1. Course Name:	
Reinforced Concrete Design III	
2. Course Code:	
CIV41101	
3. Semester / Year:	
1st /Fourth	
4. Description Preparation Date:	
8-12-2025	
5. Available Attendance Forms:	
Weekly (Theory: 3 hours, Tutorial: 1 hours)	
6. Number of Credit Hours (Total) / Number of Units (Total)	
Theory: 45 Hours Tutorial: 15 hours Total: 60 hours Total Units: 5	
7. Course administrator's name (mention all, if more than one name)	
Name: Dr. Maloof Mahmood **Email:** maloof.mahmood@muc.edu.iq	
8. Course Objectives	
Course Objectives	**1.** Providing the student with the necessary skills and mechanisms to deal with the latest developments in scientific and technical progress in their field of specialization. **2.** Special care for outstanding students and enabling them to put forward their ideas. **3.** Providing the student with high skill and the ability to design concrete structures and to solve problems. **4.** Instilling the spirit of diligence and perseverance and encouraging them to create and innovate.
9. Teaching and Learning Strategies	
Strategy	**1.** Introduce students to definition of Reinforced Concrete Design III. **2.** Self-regulated learning of reinforced concrete design, one's own learning process in the classwork. **3.** Practice testing, exams and answers. **4.** Self-explanation (i.e., explaining to oneself how new information is related.

1. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	4	Introduction of reinforced concrete two way slab.	Design of two way slab by ACI coefficient method for interior panel.	Theoretical	Homework
2	4	Understanding of the concepts of design of two way slab..	. Design of two way slab by ACI coefficient method for one edge discontinuous panel..	Theoretical	Quiz
3	4	Further practice for the design of two way slab. Drawing sketches of reinforcement	Design of two way slab by ACI coefficient method for two edges discontinuous panel	Theoretical	Homework
4	4	Application of method of design for another panel, with sketches of reinforcement.	Design of two way slab by ACI coefficient method for three edges discontinuous panel.	Theoretical	Homework
5	4	Application of method of design for another panel, with sketches of reinforcement.	Design of two way slab by ACI coefficient method for four edges discontinuous panel.	Theoretical	Exam
6	4	Understanding the direct design method by ACI-code for design of two way slab.	Applying the direct design method for designing a flat plate without edge beams.	Theoretical	Homework
7	4	Further application of direct design method for the design of two way slab.	Design of a flat plate with exterior beams by the direct design method.	Theoretical	Homework
8	4	Further application of direct design method for the design of two way slab.	Design of solid slab system with interior and exterior beams by direct design method.	Theoretical	Quiz
9	4	Understanding the method of design of footings by ACI-code for various types of footings.	Design of wall footings by ACI-code .Checking one-way shear and punching shear .	Theoretical	Homework
10	4	Understanding the method of design of footings by ACI-code for another type of footings.	Design of Isolated column footing by ACI-code with checking of one-way shear and punching shear of footing	Theoretical	Exam
11	4	Learning the methods of Design for rectangular footings by ACI-code.	Design of rectangular footing by ACI-code with checking of one-way shear and punching shear of footing.	Theoretical	Homework
12	4	Learning the methods of Design for combined footings by ACI-code.	Design of combined footing for two columns both are interior columns by ACI-code.	Theoretical	Homework

13	4	Learning the methods of Design for another type of combined footings by ACI-code.	Design of combined footing for two columns one is at property line and the other is interior column.	Theoretical	Exam
14	4	Understanding the method of design of Slender Columns by ACI-code.	Design of slender columns with the aid of charts by ACI-code.	Theoretical	Quiz
15	4	Preparatory for final exam	Revision of some previous topics.	Theoretical	

2. Course Evaluation

The grade distribution is as follows:
Assessment: Formative 40 marks,
Final exam: Theory 60 marks.

3. Learning and Teaching Resources

Required textbooks (curricular books, if any)	G. Winter, Design of Concrete Structures, 9th ed. McGraw-Hill International Book Company.
Main references (sources)	A.H. Nelson, Design of Concrete Structures, 13th ed. McGraw-Hill International Book Company,2004
Recommended books and references (scientific journals, reports…)	
Electronic References, Websites	

Course Description Form

(Reinforced Concrete Design III)