Date......Year....

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King Mongkut's Institute of Technology Ladkrabang

Topic proposal form for seminar examination

Section 1 student

Name-Surname	(Mr./Mrs./Ms)	Student ID.
Student level	☐ Master's degree	course
	☐ Doctoral degree	course
	·	
Department		Field of study
Contact numb	er	Email
Seminar subje	ct 🗆 MI 🔲 MII 📙 D	DI L DIII L DIV
Present	ing academic research	related to thesis (MI,MII,DI,DII,DII)
Present	ing research articles fro	om international journals/conferences: Name of articles/conferences(MI,DI)
No	Month	PagePage
Topic:		
(Thai)		
(English)		
		Signature
		()
		Student
		Date MonthYear
		Date World
NOTE: Fill out	only the section abo	ove by typing which can be downloaded at https://grad-eng.kmitl.ac.th/



King Mongkut's Institute of Technology Ladkrabang

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Topic proposal form for seminar examination

Section 2 Comment/Sign

Opinion of thesis advisor
Signature
()
Thesis advisor
Date MonthYear

Document preparation for seminar School of Engineering King Mongkut's Institute of Technology Ladkrabang

- 1. Prepare the article as required format (5 sets)
- 2. Use 1 sheet of A4 size per page with single row
- 3. Well-arranged with a space of top edge/bottom edge 2.5 cm., left edge 3.0 com/right edge 2.5 cm.
- 4. Use Thai front and English front as required format
 - Title (TH Sarabun, size 18 pt.)
 - Other parts (TH Sarabun, size 16 pt.)
- 5. Articles should have a cover page as required format (Attachment no. 1)
- 6. The length of article should be at least 10 pages with required format.

(Attachment no. 2)

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Topic proposal form for seminar examination

- 6.1 The first page must consist of
 - Thai title and English title
 - Name of author in Thai and English
 - Abstract in Thai
 - Abstract in English
 - Details of author
- 6.2 After the abstract page to the last page consist of these contents in the following order;
 - Introduction
 - Substance
 - Conclusion
 - References (must be referenced in the article at the place of reference)
 - Acknowledgements (if any)
 - Copy of English article (in case of international journals/conferences)

*** Documents in this section must be numbered on every page. (in the middle)

The seminar examination is also scoring from the article format (Well-arranged and correction)***

7. Prepare materials of presentation that are clearly with required format (Attachment 3)

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Topic proposal form for seminar examination

Document No. 1 Format of a cover page for seminar

(Full page of A4, TH Sarabun, size 16 pt., all bold letter)

(specify: MI, MII, DI, DII, DIII)

1-1 In case of presenting academic research related to thesis

Article proposed in the seminar

Course	(ระบุ วศ.ม หรือ วศ.ด)	Field of study	
Semester	Academic year		
Title	(<i>Thai</i>)		
	(English)		
Name	Student	ID	
Thesis advisor	Dei	nartment	

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School of Engineering

King Mongkut's Institute of Technology Ladkrabang

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Topic proposal form for seminar examination

1-2 In case of pre	senting research articles from	international journals/conf	ferences
Article proposed i	in the seminar (<u>.</u>	spcify: MI, DI)	
Course	(ระบุ วศ.ม หรือ วศ.ด)	Field of study	
Semester	Academic year		
Complied from a	journal/conference		
	No Month	Year of Publication	n Page
Author name			
Title	(<i>Thai</i>)		
	(English)		
Name	Studen	t ID	
Thesis advisor	Do	epartment	

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Topic I	oroposal	form	for	seminar	examination

Document no. 2 Format of seminar article

2-1 In case of presenting academic research related to thesis (*Seminar subject MI, MII, DI, DII and DIII*)

An example of first page (presenting academic research)

Page number in the first page is not needed

การออกแบบรูปร่างแม่เหล็กไฟฟ้าแบบสนามแม่เหล็กสแตติก 2 มิติโดยวิธีไฟในท์อิลิเมนท์
Shape Design of 2D Magnetostatic Electromagnet Using Finite Element Method

(font size 18 pt.bold)

นายนักศึกษา วิศวกรรมศาสตร์*

รศ.ดร.บัณฑิต ศึกษา**

Mr. Naksuksa Wissawagramasart

Assco. Prof. Dr. Bandit Suksa

(Name of student) font size 16 pt. (Normal)

(Name of advisor)

บศ.วศ.16

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King Mongkut's Institute of Technology Ladkrabang

Date	Month	Year

Topic proposal form for seminar examination

Abstract (font size 16 pt. bold)

