



MODUL HANDBOOK INTERIOR CONSTRUCTION

Bachelor Degree Program
Department of Interior Design
Faculty of Creative Design and Digital Business

Institut Teknologi Sepuluh Nopember



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Description of Course Unit

Course unit title	Interior Construction
Course unit code	DI184520
Type of course unit (compulsory, optional)	Compulsory
Level of course unit (according to EQF: first cycle Bachelor, second cycle Master)	First Cycle Bachelor
Year of study when the course unit is delivered (if applicable)	3 th year
Semester/trimester when the course unit is delivered	5 th
Number of ECTS credits allocated	4,8 Credits
Name of lecturer(s)	Ir. Prasetyo Wahyudie, M.T
Learning outcomes of the course unit	<ol style="list-style-type: none"> 1. Students are able to work together in building construction 2. Students are able to explain the structure and construction of concrete and steel buildings 3. Students are able to master earthquake resistant buildings
Mode of delivery (face-to-face, distance learning)	Face-to-face
Prerequisites and co-requisites (if applicable)	-
Course content	<ol style="list-style-type: none"> 1. Structure and construction of buildings 2. Engineering of Concrete and Steel building 3. Construction of earthquake resistant building
Recommended or required reading and other learning resources/tools	<ol style="list-style-type: none"> 1. (2006). Pedoman Teknis Bangunan Tahan Gempa. Direktorat Jenderal Cipta Karya 2. Hartiningsih (2016). Konstruksi Bangunan untuk Interior. Penerbit ISI Jogjakarta 3. Murty, CVR (-).Perilaku Bangunan Struktur Rangka Beton Bertulang Dengan Dinding Pengisi Dari Bata Terhadap Gempa. Earthquake Engineering Research Institute, Oakland, California 4. Imriyanti, dkk (2014). Stuktur dan Konstruksi Bangunan II. Universitas Hasanuddin 5. Abbasi, O., E. Noorzai, K. Gharouni Jafari, and M. Golabchi. 2020. "Exploring the causes of delays in construction industry using a cause-and-effect diagram: Case study for Iran." J. Archit. Eng. 26 (3): 05020008. https://doi.org/10.1061/(ASCE)AE.1943-5568.0000431. 6. Alaloul, W. S., M. S. Liew, N. A. W. Zawawi, B. S. Mohammed, M. Adamu, and M. A. Musharat. 2020. "Structural equation modelling of construction project performance based on coordination factors." Cogent Eng. 7 (1): 1726069. https://doi.org/10.1080/23311916.2020.1726069. 7. Anantatmula, V. S., and P. F. Rad. 2018. "Role of organizational project management maturity factors on project success." Eng. Manage. J. 30 (3): 165–178. https://doi.org/10.1080/10429247.2018.1458208.

	<ol style="list-style-type: none"> 8. Brookes, N., M. Butler, P. Dey, and R. Clark. 2014. "The use of maturity models in improving project management performance." <i>Int. J. Managing Projects Bus.</i> 7 (2): 231–246. https://doi.org/10.1108/IJMPB-03-2013-0007. 9. Cacamis, M. E., and M. El Asmar. 2014. "Improving project performance through partnering and emotional intelligence." <i>Pract. Period. Struct. Des. Constr.</i> 19 (1): 50–56. https://doi.org/10.1061/(ASCE)SC.1943-5576.0000180. 10. Chokor, A., M. El Asmar, and B. Sai Paladugu. 2017. "Quantifying the impact of cost-based incentives on the performance of building projects in the United States." <i>Pract. Period. Struct. Des. Constr.</i> 22 (2): 04016024. https://doi.org/10.1061/(ASCE)SC.1943-5576.0000312. 11. Crawford, J. K. 2014. <i>Project management maturity model</i>. Boca Raton, FL: Auerbach Publications. 12. Denicol, J., A. Davies, and I. Krystallis. 2020. "What are the causes and cures of poor megaproject performance? A systematic literature review and research agenda." <i>Project Manage. J.</i> 51 (3): 328–345. https://doi.org/10.1177/8756972819896113. 13. Durdyev, S. 2021. "Review of construction journals on causes of project cost overruns." <i>Eng. Constr. Archit. Manage.</i> 28 (4): 1241–1260. https://doi.org/10.1108/ECAM-02-2020-0137. 14. Hermano, V. 2021. "Rethinking maturity models: From project management to project-based." In <i>Project management and engineering research</i>, 63–73. New York: Springer. 15. Parsamehr, M., U. S. Perera, T. C. Dodanwala, P. Perera, and R. Ruparathna. 2022. "A review of construction management challenges and BIM-based solutions: Perspectives from the schedule, cost, quality, and safety management." <i>Asian J. Civ. Eng.</i> 1–37. https://doi.org/10.1007/s42107-022-00501-4.
Planned learning activities and teaching methods	Problem-Based Learning, Project-Based Learning and Blended Learning
Language of instruction	Bahasa and English
Assessment methods and criteria	Assignment, Project, Quiz, Midterm Exam and Final Exam

