

Architecture Department Syllabus - ITS

COURSE	Course Name	: Introduction to Architecture
	Course Code	: DA184102
	Credit(s)	: 3
	Semester	: I

DESCRIPTION OF COURSE

LEARNING OUTCOMES

Attitude	1.9	Demonstrating attitude of responsibility on work in his/her field of expertise independently
Knowledge	2.1	Understanding theoretical concepts of architecture, architectural design, aesthetics, structural system and building services and security and building safety
	2.3	Understanding presentation techniques of architectural conceptual design
Specific Skills	3.1	Being able to develop Architecture Design concept that integrates studies on behavior, environment, technical aspects and values related to architecture
	3.3	Being able to communicate thoughts and design results through graphics, writings, and communicative models with manual or digital techniques
	3.4	Being able to present several alternative design solutions and to make a decision based on scientific considerations in architecture
General Skills	4.1	Being able to apply logical, critical, systematic and innovative thinking in the context of development or implementation of science and technology that concerns and implements the value of humanities in accordance with their area of expertise
	4.2	Being able to demonstrate independent performance, quality, and measurable
	4.5	Being able to take decisions appropriately in the context of problem solving in the area of expertise based on the results of information and data analysis
	4.6	Being able to maintain an expanded network with mentors, colleagues, colleagues both inside and outside the institution

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	4.7	Being able to take responsibility for the achievement of group work and supervise and evaluate the work completion assigned to the worker under his/her responsibility
	4.8	Being able to conduct self-evaluation process to work group under his/her responsibility, and able to manage learning independently
COURSE LEARNING OUTCOMES		
SUBJECTS		
PREREQUISITES		
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REFERENCE(S)		
<ol style="list-style-type: none">1. R Conway and Roenisch, 1987, Understanding Architecture, Routledge of Keegan, London2. O' Goerman, James F, 1980, The ABC of Architecture, University of Peninnsylvania Press, Philadelphia.3. Snyder, James, & A.J. Catanese (ed), 1979, Introduction to Architecture, McGraw-Hill, New York.4. Jeremy M (); ISMS, Understanding Architecture .5. Vitruvius;The ten book of Afrchitecture		

Architecture Department Syllabus - ITS

COURSE	Course Name	: Architectural Science and Technology
	Course Code	: DA184306
	Credit(s)	: 3
	Semester	: III

DESCRIPTION OF COURSE

LEARNING OUTCOMES

Attitude	1.9	Demonstrating attitude of responsibility on work in his/her field of expertise independently
Knowledge	2.2	Understanding principles of building science, landscape, urban planning and design, settlement, Nusantara architecture, ecology, and meaning in architecture
Specific Skills	3.1	Being able to develop Architecture Design concept that integrates studies on behavior, environment, technical aspects and values related to architecture
	3.3	Being able to communicate thoughts and design results through graphics, writings, and communicative models with manual or digital techniques
	3.4	Being able to present several alternative design solutions and to make a decision based on scientific considerations in architecture
General Skills	4.1	Being able to apply logical, critical, systematic and innovative thinking in the context of development or implementation of science and technology that concerns and implements the value of humanities in accordance with their area of expertise
	4.2	Being able to demonstrate independent performance, quality, and measurable
	4.5	Being able to take decisions appropriately in the context of problem solving in the area of expertise based on the results of information and data analysis
	4.8	Being able to conduct self-evaluation process to work group under his/her responsibility, and able to manage learning independently

COURSE LEARNING OUTCOMES

SUBJECTS

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PREREQUISITES
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REFERENCE(S)
1. Szokolay, S. (2004), Introduction to Architectural Science; Basis for Sustainable Design, Oxford: Architectural Press

COURSE	Course Name	: Design Method and Research in Architecture
	Course Code	: DA184303
	Credit(s)	: 3
	Semester	: III

