the Hong Kong International Airport

Dr. Nicky LAM
4. Environmental Impact Assessment for the Purposed Municipal Incinerator in Hong Kong

Dr. Zhi NING
5. Charting the unknowns in urban air pollution using Quadropter-based miniature air sensing system

6. Catch the on-road polluters using roadside “plume sniffer“ based on real time Gaussian fitting algorithm
Dr. Patrick LEE

7. Development of DNA sequencing algorithms for analyzing biofuels-producing systems

Dr. Alicia AN

8. Evaluating the potential of Multi-sourcing urban water harvest approach (seawater harvest, rainwater harvesting and wastewater reclamation) in Hong Kong

9. Zero-Food waste Town Development


11. Greenhouse gas accounting in Waste Sector in Hong Kong
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**Dr. Denis YU**
12. Polymer electrolyte for battery applications
13. Diffusion study in thick electrodes
14. Fast charging anode material development

**Dr. Walid DAOUD**
15. Renewable energy generation and storage: Device fabrication and characterization
16. Self-cleaning materials and surfaces via nanotechnology

**Dr. Wey Yang TEOH**
17. Solar conversion of carbon dioxide to hydrocarbons
18. Photocatalytic degradation of endocrine disrupting chemicals in drinking water
19. Designing quantum dot-sensitized solar cells
20. Single cell PCR amplification in microfluidic device
SEE6999 Dissertation

6 credit units course over *two consecutive semesters*

Research type studies – Physical experiments, theoretical calculations, computational simulations, social studies

**First semester:**

Research proposal (with literature review) – Due Week 13

*Identify hypothesis*

**Second semester:**

Lecture series

Dissertation thesis (80 marks) – Due Week 17

Seminar (20 marks) – Week 18
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Three short lectures in the second semester:

1. Facts and myths of scientific research

2. To think out of the box, where is my box?

3. To write a fine thesis

Non-compulsory attendance. But based on track record, students who attend the lectures obtained higher marks

To help students meet expectations of Dissertation thesis
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Assessment criteria in Dissertation thesis (Total 80 marks)

1. *Clarity in written communication* (25 marks)

2. *Literature survey* (15 marks)

3. *Literature presentation* (10 marks)

4. *Experimental approach* (15 marks)

5. *Data analyses* (15 marks)

Each Thesis is marked by the Primary Supervisor and an independent Second Assessor

The difference in assessments should not be more than 10 marks
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Presentation at the end of second semester

Assessment criteria in Seminar (Total 20 marks)

1. Flows and style of presentation (8 marks)
2. Ability to communicate complex findings (6 marks)
3. Time keeping (2 marks)
4. Response to questions (4 marks)

To be assessed by all SEE faculty members present
Steps to getting enrolled in SEE6999

1. Identify supervisors and topics

2. Supervisors agree to supervise candidates on designated topics

3. Enrolment of SEE6999 through Miss Yu Ying Wai Deadline Friday 5 Sept 2014

4. Supervisors are allowed two Dissertation candidates per semester

Myth: That conducting a Dissertation is easier than studying two 3 credit unit courses
Expectations of Dissertation

- Weekly meeting with supervisor with sufficient update on progress – *self discipline essential*

- A thesis with sufficient academic rigours and critical analyses, as guided by supervisor

- Plagiarism is a guarantee failure!

- Dissertation thesis is not just a lab report or mini project – it is a course on its own

- For lab users, compulsory strict compliance with SEE safety protocols as advised by Safety Officer