Learning Outcome (LO)

LO	Description
LO2	Able to make alternatives, development, and interior design details (implementation of concepts)
LO3	Able to make alternatives, development, and interior design details (implementation of concepts)
LO5	Able to utilize environmental and maritime technology in the field of interior design
LO8	Mastering practical design knowledge about Geometry, building, communication (drawing), methodologies and consequences in the field of interior design

Course Learning Outcome (CLO)

CLO	Description	Mapping of CLO to LO				Weight of CLO (%)
		LO 2	LO 3	LO5	LO8	
CLO1	Capable of critical and creative thinking in engineering load distribution principles to support the form ideas of interior design across various construction materials	x				10
CLO2	Able to make alternatives, development, and construction details in interior design		x			30
CLO3	Able to utilize environmentally friendly technology to support the construction of the interior design that will be implemented			x		30
CLO4	Proficiency in practical knowledge of building construction and its implications in the realm of interior design				x	30

Assessment Plan

No.	Course Learning Outcomes*	Assessment Technique	Assessment Weight (%)
1	CLO1 Capable of critical and creative thinking in engineering load distribution principles to support the form ideas of interior design across various construction materials	Assessing load distribution on buildings (Team-based Project)	10
2	CLO2 Able to make alternatives, development, and construction details in interior design	Making details on interior construction (Team-based Project)	30
3	CLO3 Able to utilize environmentally friendly technology to support the construction of the interior design that will be implemented	Reviewing technology in construction practice (Case Method)	30
4	CLO4 Proficiency in practical knowledge of building construction and its implications in the realm of interior design	Final exam	30
Total Assessment Weight			100%

Learning Outcome Plan

Week	Sub Achievement-Subject Final Ability	Breadth (Learning Material)	Learning Method	Estimated Time	Students Learning Experience	Assessment Criteria and Indicator
1, 2	Students are able to explain the position and relation of subject course to other subjects	Course Introduction and relationships with other courses	Interactive lecture and discussion	2 lectures / meetings @ 120 minutes	Discussion	Attendance and students activity during lecture
3 - 5	Students are able to understand the structure and construction of buildings	Structure and construction of buildings	Interactive lecture and discussion	3 lectures / meetings @ 120 minutes	Discussion	Students activity
6, 7	Students are able to work together in creating structural and construction plans	Midterm examination and assignment 1	Discussion and presentation	3 lectures / meetings @ 120 minutes	Discussion and presentation	Students activity and assignment quality
8, 9	Students are able to understand concrete and steel buildings	Engineering of Concrete and Steel building	Interactive lecture and discussion	2 lectures / meetings @ 120 minutes	Discussion	Students activity

10	Students are able to draw structures and construction of concrete and steel buildings	Assignment 2	Interactive lecture and discussion	1 lecture / meeting @ 120 minutes	Discussion and presentation	Students activity and assignment quality
11 - 13	Students are able to create earthquake resistant building plans	Construction of earthquake resistant building	Interactive lecture and discussion	3 lectures / meetings @ 120 minutes	Discussion	Students activity
14 - 16	Students are able to draw images of earthquake resistant building construction	Final examination	Discussion and presentation	1 lecture / meeting @ 120 minutes	Discussion	Students activity

REFERENCES (max 5):

1. – (2006). Pedoman Teknis Bangunan Tahan Gempa. Direktorat Jenderal Cipta Karya
2. Hartiningsih (2016). Konstruksi Bangunan untuk Interior. Penerbit ISI Jogjakarta
3. Murty, CVR (-).Perilaku Bangunan Struktur Rangka Beton Bertulang Dengan Dinding Pengisi Dari Bata Terhadap Gempa. Earthquake Engineering Research Institute, Oakland, California
4. Imriyanti, dkk (2014). Stuktur dan Konstruksi Bangunan II. Universitas Hasanuddin

Note:

* Presentations, assignments, discussions, quizzes, laboratory practices