DESCRIPTION OF COURSE		
LEARNING OUTCOMES		
Attitude	1.9	Demonstrating attitude of responsibility on work in his/her field of expertise independently
Knowledge	2.1	Understanding theoretical concepts of architecture, architectural design, aesthetics, structural system and building services and security and building safety
	2.2	Understanding principles of building science, landscape, urban planning and design, settlement, Nusantara architecture, ecology, and meaning in architecture
	2.3	Understanding presentation techniques of architectural conceptual design
Specific Skills	3.1	Being able to develop Architecture Design concept that integrates studies on behavior, environment, technical aspects and values related to architecture
	3.2	Being able to design architecture independently with research-based design methods, and produce creative architectural works, which is a solution to contextual architectural problem, and verified theoretically to the rules of architecture
	3.3	Being able to communicate thoughts and design results through graphics, writings, and communicative models with manual or digital techniques
	3.4	Being able to present several alternative design solutions and to make a decision based on scientific considerations in architecture
	3.5	Being able to utilize design capability to assist the supervision and / or implementation of environmental development and building construction

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General Skills	4.1	Being able to apply logical, critical, systematic and innovative thinking in the context of development or implementation of science and technology that concerns and implements the value of humanities in accordance with their area of expertise
	4.2	Being able to demonstrate independent performance, quality, and measurable
	4.3	Being able to examine the implications of the development or implementation of the science of technology which concerns and implements the value of humanities in accordance with its expertise based on rules, procedures and scientific ethics in order to produce solutions, ideas, designs or art criticism, compile scientific descriptions of the study results in the form of thesis or final project report , and uploaded it in the college page
	4.4	Arrange the scientific description of the results of the above study in the form of a thesis or final project report, and upload it on the college page
	4.5	Being able to take decisions appropriately in the context of problem solving in the area of expertise based on the results of information and data analysis
	4.6	Being able to maintain an expanded network with mentors, colleagues, colleagues both inside and outside the institution
	4.7	Being able to take responsibility for the achievement of group work and supervise and evaluate the work completion assigned to the worker under his/her responsibility
	4.8	Being able to conduct self-evaluation process to work group under his/her responsibility, and able to manage learning independently

COURSE LEARNING OUTCOMES

SUBJECTS

1. Critical thinking
2. Design & research
3. Precedents
4. Pattern-based frameworks
5. Force-based frameworks
6. Concept-based frameworks

PREREQUISITES

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REFERENCE(S)
1. Revealing Architectural Design: Methods, Frameworks & Tools – Plowright, Philip D., 2014
2. A Practical Guide to Critical Thinking – Hunter, David A., 2009
3. Architectural Research Method - Linda Groat & David Wang, 2012
4. Precedents in Architecture: Analytic Diagrams, Formative Ideas, and Partis_Clark Roger, 1996
5. Design Methods Basics_Kari Jormakka_2014

Architecture Department Syllabus - ITS

COURSE	Course Name	: Structure and Construction in Architecture
	Course Code	: DA184304
	Credit(s)	: 3
	Semester	: III

DESCRIPTION OF COURSE		
LEARNING OUTCOMES		
Attitude	1.9	Demonstrating attitude of responsibility on work in his/her field of expertise independently
Knowledge	2.1	Understanding theoretical concepts of architecture, architectural design, aesthetics, structural system and building services and security and building safety
	2.2	Understanding principles of building science, landscape, urban planning and design, settlement, Nusantara architecture, ecology, and meaning in architecture
	2.3	Understanding presentation techniques of architectural conceptual design
Specific Skills	3.1	Being able to develop Architecture Design concept that integrates studies on behavior, environment, technical aspects and values related to architecture
	3.2	Being able to design architecture independently with research-based design methods, and produce creative architectural works, which is a solution to contextual architectural problem, and verified theoretically to the rules of architecture
	3.3	Being able to communicate thoughts and design results through graphics, writings, and communicative models with manual or digital techniques
	3.4	Being able to present several alternative design solutions and to make a decision based on scientific considerations in architecture
	3.5	Being able to utilize design capability to assist the supervision and / or implementation of environmental development and building construction

