

BỘ GIÁO DỤC VÀ ĐÀO TẠO  
MINISTRY OF EDUCATION AND TRAINING  
TRƯỜNG ĐẠI HỌC MỞ THÀNH PHỐ HỒ CHÍ MINH  
HO CHI MINH CITY OPEN UNIVERSITY

**ĐỀ CƯƠNG MÔN HỌC**  
**COURSE SPECIFICATION**

**I. Thông tin tổng quát - General information**

1. Tên môn học tiếng Việt/ Course title in Vietnamese: **Kiến trúc dân dụng**  
Mã môn học/Course code: **CENG5206**
2. Tên môn học tiếng Anh/ Course title in English: **Architecture in Civil Engineering**
3. Phương thức giảng dạy/Mode of delivery:  
☐ Trực tiếp/FTF      ☐ Trực tuyến/Online      ☒ Kết hợp/Blended
4. Ngôn ngữ giảng dạy/Language(s) for instruction:  
☒ Tiếng Việt/Vietnamese      ☐ Tiếng Anh/English      ☐ Cả hai/Both
5. Thuộc khối kiến thức/kỹ năng/ Knowledge/Skills:  
☐ Giáo dục đại cương/General      ☒ Kiến thức chuyên ngành/Major  
☐ Kiến thức cơ sở/Foundation      ☐ Kiến thức bổ trợ/Additional  
☐ Kiến thức ngành/Discipline      ☐ Đồ án/Khóa luận tốt nghiệp/Graduation thesis
6. Số tín chỉ/Credits

Tổng số/Total	Lý thuyết/Theory	Thực hành/Practice	Số giờ tự học/Self-study
2 (2,0,4)	2	0	60

7. Phụ trách môn học-Administration of the course
  - a) Khoa/Ban/Bộ môn/Faculty/Division: **Khoa Xây dựng**
  - b) Giảng viên/Academics: **Ths. KTS Nguyễn Ngọc Uyên**
  - c) Địa chỉ email liên hệ/Email: **uyen.nngoc@ou.edu.vn**
  - d) Phòng làm việc/Room: **P.705, Khoa Xây dựng, ĐH Mở Tp.HCM, 35-37 Hồ Hảo Hớn, P. Cô Giang, Q.1, TP.HCM**

**II. Thông tin về môn học-Course overview**

1. Mô tả môn học/Course description:  
Architecture in Civil Engineering course presents approaches to the standards and norms in the field of Architectural design for buildings, particularly in the architectural design drawings: from preliminary to detailed. This course also presents the principles in the architectural design process based on norms and criteria from the use of human living space. In order to connect Architects' designs to the real works of Civil Engineers, the subject broadens and clarifies design ideas concretized by architectural drawings, especially for houses and public buildings.
2. Môn học điều kiện/Requirements:

STT/No.	Môn học điều kiện/ Requirements	Mã môn học/Code
1.	Môn tiên quyết/Pre-requisites: No request	
2.	Môn học trước/Preceding courses: Vẽ kỹ thuật xây dựng/ Technical drawing in Construction	TECH1301

STT/No.	Môn học điều kiện/ Requirements	Mã môn học/Code
3.	Môn học song hành/Co-courses:No request	

3. Mục tiêu môn học/Course objectives

Mục tiêu môn học/ Course objectives	Mô tả - Description	CĐR CTĐT phân bổ cho môn học - PLOs
CO1	<p><i>Kiến thức:</i></p> <ul style="list-style-type: none"> <li>- To understand the basic knowledge of the field of Architectural design (reading architecture drawings from preliminary to details); understand the theoretical bases of Architectural design.</li> <li>- To fully understand the basic knowledge of drawings and be able to present the technical drawings with construction industry standards.</li> <li>- To provide with a sound understanding of the fundamental principles, methods, analysis and synthesis in architectural design and form the ability to think analytically, evaluate and creatively when accessing information, architecture projects;</li> </ul>	PLO.4
CO2	<p><i>Kỹ năng:</i></p> <ul style="list-style-type: none"> <li>- To equip the ability to understand and use the knowledge of Architectural design in structural calculations by Civil engineers.</li> </ul>	PLO. 13
CO3	<p><i>Thái độ:</i></p> <ul style="list-style-type: none"> <li>- To train skills in reading comprehension and demonstrating architectural technical drawings, serving the professional works of civil engineers.</li> </ul>	PLO. 16

