



**TQF 5 - Course Report**  
**CPE1002 Circuit and Electronic**  
**Semester 2, Academic year 2023**  
**Faculty of Engineering and Industrial Technology**

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**Section 1: General Information**

**1. Course code and title**

Course Code: CPE1002  
Course Title: Circuit and Electronic

**2. Pre-requisite (if any)**

None

**3. Lecturer**

Dr.Pongrapee Kaewsaiha

**4. Semester and academic year**

Semester 2, Academic year 2023

**5. Venue**

Room 4733, Faculty of Engineering and Industrial Technology

## Section 2: Teaching hours compared with the plan

### 1. Number of actual teaching hours compared with the teaching plan

Topics	Teaching hours as planned	Actual teaching hours	Reason(s) in case the discrepancy is more than 25%
Chapter 1: Basic concepts	3 hours	3 hours	-
Chapter 2: Resistive circuits	3 hours	3 hours	-
Chapter 3: Resistive circuit analysis methods	6 hours	6 hours	-
Chapter 4: Equivalent circuits	3 hours	3 hours	-
Chapter 5: Superposition theorem	3 hours	3 hours	-
Chapter 6: Operational amplifiers	3 hours	3 hours	-
Review	3 hours	3 hours	-
Chapter 7: Capacitance and inductance	3 hours	3 hours	-
Chapter 8: First- and second-order circuits	3 hours	3 hours	-
Chapter 9: AC steady-state analysis	3 hours	3 hours	-
Chapter 10: Semiconductor	3 hours	3 hours	-
Chapter 11: Diodes	3 hours	3 hours	-
Chapter 12: Transistors	3 hours	3 hours	-
Review	3 hours	3 hours	-
Total	45	45	

### 2. Topics that couldn't be taught as planned

Topics that couldn't be taught (if any)	Significance of the topics that couldn't be taught	Compensation
None	None	None

### 3. Effectiveness of the teaching methods specified in the course specification

Learning Outcomes	Teaching methods specified in the course specification	Effectiveness (Use ✓)		Problems of the teaching method(s) (if any) and suggestions
		Yes	No	
1. Morals and Ethics	Establish an organizational culture to instill discipline in students. Emphasis on attending classes on time as well as dressing according to university regulations. Students responsible for group work must be trained to know the responsibilities of being a group leader and being a member of a group. Be honest by not committing fraud in exams or plagiarizing other people's homework. In addition, all instructors must include morality and ethics in teaching all subjects. Also, there are activities to promote morality and ethics, such as honoring students who have done well in benefit the public and sacrifice.	-	✓	Plagiarism occurred occasionally even with forms of protection established. Point reduction is applied was penalties.
2. Knowledge	Use a variety of teaching methods emphasizing theoretical principles and practical application in real-world environments to keep pace with technological changes. This shall be in accordance with the nature of the course as well as the content of that course.	✓	-	-
3. Cognitive Skills	1) Teachers always teach and show rational thinking as an example. 2) Presentations and group discussions. 3) Provide students the opportunity to practice.	-	✓	Students were not eager to complete workshops. Laboratory use is recommended.
4. Interpersonal Skills and Responsibilities	Use instructions with activities that involve group work, work that requires coordination with others, across curriculum, across faculties, external parties, external agencies, or work that students need to research information from interviewing other people or experts.	✓	-	-
5. Numerical Analysis, Communication and Information Technology Skills	Organize learning activities in various subjects for students to analyze simulated situations, numerical analysis skills, virtual situations, and propose appropriate solutions. Learn techniques for applying technology in a variety of situations.	✓	-	-

#### 4. Suggestions for improving teaching methods

Online simulators truly assist learners who study on-demand.

### Section 3 - Course Outcomes

#### 1. Number of registered students

76

#### 2. Number of students at the end of semester

72

#### 3. Number of students who withdrew (W)

4

#### 4. Grade distribution

Score	Grade	Sec 001	Sec 002	Total	Percentage
86 – 100	A	5	2	7	9.21
82 – 85	A-	2	2	4	5.26
78 – 81	B+	5	3	8	10.53
74 – 77	B	2	-	2	2.63
70 – 73	B-	2	4	6	7.89
66 – 69	C+	3	6	9	11.84
62 – 65	C	2	2	4	5.26
58 – 61	C-	2	2	4	5.26
54 – 57	D+	4	3	7	9.21
50 – 53	D	4	1	5	6.57
46 – 49	D-	3	9	12	15.79
0 – 45	F	2	2	4	5.26
Incomplete	I	-	-	-	
Withdraw	W	-	4	4	

#### 5. Factors causing unusual distribution of grades (if any)

None

#### 6. Discrepancies in the evaluation plan specified in the course specification

6.1 Discrepancy in evaluation time frame

Details of discrepancy	Reasons
-	-

## 6.2 Discrepancy in evaluation methods

Details of discrepancy	Reasons
-	-

## 7. Verification of students' achievements

Verification method(s)	Verification Result(s)
Program committee approval	Approved

## Section 4 - Problems and Impacts

### 1. Teaching and learning resources

<b>Teaching problems</b> -	<b>Impacts on students' learning</b> -
<b>Learning resources problems</b> Most of the workshops were organized in a lecture room which is inconvenient.	<b>Impacts on students' learning</b> Students were not eager to complete workshops due to perceived inconvenience.

### 2. Administration and organization

<b>Problems from administration</b> -	<b>Impacts on students' learning</b> -
<b>Problems from organization</b> -	<b>Impacts on students' learning</b> -

## Section 5 - Course Evaluation

### 1. Results of course evaluation by students

To be reviewed by the administration board.

### 2. Results of course evaluation by other evaluation methods

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## **Section 6 - Improvement Plan**

**1. Progress of teaching and learning improvement recommended in the previous course report**

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**2. Other improvements**

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**3. Suggestions for improvement for Semester 2, Academic year 2025**

This subject should be held in a laboratory, or at least a room with working tables.

**4. Suggestions of faculty member(s) responsible for the course**

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**Responsible teacher:**

Signature:

Submission date:

(Dr.Pongrapee Kaewsaiha)

**Chairperson/Program director:**

Signature:

Submission date:

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