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General Skills	4.1	Being able to apply logical, critical, systematic and innovative thinking in the context of development or implementation of science and technology that concerns and implements the value of humanities in accordance with their area of expertise
	4.2	Being able to demonstrate independent performance, quality, and measurable
	4.3	Being able to examine the implications of the development or implementation of the science of technology which concerns and implements the value of humanities in accordance with its expertise based on rules, procedures and scientific ethics in order to produce solutions, ideas, designs or art criticism, compile scientific descriptions of the study results in the form of thesis or final project report , and uploaded it in the college page
	4.4	Arrange the scientific description of the results of the above study in the form of a thesis or final project report, and upload it on the college page
	4.5	Being able to take decisions appropriately in the context of problem solving in the area of expertise based on the results of information and data analysis
	4.6	Being able to maintain an expanded network with mentors, colleagues, colleagues both inside and outside the institution
	4.7	Being able to take responsibility for the achievement of group work and supervise and evaluate the work completion assigned to the worker under his/her responsibility
	4.8	Being able to conduct self-evaluation process to work group under his/her responsibility, and able to manage learning independently
COURSE LEARNING OUTCOMES		
SUBJECTS		
PREREQUISITES		
-		
REFERENCE(S)		
<ol style="list-style-type: none">1. Cowan, Henry J. "Architectural Structures, An introduction to Struktural Mechanics' Pitman, 1979.2. Garrison, Philliph, "Basic Structures for Engineers & Architects", Oxford, London, 2005.		

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3. Sandaker, Bjorn Normann. The Structural Basic of Architecture. New York. 1992.
4. Schodeck, Daniel L, "Structures,"(terjemahan), PT Eresco, Bandung, 1995.
5. TY Lin "Structural Concept and System for Arhitects and Engineers," John Wiley & Sons, New York, 1993

Architecture Department Syllabus - ITS

COURSE	Course Name	: Introduction to Housing and Human Settlements
	Course Code	: DA184305
	Credit(s)	: 2
	Semester	: III

DESCRIPTION OF COURSE

Introduction to Housing and Settlement aims to give students the ability to understand and explain theories in housing and settlements in relation to the human, cultural, environmental and economic aspects in urban areas as well as the challenges of housing in the 21st century, innovatively and creatively.

LEARNING OUTCOMES

Attitude	1.9	Demonstrating attitude of responsibility on work in his/her field of expertise independently
Knowledge	2.2	Understanding principles of building science, landscape, urban planning and design, settlement, Nusantara architecture, ecology, and meaning in architecture
Specific Skills	3.1	Being able to develop Architecture Design concept that integrates studies on behavior, environment, technical aspects and values related to architecture
	3.2	Being able to design architecture independently with research-based design methods, and produce creative architectural works, which is a solution to contextual architectural problem, and verified theoretically to the rules of architecture
General Skills	4.1	Being able to apply logical, critical, systematic and innovative thinking in the context of development or implementation of science and technology that concerns and implements the value of humanities in accordance with their area of expertise
	4.2	Being able to demonstrate independent performance, quality, and measurable
	4.3	Being able to examine the implications of the development or implementation of the science of technology which concerns and implements the value of humanities in accordance with its expertise based on rules, procedures and scientific ethics in order to produce solutions, ideas, designs or art criticism, compile scientific descriptions of the study

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		results in the form of thesis or final project report , and uploaded it in the college page
	4.6	Being able to maintain an expanded network with mentors, colleagues, colleagues both inside and outside the institution
	4.7	Being able to take responsibility for the achievement of group work and supervise and evaluate the work completion assigned to the worker under his/her responsibility
	4.8	Being able to conduct self-evaluation process to work group under his/her responsibility, and able to manage learning independently
	4.9	Being able to document, store, secure and recover data to ensure validity and prevent plagiarism
	4.12	Being able to implement information and communication technology (ICT) in the context of implementation of his/her work.

COURSE LEARNING OUTCOMES

1. Being able to explain the importance of learning housing and settlement in relation to architecture
2. Being able to explain housing theories in relation to human, cultural, and environmental context
3. Being able to explain phenomena of slum and squatters in urban areas and housing for low income people
4. Being able to explain informal housing in relation to rural-urban development
5. Being able to explain formal housing in relation to urban development
6. Being able to explain housing development in 21st century

SUBJECTS

1. Housing and human, cultural, and environmental aspects
2. Housing in relation to human, cultural, and environmental aspects
3. Slum and squatter in urban area
4. Informal housing and housing as a process
5. Formal housing and urban development
6. Housing challenge in 21st century

PREREQUISITES

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REFERENCE(S)

