Course Description Form

1. Course Name:
Control Theory III I
2. Course Code:
COTH1334
3. Semester / Year:
1st Semester
4. Description Preparation Date:
16/2/2024
5. Available Attendance Forms:
Personal
6. Number of Credit Hours (Total) / Number of Units (Total)
30/6
7. Course administrator's name (mention all, if more than one name)
Name: Assit.prof. Dr Mohammed Jasim Email: mohamed.j.mohamed@uotechnology.edu.iq Name: Assit Lecturer Mustafa Kareem Khashan Email: Mustafa.k.khashan@uotechnology.edu.iq

8. Course Objectives

Course Objectives	• **Teaching the student to analyze linear systems using the frequency domain with different methods of analysis. This analysis can be carried out by finding the relationship between the values of output and input and the phase difference between them by changing the frequency values of the input. As well as studying and discovering the stability of the system through this analysis.**

9. Teaching and Learning Strategies

Strategy	**- Enable the student to know the basic principles of the concept of control.** **- Enable the student to analyse the various systems within the frequency domain.** **- Enable the student to check the stability of the control systems.** **- Enable the student to draw the frequency response of the control systems using different axes.** **- Enable the student to understand the specifications of the control systems using the parameters describing the frequency domain.** **- Enable the student to find the parameters of the frequency domain specificati mathematically and through drawing.**

10. Course Structure

Week	Hours	Required Learning	Unit or subject	Learning	Evaluation

		Outcomes	name	method	method
1-2	6		**Pipeline and vector processing**	**Live presentation and homework**	**Written exam**
3-4	6		**Overview of Assembly Language**	**Live presentation and reports**	**Discussing and evaluating reports**
5-6	6		**Procedures and the Stack**	**Live presentation and homework**	**Written exam**
7-8	6		**Addressing Modes**	**Live presentation and reports**	**Discussing and evaluating reports**
9-12	12		**RISC Processors**	**Live presentation and homework**	**Written exam**
13-15	6		**Cache and virtual memory**	**Live presentation and reports**	**Discussing and evaluating reports**

11. Course Evaluation

20% documented exam
5% Quizes
5% reports and homework

12. Learning and Teaching Resources

Required readings: **- Core Texts** **- Course Materials** **- Other**	- **Modern Control Systems** (Book) BY Katsuhiko Ogata **Automatic Control System** (Book) by Farid Golnarag and Benjamin C. Kuo - **Lecture notes** **-Tutorial sheet**
Main references (sources)	- **Modern Control Systems** (Book) BY Katsuhiko Ogata **Automatic Control System** (Book) by Farid Golnarag and Benjamin C. Kuo
Recommended books and references (scientific journals, reports…)	**Other sources and requirements are given within ot lessons in the same stage or in the previous stages addition to laboratories and projects for this stage wh are related to the subject of control**
Electronic References, Websites	**http://ctms.engin.umich.edu/CTMS**