

## 2025 年度シラバス

科目分類/Subject Categories			
学部等/Faculty	/大学院工学科学研究科（博士前期課程）： /Graduate School of Science and Technology (Master's Programs)	今年度開講/Availability	/有：/Available
学域等/Field	/デザイン科学域：/Academic Field of Design	年次/Year	/1～2年次：/1st through 2nd Year
課程等/Program	/建築学専攻：/Master's Program of Architecture	学期/Semester	/第3クォータ：/Third quarter
分類/Category	/授業科目：/Courses	曜日時限/Day & Period	/集中：/Intensive

科目情報/Course Information				
時間割番号 /Timetable Number	63419914			
科目番号 /Course Number	63461005			
単位数/Credits	2			
授業形態 /Course Type	講義：Lecture			
クラス/Class				
授業科目名 /Course Title	建築・景観のデジタル設計法Ⅰ：Digital Methods in Architecture and LandscapeⅠ			
担当教員名 /Instructor(s)	/Ng Ming Shan/VOLLMER MATTHIAS：Ng Ming Shan/VOLLMER MATTHIAS			
その他/Other	インターンシップ実施科目 Internship	国際科学技術コース提供 科目 IGP	PBL 実施科目 Project Based Learning	DX 活用科目 ICT Usage in Learning
		○	○	
	実務経験のある教員による科目 Practical Teacher	○	Director of SCANVISION (scanvision.ch)	
	科目ナンバリング /Numbering Code			

授業の目的・概要 Objectives and Outline of the Course	
日	<p>このコースでは、現実環境のデジタルモデルがどのように作成され、建築、景観、都市デザインの分野でどのように利用できるかを学びます。コースは数日間のワークショップ形式で行われ、レーザースキャナーでの作業方法、データの処理方法、さらにモデリングするための基礎としての点群の使用法を学びます。デジタル・プランニングとデザインのツールと、それをデザインやリサーチの手法としてどのように活用できるかを学びます。フィールドでの記録から、応用実践のデジタル・モデルのレビューまで、各ステップを学び、実践する。</p> <p>ワークショップは11月11日から11月13日まで、曜日と時間は受講生と工場の都合により調整される。</p> <ol style="list-style-type: none"> <li>1. 日目 レーザースキャン、点群登録（KIT 外、デザインファクトリーKIT）</li> <li>2. 日目 点群編集、モデリング（デザインファクトリーKIT）</li> <li>3. 日目 モデリング編集、レポート作成（デザインファクトリーKIT）</li> </ol>
英	<p>In this course you will learn how digital models of the real environment are created and how they can be used in the field of architecture, landscape and urban design. The course is held in the form of a multi-day workshop where you will learn how to work with a laser scanner, process the data and use the point cloud as a basis for further modeling. The tools of digital planning and design and how they can be used as a design and research method will be taught. From field recording to reviewing digital models of applied practice, each step is taught and practiced.</p> <p>Workshop from 11th November to 13th November, days and times might be adjusted according to students and factory availability.</p> <ol style="list-style-type: none"> <li>1. Day: Laserscanning, Point Cloud Registration (Outside KIT, Design Factory KIT)</li> </ol>

	2. Day: Point Cloud Editing, Modelling (Design Factory KIT)
	3. Day: Modelling editing and reporting (Design Factory KIT)

学習の到達目標 Learning Objectives	
日	レーザースキャン 点群登録とモデリング 点群モデルから CAD ソフトウェアへの転送 3D BIM モデルの作成 デジタル建築と景観モデルの応用
英	Laserscanning Point Cloud Registration and Modelling Transfer from Point Cloud Model to CAD Software Creation of 3D BIM Models Applications of digital Architecture and Landscape Models

学習目標の達成度の評価基準 / Fulfillment of Course Goals (JABEE 関連科目のみ)	
日	
英	

授業計画項目 Course Plan			
No.		項目 Topics	内容 Content
1	日	This is a workshop-based course	This is a workshop-based course
	英	This is a workshop-based course	This is a workshop-based course
2	日	This is a workshop-based course	This is a workshop-based course
	英	This is a workshop-based course	This is a workshop-based course
3	日	This is a workshop-based course	This is a workshop-based course
	英	This is a workshop-based course	This is a workshop-based course
4	日	This is a workshop-based course	This is a workshop-based course
	英	This is a workshop-based course	This is a workshop-based course
5	日	This is a workshop-based course	This is a workshop-based course
	英	This is a workshop-based course	This is a workshop-based course
6	日	This is a workshop-based course	This is a workshop-based course
	英	This is a workshop-based course	This is a workshop-based course
7	日	This is a workshop-based course	This is a workshop-based course
	英	This is a workshop-based course	This is a workshop-based course
8	日	This is a workshop-based course	This is a workshop-based course
	英	This is a workshop-based course	This is a workshop-based course

9	日	This is a workshop-based course	This is a workshop-based course
	英	This is a workshop-based course	This is a workshop-based course
10	日	This is a workshop-based course	This is a workshop-based course
	英	This is a workshop-based course	This is a workshop-based course
11	日	This is a workshop-based course	This is a workshop-based course
	英	This is a workshop-based course	This is a workshop-based course
12	日	This is a workshop-based course	This is a workshop-based course
	英	This is a workshop-based course	This is a workshop-based course
13	日	This is a workshop-based course	This is a workshop-based course
	英	This is a workshop-based course	This is a workshop-based course
14	日	This is a workshop-based course	This is a workshop-based course
	英	This is a workshop-based course	This is a workshop-based course
15	日	This is a workshop-based course	This is a workshop-based course
	英	This is a workshop-based course	This is a workshop-based course

履修条件 Prerequisite(s)	
日	
英	

授業時間外学習（予習・復習等） Required study time, Preparation and review	
日	受講生はワークショップの全日程に出席する。ワークショップ終了後、学生は指導された内容を応用して仕上げ、最終的にレポートを提出する。
英	Students are asked to attend the full workshop time. After the workshop, students are asked to apply and finish the taught content and finally to hand in a report on the work they have done.

教科書／参考書 Textbooks/Reference Books	
日	
英	

成績評価の方法及び基準 Grading Policy	
日	出席、注意力、コミットメント、プロジェクトワーク、レポート
英	Attendance, attention and commitment, project work, report

留意事項等 Point to consider	
日	
英	