4. Chuẩn đầu ra (CĐR) môn học – Course learning outcomes (CLOs)

Học xong môn học này, sinh viên có khả năng

Mục tiêu môn học/Course objectives	CĐR môn học (CLO)	Mô tả CĐR -Description
CO1	CLO1.1	Understand the design of all types of civil works, some basic design principles applicable to each type of civil engineering today. Creative possibilities for architectural spaces at the preliminary design level.
CO2	CLO2.1	Know how to use drawing tools (pens, ruler, pair of compasses ...) suitable for the architectural drawing process; Enhances the ability to use Auto-CAD software to create architectural drawings

CO3	CLO3.1	Requiring accuracy, meticulousness and science in setting up technical drawings, consciously respect standards specified in technical drawings.
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Ma trận tích hợp giữa chuẩn đầu ra của môn học và chuẩn đầu ra của chương trình đào tạo (Chỉ đánh số từ mức 3 (đáp ứng trung bình) trở lên)

CLOs	PLO1	PLO2	PLO3	PLO4	PLO5	PLO6	PLO7	PLO8	PLO9
CLO1				3					
CLO2					3				
CLO3								3	4

## 5. Học liệu – Textbooks and materials

### a) Giáo trình-Textbooks

[1 Dr. Arch. Ta Truong Xuan, (2019), *Principles of architectural design*, Hanoi Architectural University, Construction Publishing, Hanoi. [38518]

### b) Tài liệu tham khảo (liệt kê tối đa 3 tài liệu tham khảo)/Other materials

[2] Dr. Arch. Nguyen Duc Thiem, (2005), *Architecture: Textbook for students of basic construction and architecture colleges*, Hanoi Publishing: Construction, 2016. [52161]

[3] Dr. Arch. Nguyen Duc Thiem, (2005), *Design Principles of Residential Housing: Housing and public housing*, Science and Technology Publishing, Oct 2005. [8706]

[4] Ernst Neufery, Data Architects Neufert (Data for Architects), Hanoi Publishing: Youth, 2014. [48618]

### c) Phần mềm/Software

[5] AutoCAD

## 6. Đánh giá môn học/Student assessment

Thành phần đánh giá/Type of assessment	Bài đánh giá Assessment methods	Thời điểm Assesment time	CĐR môn học/CLOs	Tỷ lệ % Weight %
(1)	(2)	(3)	(4)	
<b>A1.</b> Đánh giá quá trình/Formative assessment <b>Bài tập cá nhân/Individual exercises</b>	A.1.1 Practice designing a house according to the given topic.	After finishing chapter 3, it is time to start implementing and submitting assignments at the end of the lesson.	CLO1.1 CLO1.2 CLO2.1 CLO3.1	25%
<b>A2.</b> Đánh giá giữa kỳ/ Mid-term assessment	A.2.1 Multiple choice test or essay on the knowledge learned from chapter 1 □ 5	After finishing chapter 5	CLO1.1 CLO1.2 CLO2.1 CLO3.1	25%
<b>A3.</b> Đánh giá cuối kỳ /End-of-course	A.3.1 Multiple choice	The end of the term	CLO1.1 CLO1.2 CLO1.3	50%

Thành phần đánh giá/Type of assessment	Bài đánh giá Assessment methods	Thời điểm Assessment time	CĐR môn học/CLOs	Tỷ lệ % Weight %
(1)	(2)	(3)	(4)	
assessment	test or essay on knowledge learned from the entire course		CLO2.1 CLO3.1	
Tổng cộng/Total				100%

a) *Hình thức – Nội dung – Thời lượng của các bài đánh giá/Assessment format, content and time:*

(+) Phương pháp đánh giá A.1.1. Bài tập cá nhân/ Evaluation method A.1.1. Individual exercises

