

# Data Sheet of International Undergraduate's Course, Tongji CAUP

## 同济大学建筑与城市规划学院本科生国际课程(英语)登记表

Course Code 课程编号	020404	Department 所在系(✓)	A ✓	P	L	D	院登记号 CAUP Code	
Instructor(Title) 主讲教师(职称)	Associate Prof. WANG Zhendong 王桢栋 副教授	Other Teachers 合作教师						
课程中文名	当代大型公共建筑综述							
Course Name (E)	Introduction to Contemporary Large Public Building							
Form of Teaching 教学形式 (✓)	Lectures 讲课 ✓	Design Studio 设计课	Seminar 研讨课	Internship 实践课	Others 其他			
Total Hours 总学时数	34	Hours per Week 周课时	2	Weeks 教学周数	17			
Semester 春季或秋季学期	Spring 春季	Tongji Credits 同济 学分数	2					

### Brief Course Description 课程简述 (中英文)

Public building is the most common building type in our daily life as well as the container of the urban public life. Following the population and technology growth, the large public building is becoming the important part of the urban development, thus an important opportunity to change human's lifestyle. Today, to take the large public building as the research object, to study their develop history, to discriminate different theories and thoughts, to review the gains and losses in different typical cases, and then, to prospect the future development is good to help students to start a preliminary thinking of the rule and trend of contemporary large public building and even the future city.

This course is mainly focuses on three topics: bigger, higher and more complex, and introduces the main develop stages and theories of the world wide large public building as well as discusses the future development of high density sustainable vertical city. This course also arranges three special lectures to analyze the typical large public buildings in history.

公共建筑是人们日常生活中最为常用的建筑，也是城市公共生活的载体。随着城市人口的增加和人类科学技术水平的提高，大型公共建筑日益成为城市发展的重要组成部分，也已经成为改变人类生活方式的重要契机。今天，把大型公共建筑作为研究对象，考察它们的发展历程，辨析不同理论和思想的特征，回顾不同典型案例的得失，进而展望其未来发展趋势，有利于引导学生进行当代公共建筑和城市发展规律和趋势的初步思考。

课程围绕三个主题：更大、更高和更全，对世界范围内的大型公共建筑发展的重要阶段和思想理论展开介绍，并将和学生围绕未来高密度垂直城市的可持续发展命题展开讨论。课程中安排有三次专题讲座，选取历史上及当代最具代表性的案例进行深入剖析，进行类型化的公共建筑比较和知识编辑。

Brief Schedule and Topics 课程进度简表 (中英文)	
<ul style="list-style-type: none"> <li>● Week1: Introduction: The Brief Overview of the Development of Large Public Building 综述：大型公共建筑发展概述</li> <li>● Week2: Topic 1: Bigger 主题一：更大</li> <li>● Week3: Special Lecture: Case Study 1 专题讲座：经典案例剖析 1</li> <li>● Week4: Topic 2: Higher 主题二：更高</li> <li>● Week5: Special Lecture: Case Study 2 专题讲座：经典案例剖析 2</li> <li>● Week6: Topic 3: More Complex 主题三：更全</li> <li>● Week7: Special Lecture: Case Study 3 专题讲座：经典案例剖析 3</li> <li>● Week8: Summary: Toward Sustainable Vertical Urbanism 综述：迈向垂直城市主义</li> <li>● Week9: Finale Review and Presentation 终期考核答辩</li> </ul>	
Course Syllabus 课程大纲 (中英文)	
<p><b>1. Attribute and Purpose of the Course</b></p> <p>This course is a professional basic course. Via the introduction to the develop history, main theories and typical cases of large public building, it helps student to understand the physical and mental characteristics of different types of the contemporary large public buildings and reserve knowledge for future professional study.</p> <p><b>2. Basic Requirement of the Course</b></p> <p>To know the develop history, main theories and its background of the large public building, as well as the spatial characteristics of the typical cases; to understand the main develop trends of contemporary large public building and enrich the research perspective of architectural form; to analyze the social, financial and historical significance of the large public building under the guidance of instructor.</p> <p><b>3. Basic Content of the Course</b></p> <p>Public building is the most common building type in our daily life as well as the container of the urban public life. Following the population and technology growth, the large public building is becoming the important part of the urban development, thus an important opportunity to change human' s lifestyle. Today, to take the large public building as the research object, to study their develop history, to discriminate different theories and thoughts, to review the gains and losses in different typical cases, and then, to prospect the future development is good to help students to start a preliminary thinking of the rule and trend of contemporary large public building and even the future city.</p>	

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Course arrangement:

- 1) Introduction: The Brief Overview of the Development of Large Public Building
- 2) Topic 1: Bigger
- 3) Special Lecture: Case Study 1
- 4) Topic 2: Higher
- 5) Special Lecture: Case Study 2
- 6) Topic 3: More Complex
- 7) Special Lecture: Case Study 3
- 8) Summary: Toward Sustainable Vertical Urbanism
- 9) Finale Review and Presentation

#### **4. Experiment or Computer Part**

None.

#### **5. Ability Training and Personality Forming**

This course is aimed to raise the following abilities of students: (1) to get the preliminary theoretical analysis abilities through studying the basic theory and method of large public building design; (2) to get the creative abilities of public building design through understanding the main points of public building design; (3) to understand the spatial and urban characteristics of selected cases through the case study lectures.

