

HO CHI MINH CITY UNIVERSITY OF TECHNOLOGY AND EDUCATION **Programme:** Biomedical Engineering **Programme Level:** Undergraduate

FACULTY OF ELECTRICAL AND ELECTRONICS ENGINEERING

Syllabus

1. Course name: Thesis

- 2. Course code: GRAD462165
- 3. Credits: 3 credits (7:0:14) (7 lecture periods, 0 lab period, 14 self-study periods per week)

4. Instructors

- a. Chief lecturer: Assoc. Prof. Dr. Nguyen Thanh Hai
- b. Co-lecturers: Lecturer list

5. Course Requirements

Prerequisite course(s): All courses

Previous course(s):

6. Course Description

This thesis course requires learner to carry out a practical research project that can be a real model applied new knowledge and the learned knowledge to calculate, design, construct and estimate it. In addition, this course helps students to complete the synthesis of documents, to represent a complete report and the real model and the thesis committee will assess contribution to working group, skills of designing, writing report and other contributions related to scientific research skills and creativity.

7. Learning Outcomes (CLOs)

CLOs	Descriptions On successful completion of this course students will be to:	ELO(s) /PI(s)	Compe- tency
CLO1	Applying professional and new knowledge to know how to design and build an electrical circuit in biomedical field	ELO1/PI1.2	М
CLO2	Apply knowledge for writing codes and programs to produce ELO2/PI2.3		
	Recognize the professional and ethical responsibilities when building a biomedical engineering system	ELO3/PI3.2	
CLO3	Demonstrate clearly the whole system to prove contribution in a working group	ELO3/PI3.3	М
	Estimate the value of the appropriate model, independently contribute the success level	ELO3/PI3.4	
CLO4	Ability to apply appropriate new techniques, skills and tools in the biomedical field	ELO4/PI4.2	М
CLO5	Ability to work in a working group with teamwork skills, successfully contributing to the topic	ELO5/PI5.2	М
CLO6	Ability to interpret, write, and present report content Ability to present knowledge of the model to everyone. Ability to read and understand technical English documents and apply to complete the project	ELO6/PI6.2 ELO6/PI6.3 ELO6/PI6.4	М
CLO7	Ability to analyze and change forng buildi a hardware system and software process	ELO7/PI7.2	М

CLO8	Ability to do statistics, evaluate and improve the optimal technique of applications in a biomedical system considered the impacts of society, economy, environment and global to produce conclusions.	ELO8/PI8.3	М
CLO9	LO9 Ability to create a new biomedical engineering system using methodology and calculation and design skills		М

8. Content outline

- Introduction to reference materials such as books, projects, graduation theses at the HCMUTE library
- Requiringt and instructing how to perform a graduation thesis, in which discussing about direction to worrk out it such as choosing topic title and how to implement the model based on information from enterprises and collected documents.
- Assigning tasks for members to perform project and sending it to instructor.
- Work plan sheet for evaluating students' working process
- Reading and sending comment on chapters of the thesis report.
- Evaluation and suggestions problems related to thesis to students.
- Student will submit thesis to department and then represents it at the thesis committee.

9. Teaching Methods

- Powerpoint presentation
- Teamwork

10. Assessment(s)

- Grading scale: 10
- Assessment plan:

No.	Content	CLOs	Compe- tency	Assessment methods	Assessment tools	Weighting %
Summative assessment				100		
1	Thesis report, powerpoint slides, poster, model, simulation results	CLO1 CLO2 CLO3 CLO4 CLO5 CLO6 CLO7 CLO8 CLO9	М	Representation, discussion, report	Rubric	100

11. Learning Materials

[1] Sample and forms for writing report and instructions about how to represent to complete the thesis posted on the department website.

[2] Specialized books, graduation thesis of FEEE, scientific research topics in the HCMUTE library

12. General Information

Academic Integrity

All students in this class are subject to HCMUTE's Academic Integrity Policy (<u>http://sao.hcmute.edu.vn/</u>) and should acquaint themselves with its content and requirements, including a strict prohibition against plagiarism. Any violations will be reported to the Faculty of Electrical and Electronic Engineering Dean's office.

Flexibility Notice

Any information in this syllabus (other than grading and absence policies) may be subject to change with reasonable advanced notice. Students need to regularly update the information of their registered class.

Intellectual Property

All contents of these lectures, including written materials distributed to the class, are under copyright protection from the HCMUTE's Intellectual Property Regulations. Notes based on these materials may not be sold or commercialized without the express permission of the instructor.

13. Approval Date: *<dd/mm/yyyy>*

14. Endorsement:

Dean	Head of Department	Chief Lecturer	
Assoc. Prof. Dr. Nguyen Minh Tam	Assoc. Prof. Dr. Nguyen Thanh Hai	<full name=""></full>	

15. Revision History:

1 st Revision: < <i>dd/mm/yyyy</i> >	Lecturer:
	Head of Department: Assoc. Prof. Dr. Nguyen Thanh Hai
2 nd Revision: < <i>dd/mm/yyyy</i> >	Lecturer:
	Head of Department: