

登録コード	TSX16600	開講年度	2026				
授業科目	建築構造設計学演習				担当教員	遠藤 洋平	
英文授業名	Structural design exercise 1				副担当		
単位数	4	講義期間	不定期	曜日・時限	集中・不定期	対象学生	
講義室			授業形態	演習	備考		
信大コンベンション	該当						
(1)授業の達成目標	【授業で得られる「学位授与の方針」要素】				【授業の達成目標】		
	2 4 TSカリ, 2 3 TSカリ						
	【研究科共通】人類, 社会の平和的・持続的発展のために, 研究者・技術者として科学・技術を発展させるための幅広い見識と健全な倫理観				To have ethical judgements as an architect and engineer		
	【研究科共通】さまざまな課題に対処できる高い情報収集・分析能力とグローバルな情報発信能力				To communicate one's ideas in the second/third language		
	【研究科共通】深い専門知識に基づいて自らの思考や妥当性を論理的に説明できる批判的思考力				To have critical ways of thinking		
	2 6 TSカリ, 2 5 TSカリ, 2 4 TSカリ, 2 3 TSカリ						
	【専攻】さまざまな課題に対処できる高い情報収集・分析能力とグローバルな情報発信能力				To communicate one's ideas in the second/third language		
	【専攻】専門知識に基づいて自らの思考や妥当性を論理的に説明できる批判的思考力				To have critical ways of thinking		
(2)授業の概要	The participants prepare the state-of-art discussion report on the basis of lectures discussed below. During the seminar, At the end of course, the participants give a public presentation in addition to the submission of the report.						
(3)授業計画	1. History of structural analysis I: classical approaches The lectures discusses analysis techniques employed in the past including catenary theories and graphical approaches. 2. History of structural analysis II: advanced approaches The lectures presents contemporary analysis techniques such as FEM and DEM. A particular attention is given on FEM. 3. Structural analysis I: small-scale masonry structures The lectures presents recent research developments in structural analyses of small-scale masonry structures. A focus is given on influences of box behaviour to seismic behaviour. 4. Structural analysis II: slender masonry structures The lectures provides case study examples of slender masonry structures. Seismi behaviour of multi-tier pagodas are particularly disussed. 5. Structural analysis III: large-scale cultural heritage structures The lectures presents recent conservation/restoration projects of cultural heritage structures, referring to the guidelines published by ICOMOS-ISCARSAH(2005). 5. Laboratory testing The lectures discusses laboratory testing methods. 6.In-situ testing The lectures discusses in-situ testing methods.						
(4)成績評価の方法	Students are evaluated by the yearly performance including attendance, discussion, and presentations.						
(5)成績評価の基準	100-90 S 89-80 A 79-70 B 60-60 C						
(6)事前事後学習の内容	Students must work actively for their dissertation projects.						
(7)履修上の注意	The students are encouraged to have fair knowledge of structural mechanics and structural materials.						
(8)質問,相談への対応	Students are supposed to send an email in advance for the appointment. The address is found in the website of SOAR (http://soar-rd.shinshu-u.ac.jp/profile/en.gNkFbUkh.html). Any sort of questions and consult are welcome.						
(9)その他	N/A						
【教科書】	N/A						
【参考書】	N/A						