บทความนี้นำเสนอการออกแบบแม่เหล็กไฟฟ้าโดยใช้วิธีไฟในท์อิลิเมนท์ซึ่งอยู่ในรูปสมการ สนามแม่เหล็ก สแตติกแบบ 2 มิติโดยเปรียบเทียบให้เห็นถึงการเปลี่ยนแปลงของค่าสนามแม่เหล็กในช่อง อากาศซึ่งจะขึ้นอยู่กับค่าความหนาแน่นของกระแสกระตุ้น ค่าซึมซาบแม่เหล็กของสารแม่เหล็ก และรูปร่างของ ขั้วแม่เหล็ก ในบทความนี้แสดงให้เห็นถึงประโยชน์ของการใช้วิธีไฟในท์อิลิเมนท์สำหรับการเปลี่ยนแปลงรูปร่าง ขั้วแม่เหล็กเพื่อให้ได้ค่าสนามแม่เหล็กตามต้องการที่บริเวณช่องอากาศซึ่งผลที่ได้สามารถนำไปใช้ประโยชน์ใน การออกแบบรูปร่างที่เหมาะสมของอุปกรณ์ที่เกี่ยวข้องกับสนามแม่เหล็กไฟฟ้าต่าง ๆ ได้

(font size 16 pt. normal)

Abstract (font size 16 pt. bold)

This paper presents the design of 2D magnetostatic electromagnet by using the finite element method. The comparisons of the change in magnetic field which depends on current density of excitation, permeability of materials and pole-shape of an electromagnet are illustrated. This paper describes how the finite element method can be used for changing the shape of pole in order to obtain the desired magnetic field in an air gap. The results show that this technique can be used for the design shape opimization of the electomagnetic devices.

(font size 16 pt. normal)

* Graduate student School of Engineering, King Mongkut's Institute of Technology

Ladkrabang

** Advisor Electrical Engineering, School of Engineering (font size 14 pt. Normal)

บศ.วศ.16

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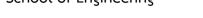
King Mongkut's Institute of Technology Ladkrabang

Date	Month	Year

Topic proposal form for seminar examination

An example, the page after the abstract (presenting academic research)

1.	Introduction (size 16 pt. bold)
	In the design of devices related to electromagnetic fields (size 16 pt. Normal)
2.	Calculation of magnetic field by finite element method (size 16 pt. Bold)
	two dimensional magnetostatic are shown in the form of equations (size 16 pt. Normal)
3.	Others (size 16 pt. Bold)
	(size 16 pt. Normal)
4.	Analysis (size 16 pt. bold)
	It can be seen that the change in current density and the magnetic permeability ($\it size~16$
pt.	Normal)
5.	Conclusion (size 16 pt. Bold)
	This article is a presentation of structural design guidelines (size 16 pt. Normal)
	**Reference (size 16 pt. Bold)
	[1] C. Chat-uthai, J.A. Ramirez and E.M. Freeman, "An Improved Constrained Quasi-
	Newton Method for the Solution of Inverse Electromagnetic Problems", IEEE
	Transactions on Magnetics, Vol. 32, No.3, May 1996, pp.1318-1321.
	[2](size 16 pt. Normal)
	Acknowledgement (size 16 pt. Bold)
	(size 16 pt. Normal)



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Topic proposal form for seminar examination

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2-2 In case of presenting research articles from international journals/conferences (Seminar subject MI and DI)

An example of first page (presenting research articles from international journals/conferences)

Page number in the first page is not needed
การออกแบบรูปร่างแม่เหล็กไฟฟ้าแบบสนามแม่เหล็กสแตติก 2 มิติโดยวิธีไฟไนท์อิลิเมนท์
Shape Design of 2D Magnetostatic Electromagnet Using Finite Element Method

(size 18 pt. Bold)

J. A. Ramirez and E. M. Freeman (size16 pt. Bold)

บทคัดย่อ (size 16 pt.Bold)

บทความนี้นำเสนอการออกแบบแม่เหล็กไฟฟ้าโดยใช้วิธีไฟในท์อิลิเมนท์ซึ่งอยู่ในรูปสมการ สนามแม่เหล็ก สแตติกแบบ 2 มิติโดยเปรียบเทียบให้เห็นถึงการเปลี่ยนแปลงของค่าสนามแม่เหล็กในช่อง อากาศซึ่งจะขึ้นอยู่กับค่าความหนาแน่นของกระแสกระตุ้น ค่าซึมซาบแม่เหล็กของสารแม่เหล็ก และรูปร่างของ ขั้วแม่เหล็ก ในบทความนี้แสดงให้เห็นถึงประโยชน์ของการใช้วิธีไฟในท์อิลิเมนท์สำหรับการเปลี่ยนแปลงรูปร่าง ขั้วแม่เหล็กเพื่อให้ได้ค่าสนามแม่เหล็กตามต้องการที่บริเวณช่องอากาศซึ่งผลที่ได้สามารถนำไปใช้ประโยชน์ใน การออกแบบรูปร่างที่เหมาะสมของอุปกรณ์ที่เกี่ยวข้องกับสนามแม่เหล็กไฟฟ้าต่าง ๆ ได้