Through this course, students may preliminarily understand the relationship between architecture and city, architecture and society, and form the sense of social development duty.

#### **6. Former Course Requirement**

None

#### **7. Evaluation and Assessment**

The assessment is combined by class performance and final assessment. Final score of this course concludes: (1) 20% is from usual attendance, total attendance below 2/3 will get Fail directly; (2) 20% is from performance in course discussions; (3) 60% is from final presentation.

### **一、课程性质与目的**

本课程为专业基础课, 通过对大型公共建筑发展历史、重要理论思想的介绍以及典型案例的剖析,

帮助学生建立对不同类型的当代大型公共建筑物质性发展与社会基本特征的认识，为进一步的专业拓展学习进行知识储备。

## 二、课程基本要求

了解大型公共建筑发展历史，相关重要理论思想及其背景，以及了解遴选的代表性案例项目各自特有的空间特征；能够理解当代大型公共建筑发展的几大趋势，丰富建筑形态研究的视角，在授课老师的指导下，透视其中包含的社会、经济和历史意义。

## 三、课程基本内容

公共建筑是人们日常生活中最为常用的建筑，也是城市公共生活的载体。随着城市人口的增加和人类科学技术水平的提高，大型公共建筑日益成为城市发展的重要组成部分，也已经成为改变人类生活方式的重要契机。今天，把大型公共建筑作为研究对象，考察它们的发展历程，辨析不同理论和思想的特征，回顾不同典型案例的得失，进而展望其未来发展趋势，有利于引导学生进行当代公共建筑和城市发展规律和趋势的初步思考。

课程围绕三个主题：更大、更高和更全，对世界范围内的大型公共建筑发展的重要阶段和思想理论展开介绍，并将和学生围绕未来高密度垂直城市的可持续发展命题展开讨论。课程中安排有三次专题讲座，选取历史上及当代最具代表性的案例进行深入剖析，进行类型化的公共建筑比较和知识编辑。

课程安排：

1. 综述：大型公共建筑发展概述
2. 主题一：更大
3. 专题讲座：经典案例剖析 1
4. 主题二：更高
5. 专题讲座：经典案例剖析 2
6. 主题三：更全
7. 专题讲座：经典案例剖析 3
8. 综述：迈向垂直城市主义
9. 终期考核答辩

## 四、实验或上机内容

无

## 五、能力培养与人格养成教育

课程旨在培养学生以下几方面的能力：（1）学习大型公共建筑设计的基本理论与方法，初步具备一定的理论分析能力；（2）理解公共建筑设计的要点，初步掌握公共建筑设计各个方面的创造能力；（3）结合课程讲授的大型公共建筑案例，了解这些项目的空间特征和城市特征。

经过课程学习，学生初步理解建筑与城市的关系，建筑与社会的关系，进而形成社会发展的责任意识。

## 六、前修课程要求

无

## 七、评价与考核

考核采用课堂表现和最终考试相结合的方式。具体环节包括：（1）平时考勤占 20%，缺席三分之一以上者重修本课程；（2）课堂讨论环节表现占总成绩 20%。（3）课程终期考核成绩占总成绩 60%。

### Main Reference Books 主要参考书目

- 1) Reyner Banham. *Megastructure: Urban Futures of the Recent Past*, USA: Harper & Row 1976
- 2) Joseph Fenton. *Pamphlet Architecture 11: Hybrid Buildings*, USA: Princeton Architectural Press, 1985
- 3) Rem Koolhaas. *Delirious New York: A Retroactive Manifesto for Manhattan*, USA: Monacelli Press, 1997
- 4) Rem Koolhaas, Bruce Mau, Hans Werlemann. *S, M, L, XL*, USA: Monacelli Press, 1997
- 5) Inaki Abalos, Juan Herreros. *Tower and Office*, USA: The MIT Press, 2002
- 6) Johann Eisele, Ellen Kloft. *High-rise Manual*, Germany: Birkhauser, 2003
- 7) DANIELS, K.. *Advanced Building Systems: A Technical Guide for Architects and Engineers*, Switzerland: Birkhauser, 2003
- 8) ULI. *Mixed-Use Development Handbook (Second Edition)*, USA: Urban Land Institute, 2005
- 9) FERNANDEZ PER. A. & MOZAS, J.. *A+ T: Hybrids I, II, III*, Spain: A+ Tediciones, 2008, 2009, 2010
- 10) GONCALVES, J.C. & UMAKOSHI, E. M.. *The Environmental Performance of Tall Buildings*, London: Earth scan Publications Ltd., 2010
- 11) Rem Koolhaas, Hans Ulrich Obrist. *Project Japan*, USA: Taschen, 2011
- 12) Adam Frampton, Jonathan D. Solomon, Clara Wong. *Cities Without Ground: A Hong Kong Guidebook*. USA: ORO Editions, 2012
- 13) David Parker, Antony Wood. *The Tall Building Reference Book*, USA: Routledge, 2013
- 14) Barrie Shelton, Justyna Karakiewicz, Thomas Kvan. *The Making of Hong Kong: From Vertical to Volumetric (Planning, History and Environment)*, USA: Routledge, 2014