1. Avi Friedman(20012), Fundamental of Sustainable Dwellings, Island Press, Washington DC
2. Barbara Miller Lane(2007), Housing and Dwelling : Perspective on Modern Dimestic Architecture, Routledge, New York
3. Henny Colen (2008), The Meaning of Dwelling Features, Netherlan
4. Barbara Ward (1994) The Home of Man, Penguin Books England, London
5. Normqa L. Newmark (1977),Self, Space and Shelter : an Introduction to Housing
6. Amos Rapoport (1977) Human Aspects of Urban Form, Pergamon Pres
7. John F. Turner (1972) Freedom to Build, McMillan Ltd, New York
8. Charles Abrams (1969),Housing in the Modern World

Architecture Department Syllabus - ITS

COURSE	Course Name	: Experimental Architecture
	Course Code	: DA184503
	Credit(s)	: 3
	Semester	: VI

DESCRIPTION OF COURSE		
LEARNING OUTCOMES		
Attitude	1.8	Internalizing values, norms and academic ethics;
	1.9	Demonstrating attitude of responsibility on work in his/her field of expertise independently
Knowledge	2.1	Understanding theoretical concepts of architecture, architectural design, aesthetics, structural system and building services and security and building safety
	2.3	Understanding presentation techniques of architectural conceptual design
Specific Skills	3.2	Being able to design architecture independently with research-based design methods, and produce creative architectural works, which is a solution to contextual architectural problem, and verified theoretically to the rules of architecture
	3.3	Being able to communicate thoughts and design results through graphics, writings, and communicative models with manual or digital techniques
	3.4	Being able to present several alternative design solutions and to make a decision based on scientific considerations in architecture
General Skills	4.1	Being able to apply logical, critical, systematic and innovative thinking in the context of development or implementation of science and technology that concerns and implements the value of humanities in accordance with their area of expertise
	4.2	Being able to demonstrate independent performance, quality, and measurable;

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	4.3	Being able to examine the implications of the development or implementation of the science of technology which concerns and implements the value of humanities in accordance with its expertise based on rules, procedures and scientific ethics in order to produce solutions, ideas, designs or art criticism, compile scientific descriptions of the study results in the form of thesis or final project report , and uploaded it in the college page
	4.4	Arrange the scientific description of the results of the above study in the form of a thesis or final project report, and upload it on the college page
	4.5	Being able to take decisions appropriately in the context of problem solving in the area of expertise based on the results of information and data analysis
	4.7	Being able to take responsibility for the achievement of group work and supervise and evaluate the work completion assigned to the worker under his/her responsibility
	4.8	Being able to conduct self-evaluation process to work group under his/her responsibility, and able to manage learning independently

COURSE LEARNING OUTCOMES

SUBJECTS

1. THEORY: Experimental Architecture, Utopian Architecture, Metabolism, Spirit of Experimentation, Deconstructivism, Conceptual Architecture
2. HISTORY: Experimental Architecture, The Spirit of the 60s
3. METHOD: Qualitative and/or Quantitative Research, Design by Research
4. DESIGN THINKING: Lateral Thinking
5. REPRESENTATION: Experimental Representation

PREREQUISITES

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REFERENCE(S)

1. Cook, Peter; Experimental Architecture; PIE Books; 1970
2. Sadler, Simon; Archigram Architecture Without Architecture; The MIT Press; London, 2005
3. Becker, Fletcher; The Drawing Center: Lebbeus Woods, New York, 2013
4. Plowright, P. (2014). Revealing Architectural Design: Methods, Frameworks and Tools. New York: Routledge.

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5. Brookes, Alan J & Poole, Dominique; Innovation in Architecture, Spon Press, 2005
6. Alison, Jane; Future City; Experimentat and Utopia in Architecture; Thames and Hudson, 2006
7. Bono, Edward D; Lateral Thinking; Harper & Row, 1970
8. Groat, Wang; Architecture Research Method, Wiley, 2013

Architecture Department Syllabus - ITS

COURSE	Course Name	: Architectural Ecology
	Course Code	: DA184504
	Credit(s)	: 3
	Semester	: V

