RS&GIS Guideline for Student Research/ Thesis / Dissertation

Research / Thesis / Dissertation Organizing: Regulations and Practice

1. **Fixing Schedule**
   Students are instructed to meet the advisor regularly and consult about the defense schedule. Once the schedule has been fixed, students are requested to submit the report to all committee members.

2. **Report Submitting**
   2.1 Proposal defense report (hard/soft copy): Must be submitted to all committees at least **3 working days** prior to defense.
   2.2 Progress defense report (hard/soft copy): Must be submitted to all committees at least **5 working days** prior to defense.
   2.3 Final defense report (hard/soft copy)
   - Must be submitted to all committees at least **7 working days** prior to defense.
   - Must be submitted to RS&GIS staff for format checking at least **5 working days** prior to last day of clearance. Students do not have wait for completing final defense for completing this process. **It is student's responsibility to prepare reports which comply with AIT style guide.** (Sample thesis are available at http://rsgis.ait.ac.th/main/current-students/)

   The schedule will be automatic cancelled if the report could not be submitted by the deadline.
   Students are advised to check spelling through Microsoft or free online resources such as https://www.grammarly.com/ and https://www.gingersoftware.com/

3. **Venue Booking**
   Once the schedule has been fixed and confirmed, students are instructed to forward the confirmed communication to sky@ait.ac.th. Once the email confirmation has been received, the announcement and invitation will be sent out. The exam venue will be automatic booked and the official form will be prepared. The following details should be included in the request mail.
   - Research/ Thesis topic
   - Confirmed schedule (Study area, Date and Time)
   - Committee members

   Students are instructed to ensure that the Exam Venue and the it's instruments are working properly and ready for the presentation. (Instructions for Tele Conference via Zoom Meeting are available at LINK)

4. **Gentle Reminder**
   Students are instructed to forward the email invitation to all committee members as a gentle reminder one day ahead before the exam. Students must check inclusion of information on topic, date, time and venue in the email.

5. **On Presentation Day**
   - Students must check projector and compatibility with their laptop/ computer prior to scheduled presentation time.
   - A hard copy of presentation should be printed for each committee member.

Research Budget (Advance and Settlement): Regulations and Practice

1. **Eligible Items**
   1.1. Transportation expenses
   1.2. Field work assistant. Number of field assistant must correspond to the research plan and range of field, should be approved from committee.
   1.3. Accommodation
   1.4. Photocopies/ Map /Stationary equipment
   1.5. Lab Equipment /Technical Test/ Service (**The comparison prices from at least 3 distributors are required**)
   1.6. Training/Workshop Fees (**Must relate to research study and be approved by Advisor**)
   1.7. Rental Fee Cloud Services
   1.8. Courses Online (Must be relevant to research topic and request must be made through RSL manager)
   1.9. Book, e-Book, English checking (Must be relevant to research topic and request must be made through RSL manager, for maximum of THB 3000)

2. **Eligible with Return Conditions**
   The following list of Equipment are under Eligible with return condition. Before purchasing, student needs to consult and get approval from Advisor, otherwise, it will be considered as an ineligible item. After purchasing, student is expected to return to RSGIS-AIT within one week (atleast) after the final exam.

   2.1. Development Board/ Sensor
   2.2. Data Purchase/ Satellite image purchase (Only from agencies and companies)
   2.3. Electronic equipment Cost > 2,000 THB
   2.4. Computer Server
   2.5. Network equipment
   2.6. Camera/Lens
   2.7. External Hard Disk
   2.8. Other: Any other special items must be requested in advance and on approval of the advisor, by submitting a memo.

   All expenses must be related to the research topic (objectives) and study area and must be approved by the advisor. All receipts of those eligible items must be in English language or have English translation. Study area and date of issue must be within the duration of data collection period and **not before the date of proposal exam**. All expense is maximum limit with AIT P&P. Any other items than these must be proposed with memo and supporting documents which should be approved by Advisor and DPCC in advance.

3. **NOT Eligible Items**
   3.1. Personal Computer/Laptop/ Monitor
   3.2. Upgraded and Repairing Computer/Laptop/Monitor, Graphic
   3.3. Personal Storage e.g., Flash drive
   3.4. ANY Personal usage equipment
   3.5. External consultation fees/ service (personal)
   3.6. Stationeries

4. **Process of Advance**
   Students are instructed to submit the budget request form (could be download from RSGIS website) along with a supporting document within one week, after the completion of the proposal defense. The document should contain a brief abstract, brief methodology, activities schedule plan, approved budget, a copy of bank book (SCB only). Guideline to prepare budget is attached in Appendix A.