- Format: students research, design and sketch preliminary architectural drawings. Submit drawings to teacher
- Contents: Set up drawings of all plans, elevations and sections of a civil architecture wor.
- Evaluation tool: Rubrics

(+) Phương pháp đánh giá A.2.1. Bài kiểm tra giữa kỳ/ Evaluation method A.1.2. Mid-term assessment

- Format: multiple choice test (40 questions) or essay.
- Content: Knowledge learned from chapter 1 □ chapter 5.
- Evaluation tool: Rubrics

(+) Phương pháp đánh giá A.3.1. Bài kiểm tra cuối kỳ/ Evaluation method A.1.2. End-of-course assessment

- Format: multiple choice test (40 questions) or essay.
- Content: Knowledge learned from the entire course.
- Evaluation tool: Rubrics

b) *Rubrics (bảng tiêu chí đánh giá)* kèm theo Phụ lục/ (assessment criteria table) attached to the Appendix.

7. Kế hoạch giảng dạy (5/30 Blended) Teaching schedule:

Tuần/buổi học Week Section	Nội dung Content	CDR môn học CLOs	Hoạt động dạy và học/Teaching and learning										Bài đánh giá Student assessment	Tài liệu chính và tài liệu tham khảo Textbooks and materials
			Tự học/Self-study		Trực tiếp/FTF				Trực tuyến (nếu có)/Online (if any)					
					Lý thuyết/Theory		Thực hành/Practice		Lý thuyết/Theory		Thực hành/Practice			
			Hoạt động Activity	Số giờ Hour	Hoạt động Activity	Số tiết Periods	Hoạt động Activity	Số tiết Periods	Hoạt động Activity	Số tiết Periods	Hoạt động Activity	Số tiết Periods		
(1)	(2)	(3)	(4)		(5)		(6)		(7)		(8)		(9)	(10)
1	<b>Chapter 1: INTRODUCTION TO DESIGN CIVIL ARCHITECTURE</b> 1.1. Concept, definition of Architecture - Brief history of architecture - Classification and hierarchy of buildings - Elements of architecture - Characteristics of architecture. 1.2. Principles of establishing architectural design drawings: master plan, floor plans, elevations, sections, roof plans, structural details. 1.3. Concept of architectural physics: lighting, ventilation and heat insulation, sound insulation in architecture.	CLO1	Access LMS, review, pre-read chapter 2	10	+ Lecturer: - Teach and give examples, images for students to grasp basic knowledge. - Suggest good topics about architecture for students to explore and research for essays or group presentations.	5							A.1.1 A2.1 A3.1	[1], [2], [3]
2	<b>Chapter 2: PROFILE OF ARCHITECTURE DESIGN PROJECT, CONSTRUCTION DESIGN METHODOLOGY</b> 2.1. Foundations of architectural design documents: Design tasks, construction sites, legal documents and regulations on construction, estimated construction budget. 2.2. Profile of architectural work design projects 2.3. Thesis of architectural design	CLO1	Access LMS, review, pre-read chapter 3	10	+Lecturer: - Teach and give examples, images for students about the design process. + Give some guidance on individual exercises	5							A.1.1 A2.1 A3.1	[1], [2], [3]

