

基本情報/Course Schedule Information	
開講区分(開講学期)/Semester	Fall and Winter Term
曜日・時間/Day and Period	Fri5
開講科目名/Course Name (Japanese)	地球総合工学入門
開講科目名(英)/Course Name	Introduction to Global Architecture
授業形態/Type of Class	講義科目/Lecture
単位数/Credits	2
担当教員/Instructor	MAKI Atsuo, SAKAI Masahiro

※メディア授業科目について

授業回数の半数以上を、多様なメディアを高度に利用して教室等以外の場所で行う授業を「メディア授業科目」としています。

学部学生が「メディア授業科目」を卒業要件に算入できるのは60単位が上限です。

なお、非該当の場合であっても、メディアを利用した授業を実施する場合があります。

授業担当教員一覧

詳細情報/Detailed Syllabus Information	
授業サブタイトル/Course Subtitle	Role of Global Architecture in Sustainable Development
開講言語/Language of the Course	English
学習方法/Learning Method	聴講・視聴/Listening and watching face-to-face/online class ☒ Listening and watching face-to-face/online class: Listening and watching a lecture, video, or demonstration, face-to-face or via online (e.g., attending a face-to-face lecture, watching an on-demand video) ☐ Reading: Reading books and academic papers (e.g., summarizing an academic paper, reading information on a website) ☐ Discussion: Learning through question-and-answer interactions and exchanges of opinions among students and between students and the instructor (e.g., pair/group discussion, online chat, one-on-one guidance for writing an academic paper) ☐ Collaborative work: Working as a pair or a group (e.g., producing a poster through group work) ☐ Research: Collecting information from books and academic papers; gathering and analyzing data by fieldwork (e.g., review of previous research, fieldwork) ☐ Experience/practice: Learning from experience- and practice-based activities, and feedback on such activities (e.g., solving problems; laboratory work using instruments; on-campus and off-campus practical training; skills practice including sporting skills; project-based learning; internship) ☐ Presentation: Writing papers, making presentations, and creating works (e.g., report writing, oral/poster presentation, creation of works, portfolio development) ☐ Others(free description)
授業の目的と概要/Course Objective	The 21st Century will be an era of global partnership. We should make best efforts for realizing sustainable society based on better understanding of global environment and diversity of human cultures with considering the impact of human activities on the nature. In the lectures, recent studies of technology and planning/design concepts for sustainable development in the field of architectural engineering, civil engineering and naval architecture are discussed, which introduce the concept of Global Architecture.
履修条件・受講条件/Requirement / Prerequisite	None
出欠席及び受講に関するルール/Attendance and Student Conduct Policy	Attendance will be considered for grading. The attendance is checked at 20 minutes after the lecture starts.
教科書・指定教材/Textbooks	None
参考図書・参考教材/Reference	None
成績評価に関する補足情報/Additional Information on Grading	*Class participation 30% : Class participation is checked at 20 minutes after the lecture starts. *Examination 70% : 2 Examinations scheduled are based on lectures.
特記事項/Special Note	The contents of the syllabus are subject to change. Please be sure to check the latest information before registering for courses.
オフィスアワー/Office Hour	1hour after lecture
実務経験のある教員による授業科目/Course conducted by instructors with practical experience	

※ 合理的配慮は定型文につき除外。

学習目標・成績評価詳細情報/Learning Goals &Grading Policy Information	
学習目標(1)/Learning Goal(1)	Students will be able to understand the importance of global architecture in sustainable development.
学習目標(2)/Learning Goal(2)	
学習目標(3)/Learning Goal(3)	
学習目標(4)/Learning Goal(4)	
学習目標(5)/Learning Goal(5)	

↑ 5行以上必要な場合は、行を挿入してください。

評価方法/Evaluation Method (プルダウンで選択してください。「その他(自由記述)」を選択した場合は、カッコ内に具体的な内容を入力してください。)					
学習目標/Learning Goals	学習への参加度/Learning Engagement	試験/Exam			
学習目標(1)/Learning Goal(1)	○	○			
学習目標(2)/Learning Goal(2)					
学習目標(3)/Learning Goal(3)					
学習目標(4)/Learning Goal(4)					
学習目標(5)/Learning Goal(5)					
評価割合(%)/Grade Breakdown	30%	70%	%	%	%

↑ 5行以上必要な場合は、行を挿入してください。

評価割合/Allocation of Marks (%) : 100%

授業計画/Class Plan Detailed Information			
回/Time	題目/Title	内容/Content	授業時間外学習/ Independent Study Outside of Class
1	Orientation	Orientation	
2	Architectural Engineering 1	Sustainability of Housing Field	Students should read the references given in the lecture.
3	Architectural Engineering 2	Lessons Learned from Giant Earthquakes in Japan for Building Structural Engineering	Students should read the references given in the lecture.
4	Architectural Engineering 3	Earthquake Strong Ground Motions and Earthquake Disasters	Students should read the references given in the lecture.
5	Architectural Engineering 4	Place for Urban and Community Design in Senri New Town	Students should read the references given in the lecture.
6	Civil Engineering 1	Disaster Prevention and Conservation of Natural Environment in Coastal Zone	Students should read the references given in the lecture.
7	Examination 1	Examination on Lecture subjects Nos. 2-6	
8	Civil Engineering 2	Macro Architecture for Sustainable Urban Development and Green Mobility	Students should read the references given in the lecture.
9	Civil Engineering 3	Sustainability of Bridge Engineering Field	Students should read the references given in the lecture.
10	Civil Engineering 4	Geotechnics for sustainable soil management	Students should read the references given in the lecture.
11	Naval Architecture and Ocean Engineering 1	Ocean Renewable Energy	Students should read the references given in the lecture.
12	Naval Architecture and Ocean Engineering 2	Safety at Sea	Students should read the references given in the lecture.
13	Naval Architecture and Ocean Engineering 3	Prediction of Energy Consuming of Oceangoing Ships	Students should read the references given in the lecture.
14	Naval Architecture and Ocean Engineering 4	Structural Longevity for Ships and Offshore Structures	Students should read the references given in the lecture.
15	Examination 2	Examination 2 on Lecture subjects Nos. 8-14	
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↑ 16行以上必要な場合は、行を挿入してください。

授業担当教員/Instructor(s)					
教員氏名/Instructor Name	ふりがな/Name (hiragana)	所属・職名・講座名/Affiliation, Title, Course	居室/Office	内線/Extension	e-mail/E-mail
MAKI Atsuo	まき あつお	Naval Eng., Prof.	S1-427	7579	maki@naoe.eng.osaka-u.ac.jp

↑ 5行以上必要な場合は、行を挿入してください。