(size 16 pt. Normal)

Abstract (size 16 pt. Bold)

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Topic proposal form for seminar examination

This paper presents the design of 2D magnetostatic electromagnet by using the finite element method. The comparisons of the change in magnetic field which depends on current density of excitation, permeability of materials and pole-shape of an electromagnet are illustrated. This paper describes how the finite element method can be used for changing the shape of pole in order to obtain the desired magnetic field in an air gap. The results show that this technique can be used for the design shape opimization of the electromagnetic devices.

(size 16 pt. Normal)

An example, the page after the abstract (presenting research articles from international journals/conferences)

1. Introduction (size 16 pt. bold)

In the design of devices related to electromagnetic fields (size 16 pt. Normal)

- 2. Calculation of magnetic field by finite element method (*size 16 pt. Bold*) two dimensional magnetostatic are shown in the form of equations (*size 16 pt. Normal*)
- 3. Others (size 16 pt. Bold)
 (size 16 pt. Normal)......
- 4. Analysis (size 16 pt. bold)

It can be seen that the change in current density and the magnetic permeability (*size 16* pt. Normal)

5. Conclusion (size 16 pt. Bold)

This article is a presentation of structural design guidelines (size 16 pt. Normal)

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Topic proposal form for seminar examination

**Reference (size 16 pt. Bold)

6. Analysis (size 16 pt. Bold)

It can be seen that the change in current density and the magnetic permeability (*size 16* pt. Normal)

7. Conclusion (size16 pt. Bold)

This article is a presentation of structural design guidelines (size 16 pt. Normal)

**Reference (size 16 pt. Bold)

[1] C. Chat-uthai, J.A. Ramirez and E.M. Freeman, "An Improved Constrained Quasi-Newton Method for the Solution of Inverse Electromagnetic Problems", IEEE Transactions on Magnetics, Vol. 32, No.3, May 1996, pp.1318-1321.

[2]	(size	16 pt. Normal)
กิตติกรรมประกาศ	(ขนาด 16 pt.	ตัวหนา)
	(size	16 pt. Normal)

A copy of the article in English must be attached

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Topic proposal form for seminar examination

Document no. 3 Format of media for presenting on seminar

Preparation of media for presenting on seminar by using PowerPoint

1. Any form of font type is allowed to use, must have a font or image size that be read easily and clearly.

E.g. TH SarabunPSK

- 2. **DO NOT** use font or image that are as small as the original by copying them form article of book. In case of necessary to use, must enlarge font or image size of not less than **150%**, and should **make it clear as possible**.
- 3. The text in each slide should be appropriate words (concise summary), more details can be described during the presentation. **Do not** read all the details from the slides.
- 4. The slide must show the details in order, example as follows
 - Page 1 Seminar subject / Title/ Author's name/ (in case of presenting academic research) / Student's name/ Student ID/ Advisor's name/ Course/ Program/ Faculty/Institution

Page 2 Objective



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Topic proposal form for seminar examination

Page 3 Summary of the topic (Overview)

Others Substance

Last page Conclusion

Presentation 1 topic

MI and MII Time duration 30 mins

(Presentation 20 mins, Answer question 10 mins)

DI and DII Time duration 45 mins

(Presentation 30 mins, Answer question 15 mins)

DIII and DIV Time duration 60 mins

(Presentation 40 mins, Answer question 20 mins)

^{**}Student must keep up time and not exceed the given time**

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Topic proposal form for seminar examination

Example of Page 1

Seminar subject (specicy MI, MII, DI, DII, DIII)

การออกแบบรูปร่างแม่เหล็กไฟฟ้าแบบสนามแม่เหล็กสแตติก 2 มิติโดยวิธีไฟ ในท์อิลิเมนท์

Shape Design of 2D Magnetostatic Electromagnet Using Finite

Element Method

J. A. Ramirez and E. M. Freeman (In case of presenting academic research)

Edit by Mr. Student Witsawakramsart 39061000

Thesis advisor Assoc.Prof.Dr. Bandit Suksa

Course (<u>specify</u>) Department (<u>specify</u>)

School of Engineering

King Mongkut's Institute of Technology Ladkrabang

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Graduate Studies School of Engineering

Date.....Year....

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Topic proposal form for seminar examination

Example of page 2

Objective	
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Topic proposal form for seminar examination

Example of page 3

Topic conclusion

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2	
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