Tuần/buổi học Week Section	Nội dung Content	CDR môn học CLOs	Hoạt động dạy và học/Teaching and learning										Bài đánh giá Student assessment	Tài liệu chính và tài liệu tham khảo Textbooks and materials
			Tự học/Self-study		Trực tiếp/FTF				Trực tuyến (nếu có)/Online (if any)					
					Lý thuyết/Theory		Thực hành/Practice		Lý thuyết/Theory		Thực hành/Practice			
			Hoạt động Activity	Số giờ Hour	Hoạt động Activity	Số tiết Periods	Hoạt động Activity	Số tiết Periods	Hoạt động Activity	Số tiết Periods	Hoạt động Activity	Số tiết Periods		
(1)	(2)	(3)	(4)		(5)		(6)		(7)		(8)		(9)	(10)
3	<b>Chapter 3: PRINCIPLES OF ARCHITECTURAL FLOOR PLAN LAYOUT</b> 3.1. General concept 3.2. Meaning of floor plan layout, foundations to establish floor plan layout 3.3. Analysis the relationship between functional areas 3.4. Types of floor plan layout 3.5. Technical, artistic and economic factors through floor plan layout 3.6. Learn more about feng shui in architecture	CLO2	Access LMS, review, pre-read chapter 4	10	+ Lecturer: - Teach and give examples, images for students to design floor plans.	5							A.1.1 A2.1 A3.1	[1], [2], [3], [4], [5]
4	<b>Chapter 4: PRINCIPLES OF SPACE SHAPED LAYOUT OF ARCHITECTURE WORKS</b> 4.1. Overview 4.2. Rule of spatial layout of architectural works: Contrast and variation; Rhythms; Primary and secondary; Relationship and separation 4.3. Balance and stability in architectural layout 4.4. The scale and measurement in architecture 4.5. Special laws of human vision <b>Chapter 5: Principles of Dimensional Determination in Architectural Design (4.5 x 50 mins)</b> 5.1. General principles.	CLO2	Access LMS, review, pre-read chapter 5, 6	15					<b>Online on LMS</b> Lecturer: + Teach and give examples, images for students about architectura l space shaped layout. <u>Lecturer:</u> + Teach and give examples, images for students about architectura l housing. + Instruct	5			A.1.1 A2.1 A3.1	[1], [2], [3],

Tuần/buổi học Week Section	Nội dung Content	CDR môn học CLOs	Hoạt động dạy và học/Teaching and learning										Bài đánh giá Student assessment	Tài liệu chính và tài liệu tham khảo Textbooks and materials
			Tự học/Self-study		Trực tiếp/FTF				Trực tuyến (nếu có)/Online (if any)					
					Lý thuyết/Theory		Thực hành/Practice		Lý thuyết/Theory		Thực hành/Practice			
			Hoạt động Activity	Số giờ Hour	Hoạt động Activity	Số tiết Periods	Hoạt động Activity	Số tiết Periods	Hoạt động Activity	Số tiết Periods	Hoạt động Activity	Số tiết Periods		
(1)	(2)	(3)	(4)		(5)		(6)		(7)		(8)		(9)	(10)
	5.2. Dimensions of human and equipment: Standard dimensions in civil houses, standard dimensions in public spaces 5.3. Room dimension: Unit of measure; Design criteria for all type rooms; Clearance height								assignment in detail so that students can start doing it at home.					
5	<b>Chapter 6: PRINCIPLES OF HOUSE DESIGN</b> 6.1. Define; Classify; Functional parts of the house. 6.2. Principles of residential space design: Design basic functional rooms in residential space; Ventilation and lighting in living space; Standard sizes of some equipment and basic layout principles. 6.3. Common types of housing	CLO2 CLO3	Access LMS, review, pre-read chapter 7	15	+ Lecturer: - Teach and give examples, images for students about architectural housing. + Instruct assignment in detail.	5							A.1.1 A2.1 A3.1	[1], [2], [3], [4], [5]
6	<b>Chapter 7: PRINCIPLES OF DESIGNING PUBLIC WORKS</b> 7.1. Define; Classify; Properties of public works; Functional parts in public works. 7.2. The design principles of some basic public spaces. 7.3. Traffic in public works 7.4. Notes in the design of public spaces	CLO2 CLO3	Access LMS, review all lessons.	10	+ Teach and give real examples, images for students about architectural public buildings. + Instruct assignment in detail.	5							A.1.1 A2.1 A3.1	[1], [2], [3], [4], [5]
Tổng cộng/Total			X	70	X	25	X	0	X	5	X	0		