DESCRIPTION OF COURSE		
Architecture Ecology Course is a partial course that aims to provide an understanding of the interrelationships between architectural environments with human users and with the wider environment, related to architectural technology (Green Architecture), and apply the understanding in the given task		
LEARNING OUTCOMES		
Attitude	1.9	Demonstrating attitude of responsibility on work in his/her field of expertise independently
Knowledge	2.1	Understanding theoretical concepts of architecture, architectural design, aesthetics, structural system and building services and security and building safety
	2.2	Understanding principles of building science, landscape, urban planning and design, settlement, Nusantara architecture, ecology, and meaning in architecture
	2.3	Understanding presentation techniques of architectural conceptual design
Specific Skills	3.1	Being able to develop Architecture Design concept that integrates studies on behavior, environment, technical aspects and values related to architecture
	3.3	Being able to communicate thoughts and design results through graphics, writings, and communicative models with manual or digital techniques
	3.4	Being able to present several alternative design solutions and to make a decision based on scientific considerations in architecture
General Skills	4.1	Being able to apply logical, critical, systematic and innovative thinking in the context of development or implementation of science and technology that concerns and implements the value of humanities in accordance with their area of expertise
	4.2	Being able to demonstrate independent performance, quality, and measurable

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	4.5	Being able to take decisions appropriately in the context of problem solving in the area of expertise based on the results of information and data analysis
	4.6	Being able to maintain an expanded network with mentors, colleagues, colleagues both inside and outside the institution
	4.7	Being able to take responsibility for the achievement of group work and supervise and evaluate the work completion assigned to the worker under his/her responsibility
	4.8	Being able to conduct self-evaluation process to work group under his/her responsibility, and able to manage learning independently

COURSE LEARNING OUTCOMES

1. Demonstrate responsible attitude towards work in the field of Architecture Design on ecological and environmental topics independently
2. Understanding theoretical concepts, architectural principles related to architectural ecology, and presentation techniques of architectural conceptual design
3. Able to develop architectural concepts and designs on ecological topics and green architecture independently and communicate thoughts and designs in graphic, written, and communicative models with both manual and digital techniques and present some alternative design solutions and make informed decision based on architectural scientific considerations
4. Be able to present several alternative design solutions and make informed choices based on architectural ecological considerations
5. Be able to apply logical, critical, systematic, and innovative thinking, related to the concept of ecological architecture in tropical climate by showing independent, quality, and measurable performance, and assessing the implications of development or implementation of science technology
6. Able to demonstrate independent, qualified, and measurable performance so as to make informed decisions in the context of problem solving in the area of expertise, based on the results of information and data analysis
7. Able to maintain and develop the network, responsible for achieving the results of group work and supervision and evaluation of the completion of work, and able to conduct the process of self-evaluation of the working group

SUBJECTS

1. Basic ecological architecture
2. Environmentally conscious architecture

3. Architecture as a built environment in the environment
4. Environmental and Architectural Ethics
5. Application of architectural ecology and linkage with Green Architecture
6. Application of the principles of Architectural Technology in Architectural Ecology
7. Application of architectural ecological understanding related to Open Building & Post-Occupational Evaluation
8. Application of respect for user understanding related to Green Architecture

PREREQUISITES

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REFERENCE(S)

1. Graham, Peter, 2003, Building Ecology: First Principles For A Sustainable Built Environment, Blackwell Science, Sidney, Australia
2. Keraf, A. Sonny, 2006, Etika Lingkungan, Penerbit Buku Kompas, Jakarta.
3. Zeiher, Laura C, 1996, Ecology of Architecture, Watson-Guptill Publications, New York, N.Y. z
4. Frick, Heinz; Mulyani, Tri Hesti, 2006, Seri Eko Arsitektur 2 : Arsitektur Ekologis, Penerbit Kanisius, Soegijapranata University Press
5. Frick, Heinz; Suskiyanto, FX. Bambang, 2006, Seri Eko Arsitektur 1 : Dasar – Dasar Eko Arsitektur , Penerbit Kanisius, Soegijapranata University Press
6. Klaus, Daniel,, The Technology of Ecological Building,
7. Brenda, V., Robert, V. (1991) Green Architecture, Design for Sustainable. Future. London: Thames & Hudson.