5. **Process of Settlement**

To settle the expenditure, the final list of items with breakdown (same in Appendix A can be used) with the **ORIGINAL** receipts of those approved eligible items must be submitted **(No receipt-No approval)**. The receipts must:

5.1.   Address to "Asian Institute of Technology, AIT and student's name"
5.2.   Provide clearly details of goods (in English or with English Translation)
5.3.   Provide clearly total cost of goods (in English or with English Translation)
5.4.   Provide name of seller/ cashier
5.5.   For all kind of transportation, a stub of tickets are required.
5.6.   For field work assistant, the details of assigned work must be provided
5.7.   For Lab Equipment, quotations must be provided

Only ACTUAL cost of the expenses would be settled.

To settle field visit expenditures, a **field visit report must be submitted** along with the other receipts. This report should contain details about the field visit conducted such as number of samples, number of days, activities performed by each of the field assistants and field photographs of each day activity. A sample **field visit report** can be found at end of this guideline (**Appendix B**).

Students are instructed to settle their research expenditures along with the approved summary of expenditure to program secretary not less than 3 weeks before the final exam or as soon as the progress exam is completed. The diagram of budget request and settlement is as below:
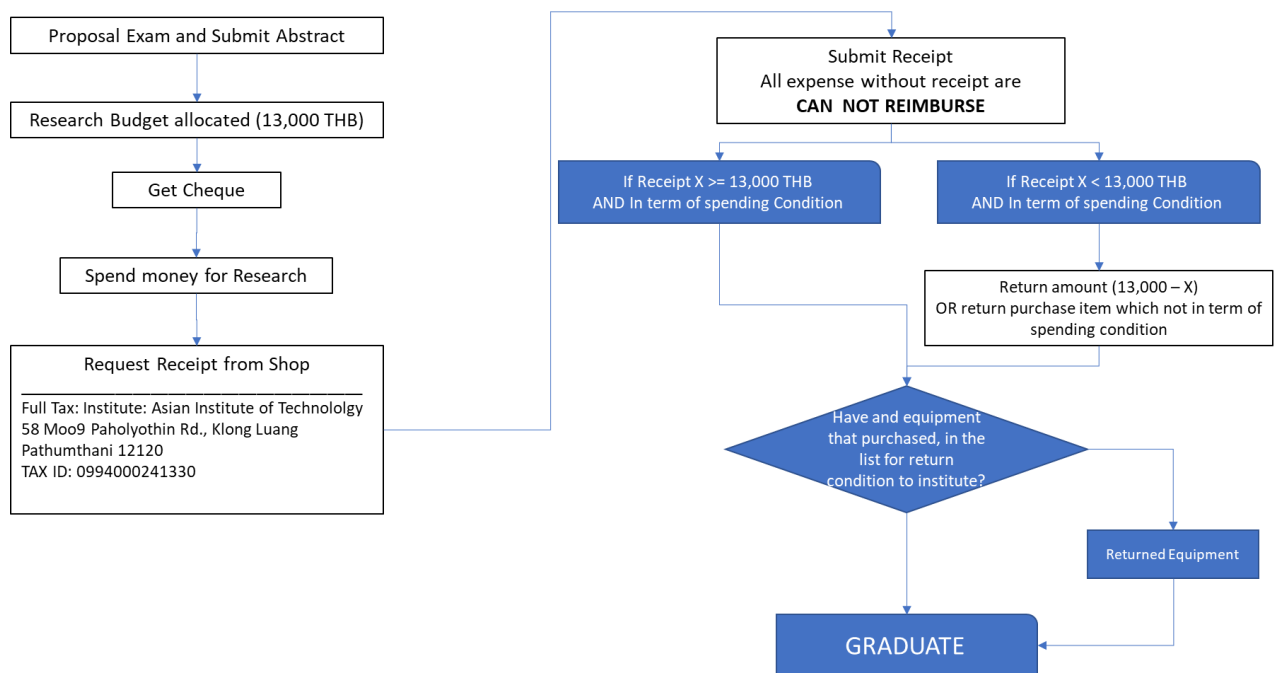
Equipment

Students are allowed to borrow the equipment available in RSGISto conduct their research with acceptance to the following conditions:

- The borrower agree that any damages cause under possession of the borrower shall be bear by the borrower.
- The borrower should make every effort to ensure equipment is kept secure and free from damage. The borrower must not put themselves or the equipment in a place where there is a risk of damage or loss.
- The extension of the damage shall be calculated at the current price of equipment.
- The borrower must fully follow the instruction of usage stated in the manual.
- The borrower fully understands that all AIT equipment will not be used or served for any other purpose of any personal interests or in conversion with Thai laws and international laws.
- When found that the misuse, any harmful practice, the borrower will be charged with full responsibility.
- Late returns may incur a charge.