Tuần/buổi học Week Section	Nội dung Content	CĐR môn học CLOs	Hình thức dạy học Teaching and learning methods	Hình thức đánh giá Student assessment
(1)	(2)	(3)	(4)	(5)
1	<b>Chapter 1: INTRODUCTION TO DESIGN CIVIL ARCHITECTURE</b> 1.1. Concept, definition of Architecture - Brief history of architecture - Classification and hierarchy of buildings - Elements of architecture - Characteristics of architecture. 1.2. Principles of establishing architectural design drawings: master plan, floor plans, elevations, sections, roof plans, structural details. 1.3. Concept of architectural physics: lighting, ventilation and heat insulation, sound insulation in architecture.	CLO1 -	GV diễn giảng, SV thảo luận nhóm. GV hướng dẫn về bài tiểu luận kiến trúc, SV nghiên cứu để thực hiện.	A.2.1 A.3.1
2	<b>Chapter 2: PROFILE OF ARCHITECTURE DESIGN PROJECT, CONSTRUCTION DESIGN METHODOLOGY</b> 2.1. Foundations of architectural design documents: Design tasks, construction sites, legal documents and regulations on construction, estimated construction budget. 2.2. Profile of architectural work design projects 2.3. Thesis of architectural design	CLO1 -	GV diễn giảng thông qua hình vẽ minh họa, SV thảo luận nhóm. GV hướng dẫn về bài tập khóa học, SV nghiên cứu bài tập để thực hiện	A.1.1 A.2.1 A.3.1
3	<b>Chapter 3: PRINCIPLES OF ARCHITECTURAL FLOOR PLAN LAYOUT</b> 3.1. General concept 3.2. Meaning of floor plan layout, foundations to establish floor plan layout 3.3. Analysis the relationship between functional areas 3.4. Types of floor plan layout 3.5. Technical, artistic and economic factors through floor plan layout 3.6. Learn more about feng shui in architecture	- CLO2	GV diễn giảng thông qua hình vẽ minh họa, SV thảo luận nhóm. GV hướng dẫn về bài tập khóa học, SV thực hiện theo đúng tiến độ.	A.1.1 A.2.1 A.3.1
4	<b>Chapter 4: PRINCIPLES OF SPACE SHAPED LAYOUT OF ARCHITECTURE WORKS</b> 4.1. Overview 4.2. Rule of spatial layout of architectural works: Contrast and variation; Rhythms; Primary and secondary; Relationship and separation 4.3. Balance and stability in architectural layout 4.4. The scale and measurement in architecture 4.5. Special laws of human vision <b>Chapter 5: Principles of Dimensional Determination in Architectural Design (4.5 x 50 mins)</b> 5.1. General principles. 5.2. Dimensions of human and equipment: Standard	- CLO2	GV diễn giảng thông qua hình vẽ minh họa, SV thảo luận nhóm. Thuyết trình tiểu luận được giao. GV hướng dẫn về bài tập khóa học, SV thực hiện theo đúng tiến độ.	A.1.1 A.2.1 A.3.1



Tuần/buổi học Week Section	Nội dung Content	CĐR môn học CLOs	Hình thức dạy học Teaching and learning methods	Hình thức đánh giá Student assessment
(1)	(2)	(3)	(4)	(5)
	dimensions in civil houses, standard dimensions in public spaces 5.3. Room dimension: Unit of measure; Design criteria for all type rooms; Clearance height			
5	<b>Chapter 6: PRINCIPLES OF HOUSE DESIGN</b> 6.1. Define; Classify; Functional parts of the house. 6.2. Principles of residential space design: Design basic functional rooms in residential space; Ventilation and lighting in living space; Standard sizes of some equipment and basic layout principles. 6.3. Common types of housing	CLO2 CLO3	<i>GV diễn giảng thông qua hình vẽ minh họa, SV thảo luận nhóm.</i> <i>GV hướng dẫn về bài tập khóa học, SV thực hiện theo đúng tiến độ.</i>	A.1.1 A.3.1
6	<b>Chapter 7: PRINCIPLES OF DESIGNING PUBLIC WORKS</b> 7.1. Define; Classify; Properties of public works; Functional parts in public works. 7.2. The design principles of some basic public spaces. 7.3. Traffic in public works 7.4. Notes in the design of public spaces	CLO2 CLO3	<i>GV diễn giảng thông qua hình vẽ minh họa, SV thảo luận nhóm.</i>	A.1.1 A.3.1

## RUBRICS

### ARCHITECTURE IN CIVIL ENGINEERING

#### Rubric 1. Individual exercises, Collection of exercises in class - Midterm test – 30%

*Subject: Design a preliminary architectural work, have basic knowledge, overview of architecture.*

