



# MODUL HANDBOOK INTERIOR DESIGN AND TECHNOLOGY

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 Design and Technology
Course unit code	DI184519
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)	2 <sup>nd</sup> year
Semester/trimester when the course unit is delivered	3 <sup>rd</sup>
Number of ECTS credits allocated	8 Credits
Name of lecturer(s)	1. Thomas Ari Kristianto, S.Sn., MT. 2. Okta Putra Setio Ardianto, S.T, M.T
Learning outcomes of the course unit	Students are able to: 1. Have good insight and knowledge about function and aesthetics of interior design of public facility with modern building system, especially building with office function. 2. Recognize in more detail the application of building systems associated with the interior including structural systems, building quilt systems, building utility systems, vertical circulation systems in buildings, lighting systems, sound systems, security systems. 3. Have the ability to apply an effective and efficient office design interior methodology. 4. Able to do simple design research about the office, design concepts with research design problems, and make alternative office design as implementation of design concepts. 5. Able to make design and final design development, and present it by using manual and digital techniques.
Mode of delivery (face-to-face, distance learning)	Face-to-face
Prerequisites and co-requisites (if applicable)	Have completed Interior Design and Function courses with a minimum grade of D
Course content	1. Aesthetic aspect and its application on interior design office design. 2. Aspects of function and its application on interior design office design. 3. Technology aspect and its application on interior design office design. 4. Aspects of communication design and its application on interior design office design. 5. Aspect of design methodology on interior office design planning. 6. Principles of "design consequences" and its application to the interior design office design
Recommended or required reading and other learning resources/tools	1. Palmer, Mickey. 1981. <i>The Architect's Guide to Facility Programming</i> . The American Institute of Architect. 2. Cross Nigel. 2006. <i>Engineering Design Methods</i> . New York: Jhon Wiley & Sons LTD.

	<ol style="list-style-type: none"> <li>3. Albert, Halse. <i>The Use of Color In Interior</i>. New York : Mc. Graw Hill.</li> <li>4. Charles &amp; David. 2001. <i>Creative Lighting Solution</i>. Hong Kong : Dai Nippon.</li> <li>5. D.K Ching, Francis. 1993. <i>Form, Space and Order</i>.</li> <li>6. Potter, B. A., Holmes, C. E., &amp; Yesner, D. R. (2013). Technology and economy among the earliest prehistoric foragers in interior eastern Beringia. <i>Paleoamerican odyssey</i>, 81-103.</li> <li>7. Rahman, M. A., &amp; Jamaludin, J. (2022). Penerapan Motif Batik Jawa Barat Berbasis Teknologi sebagai Elemen Estetis pada Perancangan Interior Lobby Grand Pasundan Convention Hotel. <i>REKAJIVA Jurnal Desain Interior</i>, 1(2), 68-80.</li> <li>8. Wijaya, I. B. A. (2019). Reaktualisasi Motif Batik pada Elemen Desain Interior Berbasis Teknologi. <i>LINTAS RUANG: Jurnal Pengetahuan dan Perancangan Desain Interior</i>, 7(1).</li> <li>9. Syifa, N. F. (2023). <i>Desain Interior Museum Kanker Indonesia Dengan Penerapan Teknologi Digital Untuk Meningkatkan Ketertarikan Pengunjung Dan Tujuan Edukasi</i> (Doctoral dissertation, Institut Teknologi Sepuluh Nopember).</li> </ol>
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 think critically and creatively in preparing interior design ideas/ 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
LO10	Able to provide alternative solutions and make the right, creative and innovative decisions related to the field of interior design based on good leadership and communication skills

### Course Learning Outcome (CLO)

CLO	Description	Mapping of CLO to LO				Weight of CLO (%)
		LO 2	LO 5	LO8	LO10	
CLO1	Students are able to do interior design programming with a series of studies with the premise of environmentally sound technology	x				15
CLO2	Students are able to formulate and present workspace interior design concepts with a technology premise		x			25
CLO3	Students are able to explore the interior design of the workspace with the premise of technology				x	25
CLO4	Students are able to produce technical drawing documents and visualization of workspace interior designs and can evaluate design performance			x	x	35