Architecture Department Syllabus - ITS

COURSE	Course Name	: Introduction to Urban Design
	Course Code	: DA184404
	Credit(s)	: 2
	Semester	: IV

DESCRIPTION OF COURSE		
LEARNING OUTCOMES		
Attitude	1.9	Demonstrating attitude of responsibility on work in his/her field of expertise independently
Knowledge	2.1	Understanding theoretical concepts of architecture, architectural design, aesthetics, structural system and building services and security and building safety
	2.2	Understanding principles of building science, landscape, urban planning and design, settlement, Nusantara architecture, ecology, and meaning in architecture
	2.3	Understanding presentation techniques of architectural conceptual design
Specific Skills	3.1	Being able to develop Architecture Design concept that integrates studies on behavior, environment, technical aspects and values related to architecture
	3.2	Being able to design architecture independently with research-based design methods, and produce creative architectural works, which is a solution to contextual architectural problem, and verified theoretically to the rules of architecture
	3.3	Being able to communicate thoughts and design results through graphics, writings, and communicative models with manual or digital techniques
	3.4	Being able to present several alternative design solutions and to make a decision based on scientific considerations in architecture
General Skills	4.1	Being able to apply logical, critical, systematic and innovative thinking in the context of development or implementation of science and technology that concerns and implements the value of humanities in accordance with their area of expertise
	4.2	Being able to demonstrate independent performance, quality, and measurable

	4.3	Being able to examine the implications of the development or implementation of the science of technology which concerns and implements the value of humanities in accordance with its expertise based on rules, procedures and scientific ethics in order to produce solutions, ideas, designs or art criticism, compile scientific descriptions of the study results in the form of thesis or final project report , and uploaded it in the college page
	4.4	Arrange the scientific description of the results of the above study in the form of a thesis or final project report, and upload it on the college page
	4.5	Being able to take decisions appropriately in the context of problem solving in the area of expertise based on the results of information and data analysis
	4.6	Being able to maintain an expanded network with mentors, colleagues, colleagues both inside and outside the institution
	4.7	Being able to take responsibility for the achievement of group work and supervise and evaluate the work completion assigned to the worker under his/her responsibility
	4.8	Being able to conduct self-evaluation process to work group under his/her responsibility, and able to manage learning independently

COURSE LEARNING OUTCOMES

SUBJECTS

PREREQUISITES

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REFERENCE(S)

1. Lynch, Kevin (1960), Image of The City. Van Nostrand Reinhold
2. Shirvani, Hamid (1997), Urban Design Process
3. Catanese, Anthony J & Snyder, James C , Introduction to Urban Planning, New York, McGraw-Hill Book Company, 1979.
4. Pemerintah RI (2007), UU RI No 26 tahun 2007 Tentang Penataan Ruang (Urban Planning Law), Departemen PU, Jakarta.
5. Rainer, George PE, Understanding Infrastructure, A Guide for Architects and Planner, John Willey & Sons Inc, 1990.
6. Spreiregen, P.D., Urban Design; The Architecture of Towns and Cities, New York, McGraw-Hill Book Company, 1965.

Architecture Department Syllabus - ITS

COURSE	Course Name	: Architectural Theory
	Course Code	: DA184406
	Credit(s)	: 3
	Semester	: IV

DESCRIPTION OF COURSE

LEARNING OUTCOMES

Attitude	1.9	Demonstrating attitude of responsibility on work in his/her field of expertise independently
Knowledge	2.1	Understanding theoretical concepts of architecture, architectural design, aesthetics, structural system and building services and security and building safety
	2.2	Understanding principles of building science, landscape, urban planning and design, settlement, Nusantara architecture, ecology, and meaning in architecture
	2.3	Understanding presentation techniques of architectural conceptual design
Specific Skills	3.1	Being able to develop Architecture Design concept that integrates studies on behavior, environment, technical aspects and values related to architecture
	3.2	Being able to design architecture independently with research-based design methods, and produce creative architectural works, which is a solution to contextual architectural problem, and verified theoretically to the rules of architecture
	3.3	Being able to communicate thoughts and design results through graphics, writings, and communicative models with manual or digital techniques
	3.4	Being able to present several alternative design solutions and to make a decision based on scientific considerations in architecture
	3.5	Being able to utilize design capability to assist the supervision and / or implementation of environmental development and building construction
General Skills	4.1	Being able to apply logical, critical, systematic and innovative thinking in the context of development or implementation of science and technology that concerns and implements the value of humanities in accordance with their area of expertise