Equipment Borrowing Procedure:

1. Print Equipment Borrowing Application Form from RSGIS website and fill up information
   a. Equipment list
   b. Purpose/ Usage / Location
   c. Date/Period of borrowing
2. Authorize the request by (Advisor/Coordinator)
3. Submit to Approval by RSL Manager

Appendix A: Guideline to estimate your research budget

Thesis/ research title:
Objectives:
Study Area: **Location:**
              Area (km²):
              Sample size (for primary data collection):

Table A.1: Budget Summary

Item	Item details	In THB
Transportation expenses[1]	Air	
	Bus/Local Trans/Taxi/Boat	
Accomodation[2]	Hotel/ guest house/ hostel	
Field/ research Assistants[3]	Level (1.21/ 2.15/ 3.13)	
Printing		
Photocopies		
Lab Equipment /Technical Test/ Service[4]		
Training/Workshop Fees3		
Software		
Books		
Courses Online[5]		
Others (please specify)		
Total		

Notes:

[1][2][3] Please follow TRF guideline to estimate this cost in next page. Please provide break down of these expenses similar to table A.2.

[3] Research budget is provided to students to hire assistants for field work only, not for data analysis/ coding/ writing reports.

[4] The comparison prices from at least 3 distributors are required

[5] Request must be made through RSL manager, for maximum of THB 3000

Table A.3: Budget Breakdown

Transportation					
Item	**Description of Items**	**Number of flights**	**Airfare (THB)**	**Total cost (THB)**	**Justification**
International Flights	e.g. 1 return flight for student travel from Thailand to India	e.g. 1 roundtrip or 2 individual			e.g. visit for questionnaire survey with policy makers
Item	**Description of Items**	**Quantity**	**Cost per unit (THB)**	**Total cost (THB)**	**Justification**
In country travel	e.g. fuel for car for 10 days at 4 THB/Km	e.g. 10	e.g. 4	e.g. 40	e.g. field assistants to travel to study area .. to suvey water quality
Accommodation					
Item	**Description of Items**	**Number of nights**	**Daily rate (THB)**	**Total cost (THB)**	**Justification**
Accommodation	e.g. accommodation for student in guest house for 10 days	e.g. 10	e.g. 1000	e.g. 10000	e.g. student trip to Udon Thani for ground truth data collection
Field assistants					
Item	**Description of Items**	**Quantity**	**Rate (THB)**	**Total cost (THB)**	**Justification**
Field/ survey assistant wages	e.g. one research assistant holding Bachelor degree (Level 2.15) for 5 days	e.g. 5	e.g. 600	e.g. 3000	e.g. RA will assist to collect spectrometer data from 200 samples in 5 days

For all Items, tariffs must be followed from Table A.3

Table A.3: Maximum allowed rates for items [1][2][3]

Item	Type	Rate	What to submit?
Transportation	Bus/Local Trans/Taxi/Boat	< 600 THB/Trip	Actual Receipt
	Self (Private Car)	4 THB/Km	Photo of Mileage
	Self (Private Motorcycle)	2 THB/Km	Photo of Mileage
	Flight Ticket (Economic Class Only) *	-	Actual Receipt, boarding passes
Item	**Type**	**Rate**	**What to submit?**
Accommodation **	No VAT (Hotel/ guest house/ hostel)	800 THB/Day	Receipt
	With official Tax (in Thailand)	Less 1500 THB/Day	Official original receipt
	With official Tax (Outside Thailand)	Less 3100 THB /Day	Official original receipt
Item	**Qualification**	**Rate**	**What to submit?**
Research Assistant	Less than Bachelor Degree Level 1.21	500 THB/Day	
	Holding Bachelor Degree Level 2.15	650 THB/Day	Qualification proof
	Holding Master Degree Level 3.13	735 THB/Day	Qualification proof

Tariffs according to Ministry of Finance, Thailand

* Seat selection price is not allowed

** If study area is in home city/ town, accommodation charges are not allowed

Appendix B: Guideline to prepare field visit summary report

Research Topic: Title of your research topic
Introduction: Briefly summarize the field trip with information of when (mention start and end date, number of days) and where the field trip was conducted.
Objectives of field visit: Specify why the field trip was conducted, what was the aim?
Study Area: **Location:**
                   Area:

Total number of Samples: e.g. 500
Duration of Field Trip: 10 days
Parameters considered: e.g. Reflectance (spectrometer), Tree height
Activities performed: e.g. Collection of reflectance
Details of surveyors (including student): Student name[a], field assistant name[b]

Table B.1: Summary of Activities

Day	Location	Number of Samples	Activities performed	Observations/ Remark	Surveyors
e.g. Day 1 (14/05/2020)	e.g. Klong Nueng (or lat long)	40	e.g. Spectrometer readings, tree height measurement of 40 trees e.g. questionnaire survey with 100 respondants	e.g. trees more than 5 m height could not be measured	a collected spectrometer reading, b measured tree heights.

Note: Summary activities of each day for all days. For example, if data were collected for 10 days, 10 days activities should be summarized.

Sample Field photos

Day 1

Day 2

Day 3

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