CLOs	RESULTS						Percentage
	Grade	Excellent 9,0 - 10	Verygood 8,0 - 8,9	Good 6,0 - 7,9	Pass 5,0 – 5,9	Fail <4,0	
CLO1.1 Present, set up, architectural design documents in accordance with the technical standards of the construction industry.	<u>Content:</u> Expressed through architectural drawings	Architectural drawings can be shown, the content is accurate	Architectural drawings can be shown, the content is accurate with few errors	Architectural drawings can be shown, the content is accurate with some errors	Architectural drawings can be shown, the content is not accurate	cannot draw the Architectural drawings	20%
CLO1.2 State the principles of architectural design, architectural history. Apply architectural insights into practice.	<u>Content:</u> Present knowledge through articles	Completely correct answers to questions about architectural knowledge learned	Can answer all questions, although there are few mistakes	Can answer all questions but still have many shortcomings	Answer more than 50% of knowledge about architecture	Unable to answer questions about general knowledge	40%
CLO1.2 Give the correct dimensions for architectural design	<u>Content:</u> Expressed through architectural drawings	Architectural drawings can be shown, 90%-100% the dimensions is right as required	Architectural drawings can be shown, has most of the basic dimensions although there are few deviations from the requirements	Architectural drawings can be shown, has most of the basic dimensions although there are few deviations from the requirements	Architectural drawings can be shown 50%-59%, get basic dimensions	cannot draw the Architectural drawings	20%
CLO1.3 Ability to design architectural works	<u>Content:</u> Expressed through architectural drawings	Get 90%-100% of drawings according to design requirements	Get 80%-89% of drawings according to design requirements	Get 60%-79% of drawings according to design requirements	Get 50%-59% of drawings according to design requirements	cannot draw the Architectural drawings	20%

#### Rubric 2. Final Test 70%

*Subject: Apply knowledge learned in civil architecture to present and implement the project; have knowledge of architecture; capable of creating architectural space and expressing architecture through architectural drawings.*

CLOs	RESULTS						Percentage
		Excellent	Verygood	Good	Pass	Fail	
	Grade	9,0 - 10	8,0 - 8,9	6,0 - 7,9	5,0 – 5,9	<4,0	
CLO1.1 Present, set up, architectural design documents in accordance with the technical standards of the construction industry.	<u>Content:</u> Expressed through architectural drawings	Architectural drawings can be shown, the content is accurate	Architectural drawings can be shown, the content is accurate with few errors	Architectural drawings can be shown, the content is accurate with some errors	Architectural drawings can be shown, the content is not accurate	cannot draw the Architectural drawings	20%
CLO1.2 State the principles of architectural design, architectural history. Apply architectural insights into practice.	<u>Content:</u> Present knowledge through articles	Completely correct answers to questions about architectural knowledge learned	Can answer all questions, although there are few mistakes	Can answer all questions but still have many shortcomings	Answer more than 50% of knowledge about architecture	Unable to answer questions about general knowledge	40%
CLO1.2 Give the correct dimensions for architectural design	<u>Content:</u> Expressed through architectural drawings	Architectural drawings can be shown, 90%-100% the dimensions is right as required	Architectural drawings can be shown, has most of the basic dimensions although there are few deviations from the requirements	Architectural drawings can be shown, has most of the basic dimensions although there are few deviations from the requirements	Architectural drawings can be shown 50%-59%, get basic dimensions	cannot draw the Architectural drawings	20%
CLO1.3 Ability to design architectural works	<u>Content:</u> Expressed through architectural drawings	Get 90%-100% of drawings according to design requirements	Get 80%-89% of drawings according to design requirements	Get 60%-79% of drawings according to design requirements	Get 50%-59% of drawings according to design requirements	cannot draw the Architectural drawings	20%

- Regulations on submitting assignments and tests: students attend classes on time. Students who miss the midterm exam and the unscheduled submission of the assignment will receive "0" score for the respective content.
- Provisions on attendance: lecturers unexpectedly take attendance; students are not allowed to miss more than 2 theoretical lessons.
- Classroom Rules: Students need to follow the rules of Ho Chi Minh City Open University.