



Syllabus

- 1. Course name:** Thesis Topics
- 2. Course code:** THEM426265
- 3. Credits:** 3 credits (0:1:1) (0 lecture periods, 1 lab period, 3 self-study periods per week)
- 4. Instructor**
 - Chief lecturer: Assoc. Prof. Dr. Nguyen Thanh Hai
 - Co-lecturers: Lecturer list

5. Course Requirements:

Prerequisite course(s): None

Previous course(s): all Labs and projects

6. Course Description

Students will explore prior research using knowledge of electronics, digital systems and microprocessors to calculate, program, and operate a complete systems. Furthermore, students must complete report sections of topics to present understanding, analysis, and evaluation. Students also show presentation skills and teamwork for assessment.

7. Learning Outcomes (CLOs)

CLOs	Descriptions <i>On successful completion of this course students will be able to:</i>	ELO(s) /PI(s)	Competency
CLO1	Ability to apply professional knowledge to design and build an electronic circuits for biomedical applications.	ELO1/PI1.2 ELO1/PI1.3	M
CLO2	Ability to apply knowledge for writing programs/codes to produce results, analyze and evaluate results	ELO2/PI2.2 ELO2/PI2.3	M
CLO3	Ability to demonstrate and interpret a practical system Ability to calculate cost of a appropriate model and evaluate the successful level of the model	ELO3/PI3.3 ELO3/PI3.4	R
CLO4	Ability to apply relevant new techniques, skills, and tools in the biomedical field	ELO4/PI4.2	M
CLO5	Ability to work in a team, successfully contribute to the topic.	ELO5/PI5.2	M
CLO6	Ability to interpret, write, and present report content Able to read and understand English technical documents to apply to the topics	ELO6/PI6.2 ELO6/PI6.4	M
CLO7	Ability to analyze and change to build a hardware system or software process	ELO7/PI7.2	M
CLO8	Ability to do statistics for evaluation and technical optimization of applications in the biomedical engineering system	ELO8/PI8.3	M
CLO9	Ability to connect technical details, use new methodology for calculation, design to create biomedical engineering system.	ELO9/PI9.3	R

8. Content outline

- Sinh viên thực hiện báo cáo trước giáo viên
- Introduction to reference materials such as books, projects, graduation theses at the HCMUTE library
- Requiringt and instructing how to perform topics which can develop for performing thesis at Lab.
- Assigning tasks for members to perform the topics and sending it to instructor.
- Working plan sheet for evaluating students' working process
- Reading and sending comment on reports of the topics.
- Evaluation and suggestions problems related to thesis to students.
- Student will submit reports and representation skills

9. Teaching Methods

- *Monitor*
- *Teamwork*

10. Assessment(s)

- Grading scale: **10**
- Assessment plan

No.	Content	CLOs	Compe- tency	Assessment methods	Assessment tools	Weighting %
Summative assessment						50
1	Brief reports and powerpoint slides	CLO1 CLO2 CLO3 CLO4 CLO5 CLO6 CLO7 CLO8 CLO9	M M R M M R M R R	Written/Oral	Rubric	100

11. Learning Materials

- Textbook(s):
[1] Experimental documents of topics at Lab.
- References:
[2] Nguyen Đình Phú, *Microprocessor*, National University publisher, HCMUTE, 2012
[3] Richard H. Barnett, Sarah Cox, Larry O'Cull, *Embedded C Programming and the Microchip PIC*, Delmar Publishers Inc, 1 edition November 3, 2003.
[4] Martin P. Bates, *Programming 8-bit PIC Microcontrollers in C: With Interactive Hardware Simulation*, Newnes, 1 edition July 29, 2008.

12. General Information

Academic Integrity

All students in this class are subject to HCMUTE's Academic Integrity Policy (<http://sao.hcmute.edu.vn/>) 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

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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	<i><Full Name></i>

15. Revision History:

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