SYLLABUS

1. **Course name: T**hesis
2. **Course code:** GRES312463
3. **Credits:** 4 (4/0/8)
   Duration: 15 weeks (4 theories + 0 laboratories + 8 self-studying/week)
4. **Instructors:**
   1- Nguyen Thanh Hai, PhD
   2- Nguyen Dinh Phu, MEng
   3- Nguyen Thanh Binh, MEng
   4- Ha a Thoi, Eng
   5- Pham Ty Phu, MEng
   6- Nguyen Truong Duy, MEng
   7- Nguyen Duy Thao, MEng
5. **Course conditions**
   Prerequisites: All courses
   Corequisites: All courses
6. **Course description**

This course requires students to conduct a researching project by applying the previous knowledge in all courses taught in the education programs. Furthermore, this course helps students train their abilities to research documents, write reports, and make a presentation in front of the grading boards. It also provides students abilities to work in group and do scientific research which can help them develop in higher levels.

7. **Course Goals**

Goals	***Goal description*** *(This course provides students:)*	**ELOs**
G1	An ability to apply the knowledge in circuit analysis, programming tools, and professional software in order to design, operate, test, and maintain application circuits.	01 (M)
G2	An ability to read professional documents in English.	02 (L)
G3	An ability to write reports and make presentations clearly and coherently.	03 (H)

** Note: High: H; Medium: M; Low: L*

8. **Course Learning Outcomes (CLOs)**

CLOs		***Description*** *(After completing this course, students can have:)*	**Outcome**
	G1.1	the ability to use the theories in digital and analog circuits in order to calculate and choose the appropriate components in designing application circuits.	11

	G1.2	the ability to use some popular programming languages, such as C++, Java, and Python, to program application circuits.	11
	G1.3	the ability to draw and simulate electric and electronic circuits by applying some computer aided software, such as Protues, Orcad, and ISE Design Suite.	11
	G1.4	the ability to evaluate and choose the appropriate designing prototypes according to the requirements.	11
	G2.1	the ability to read the datasheets of available electric and electronic components in English.	05
	G2.2	the ability to read online training documents in English.	05
	G3.1	the ability to read and compile the requirements about contents, formats, and methods of presenting the reports.	04
	G3.2	the ability to form and arrange ideas in reports.	04
	G3.3	the ability to design slides clearly and coherently in order to present the reports.	04

9. Study materials

- Textbooks: *The lectueres provide the documents of this course, as the subjects are diverse.*

- References: *The lectueres provide the documents of this course, as the subjects are diverse.*

10. Student Assessments

- Grading points: 10

- Planning for students assessment is followed:

Type	Contents	Linetime	Assessment techniques	CLOs	Rates (%)
Assessment of reviewers					**20**
Test 1	Before defensing the undergraduate thesis, students are assessed by reviewers about results, contents, and formats of their reports.	Week 14	Rubrics	G3.1 G3.2 G3.3	20
Final reports				**50**	**80**
Test 1	The contents of the reports have to cover all requirements approved for each student.	Week 15	Reports and Presentations	G1.1 G1.2 G1.3 G1.4	80

11. Course details:

Weeks	Contents	CLOs
	Content 1: **<CHOOSING OF SUBJECT TITLES>** *(4/0/8)*	
	A/ **Contents and teaching methods***: (4)* **Contents:** 1.1 Introduction 1.2 Requirements 1.3 Steps	G3.1

	1.4 The schedule 1.5 Choosing the project title and groups **Teaching methods**: + Presentation	
	B/ **Self-study contents**: (8) 1.6 Choosing the subject title on the pre-chosen lists or on the Internet.	G2.1 G2.2
	Content 2: **<APPROVING THE SUBJECT TITLES>** *(4/0/8)*	
	A/ **Contents and teaching methods***: (4)* **Contents:** 2.1 Listing the students who chose the subject titles 2.2 Approving the subject title according to the priorities 2.3 The requirements of the thesis 2.4 The purposes of the thesis 2.5 The limitation of the thesis 2.6 Method of writing the project proposals **Teaching methods**: + Discussion	G1.4
	B/ **Self-study contents**: (8) 2.6 Surveying all available documents to write the project proposal	G2.1 G2.2
	Content 3: **<CONDUCTING THE PROJECT – WORKING DIRECTLY WITH SUPERVISORS>** *(48/0/96)*	
	A/ **Contents and teaching methods***: (48)* **Contents:** 3.1 Students working directly with their supervisors **Teaching methods**: + Presentation + Discussion	G1.1 G1.2 G1.3 G1.4
	B/ **Self- study contents**: (4) 3.5 Researching all documents to write the chapter 1 of the report	G2.1 G2.2
	Content 4: **< REPORT ASSESSMENTS >** *(4/0/8)*	
	A/ **Contents and teaching methods***: (4)* **Contents:** 4.1 Assigning the defensers 4.2 Instruction of designing the presentation slides 4.3 Instruction of presentation skills **Teaching methods**: + Presentation + Discussion	G3.2
	B/ **Self- study contents**: (8) 4.4 Preparing the presentation	G3.3

12. Learning ethics:

All pictures, diagrams, flow charts, and tables in the report must not be copied from other official documents without clearly referenced. The results of each student project have to be conducted by his own. If there are any violation detected from the project, this project will be evaluated zero mark for the final result.

13. First approved date:

14. Approval level:

Dean	**Department**	**Instructor**

15. Syllabus updated process

1st time: Updated content dated	Instructors Nguyen Thanh Hai
2st time: Updated content dated	Head of department