## Assessment Plan

No.	Course Learning Outcomes*	Assessment Technique	Assessment Weight (%)
1	<b>CLO1</b> Students are able to do interior design programming with a series of studies with the premise of environmentally sound technology	Office Interior Design Programming Tasks (Case Method)	15
2	<b>CLO2</b> Students are able to formulate and present workspace interior design concepts with a technology premise <b>CLO3</b> Students are able to explore the interior design of the workspace with the premise of technology <b>CLO4</b> Students are able to produce technical drawing documents and visualization of workspace interior designs and can evaluate design performance	Office Interior Design Concept Tasks (Case Method)	35
3	<b>CLO3</b> Students are able to explore the interior design of the workspace with the premise of technology <b>CLO4</b> Students are able to produce technical drawing documents and visualization of workspace interior designs and can evaluate design performance	Document Drawing Engineering Design (Case Method)	30
4	<b>CLO4</b> Students are able to produce technical drawing documents and visualization of workspace interior designs and can evaluate design performance	Documentation of Visualization and Design Evaluation (Case Method)	20
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	Have good insight and knowledge about function and aesthetics of interior design of public facility with modern building system, especially building with office function.	Introduction to lectures and studies Library & Existing Interior Design Office: <ul style="list-style-type: none"> <li>• Office Type</li> <li>• Office organization and activities</li> <li>• Office facilities</li> <li>• Interior office design style</li> </ul>	Lecture and interactive discussion	1 x meeting @ 5x50 menit  Task-1: library study and the existing study of interior office design	Discussion and study case	<ul style="list-style-type: none"> <li>• The accuracy and completeness of the description of the function and aesthetics of the office interior.</li> <li>• Accuracy and breadth of data sources.</li> </ul>
2	Recognize in more detail the application of building systems associated with the interior including structural systems, building quilt systems, building utility systems, vertical circulation systems in buildings, lighting systems, sound systems, building security systems.	Systems in office buildings: <ul style="list-style-type: none"> <li>• Structural systems,</li> <li>• Building quilt systems,</li> <li>• Building utility systems,</li> <li>• Vertical circulation system in buildings,</li> <li>• Light system,</li> <li>• Sound system,</li> <li>• Building security systems.</li> </ul>	Lecture, consultation and interactive discussion	1 x meeting @ 5x50 menit  Task-2: literature study and / or existing building system	Discussion and study case	<ul style="list-style-type: none"> <li>• Accuracy and completeness of the detailed description of existing systems in the interior of the office.</li> <li>• Accuracy and breadth of data sources.</li> </ul>
3	Have the ability to apply an effective and efficient office design interior methodology.	Office Interior Design Methodology: <ul style="list-style-type: none"> <li>• Interior office design process</li> <li>• Interior office design method.</li> </ul>	Lecture, consultation and interactive discussion	1 x meeting @ 5x50 menit  Task-3: develop an interior office design methodology	Discussion and study case	<ul style="list-style-type: none"> <li>• The accuracy and clarity of the reasons for the selection of processes and design methods to be</li> </ul>

						implemented.
4, 5	Able to do simple design research about office, arrange design concept with problem of research result design.	Simple research on office interior: <ul style="list-style-type: none"> <li>Existing and Comparative Studies</li> <li>Formulation of interior design problems</li> <li>The preparation of the interior design concept of the office</li> </ul>	Lecture, consultation and interactive discussion	2 x meeting @ 5x50 menit  Task-4: analysis and interior design office concept	Discussion and study case	<ul style="list-style-type: none"> <li>Adequacy and validity of data.</li> <li>Truth data analysis.</li> <li>Clarity of design problem formulation</li> <li>Truth ideas/ design concepts.</li> </ul>
6, 7	Able to make alternative office design as implementation of design concept	Alternative design and selection of alternative interior office design: <ul style="list-style-type: none"> <li>Alternative design</li> <li>Selection of design alternatives</li> </ul>	Lecture, consultation and interactive discussion	2 x meeting @ 5x50 menit  Task-5 : create an office design alternative	Discussion and study case	<ul style="list-style-type: none"> <li>Optimization of the application of the concept of design in the form of drawing sketch drawings and perspective.</li> <li>Presentation techniques.</li> <li>Truth alternative selection method</li> </ul>
8	Students are able to know and master the knowledge of interior design design until the early stage of the initial design.	Midterm Examination	Evaluation and submission of project's progress.	1 x meeting @ 5x50 menit	Discussion and Evaluation.	<ul style="list-style-type: none"> <li>Quality of initial document design.</li> <li>Quality of data and supporting literature</li> <li>Quality depth of design concept.</li> </ul>
9, 10	Able to make design development, as well as present by using manual and digital techniques.	Design development with manual / digital presentations: <ul style="list-style-type: none"> <li>Image layout</li> <li>Elevations</li> <li>Perspectives</li> </ul>	Lecture, consultation and interactive discussion	2 x meeting @ 5x50 menit	Discussion and study case	<ul style="list-style-type: none"> <li>Optimization of the application of the concept of design in the form of drawing layouts, elevation and</li> </ul>



						<p>perspective.</p> <ul style="list-style-type: none"> <li>• Presentation techniques.</li> </ul>
11, 12, 13	Able to make final designs, and present them using manual and digital techniques.	<p>Final design with manual / digital presentation:</p> <ul style="list-style-type: none"> <li>• Analysis and design concepts book</li> <li>• Image layout</li> <li>• Elevations</li> <li>• Perspectives</li> <li>• Detailed drawings</li> </ul>	Lecture, consultation and interactive discussion	3 meeting @ 5x50 minutes	Discussion and study case	<ul style="list-style-type: none"> <li>• Optimization of the application of the concept of design in the form of drawing layouts, elevation, perspective and detail.</li> <li>• Presentation techniques.</li> </ul>
14, 15	Able to make final designs, and present them using manual and digital techniques.	<ul style="list-style-type: none"> <li>• 3 D Image</li> <li>• Animation/ mockup</li> </ul>	Lecture, consultation and interactive discussion	2 x meeting @ 5x50 minutes	Discussion and study case	<ul style="list-style-type: none"> <li>• Quality of 3D image presentations and animations.</li> </ul>
16	Students are able to know and master the knowledge of interior design until the final stage.	Final Examination	Evaluation and submission of project's progress.	1 x meeting @ 5x50 minutes	Discussion and Evaluation.	<ul style="list-style-type: none"> <li>• Quality of final document design.</li> <li>• Quality of data and supporting literature</li> <li>• Quality depth of design concept.</li> </ul>

REFERENCES (max 5):

1. Palmer, Mickey. 1981. *The Architect's Guide to Facility Programming*. The American Institute of Architect.
2. Cross Nigel. 2006. *Engineering Design Methods*. New York: Jhon Wiley & Sons LTD.
3. Albert, Halse. *The Use of Color In Interior*. New York : Mc. Graw Hill.
4. Charles & David. 2001. *Creative Lighting Solution*. Hong Kong : Dai Nippon.
5. D.K Ching, Francis. 1993. *Form, Space and Order*.

Notes:

\* Presentation