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	4.2	Being able to demonstrate independent performance, quality, and measurable
	4.3	Being able to examine the implications of the development or implementation of the science of technology which concerns and implements the value of humanities in accordance with its expertise based on rules, procedures and scientific ethics in order to produce solutions, ideas, designs or art criticism, compile scientific descriptions of the study results in the form of thesis or final project report , and uploaded it in the college page
	4.4	Arrange the scientific description of the results of the above study in the form of a thesis or final project report, and upload it on the college page
	4.5	Being able to take decisions appropriately in the context of problem solving in the area of expertise based on the results of information and data analysis
	4.6	Being able to maintain an expanded network with mentors, colleagues, colleagues both inside and outside the institution
	4.7	Being able to take responsibility for the achievement of group work and supervise and evaluate the work completion assigned to the worker under his/her responsibility
	4.8	Being able to conduct self-evaluation process to work group under his/her responsibility, and able to manage learning independently

COURSE LEARNING OUTCOMES

SUBJECTS

PREREQUISITES

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REFERENCE(S)

1. Salingaros, Nikos A. and Michael W. Mehaffy, A Theory of Architecture, UMBAU-VERLAG Harald Püschel, 2006
2. Antoniadis, Anthony C., Poetics of Architecture: Theory of Design, Van Nostrand Reinhold, 1990
3. Mitias, Michael H., Philosophy and Architecture, Rodopi, 1994
4. Salvan, George S., Architectural Theories of Design, Goodwill Trading Co. Inc., 1999

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| 5. Snodgrass, Adrian and Richard Coyne, Interpretation in Architecture: Design as Way of Thinking, Routledge, 2013 |
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Architecture Department Syllabus - ITS

COURSE	Course Name	: Landscape Architecture
	Course Code	: DA184403
	Credit(s)	: 3
	Semester	: IV

DESCRIPTION OF COURSE		
LEARNING OUTCOMES		
Attitude	1.9	Demonstrating attitude of responsibility on work in his/her field of expertise independently.
Knowledge	2.1	Understand the theoretical concepts of architecture, architectural design, aesthetics, structural system and building services and security and building safety
	2.2	Understand the principles of building science, landscape, urban planning and design, settlement, Nusantara architecture, ecology, and meaning in architecture
Specific Skills	3.1	Able to make the concept of Architecture Design that integrates the study on behavior, environment, technical aspects and values related to architecture
	3.2	Able to design the architecture independently with research-based design methods, and produce creative architectural works, which is a solution to the problem of contextual architecture, and verified theoretically to the rules of architecture
General Skills	4.1	Being able to apply logical, critical, systematic and innovative thinking in the context of development or implementation of science and technology that concerns and implements the value of humanities in accordance with their area of expertise;
	4.2	Being able to demonstrate independent performance, quality, and measurable;
	4.3	Being able to examine the implications of the development or implementation of the science of technology which concerns and implements the value of humanities in accordance with its expertise based on rules, procedures and scientific ethics in order to produce solutions, ideas, designs or art criticism, compile scientific descriptions of the study results in the form of thesis or final project report , and uploaded it in the college page;

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	4.4	Arrange the scientific description of the results of the above study in the form of a thesis or final project report, and upload it on the college page;
	4.5	Being able to take decisions appropriately in the context of problem solving in the area of expertise based on the results of information and data analysis;
	4.8	Being able to conduct self-evaluation process to work group under his/her responsibility, and able to manage learning independently

COURSE LEARNING OUTCOMES

SUBJECTS

1. The human habitat, climate , land, water, vegetation
2. Landscape Character
3. Topography
4. Site Planning
5. Site Development
6. Site Planting , Site Volume / Space
7. Visible Landscape
8. Circulation
9. Structure in the Landscape
10. Community Planning

PREREQUISITES

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REFERENCE(S)

1. Simmonds, John Ormsbee (2006), Landscape Architecture.
2. Landscape Architecture: A Manual of Land Planning and Design by John Ormsbee Simonds
3. LaGro Jr, James.A (2008), Site Analysis. A Contextual Approach to sustainable Land Planning and Site Design
4. Van Ufelen (2011) Façade Greenery Contemporary Landscaping, Braun Publishing
5. 1000X Landscape Architecture (2010).Braun Publishing

Architecture Department Syllabus - ITS

COURSE	Course Name	: Building Services
	Course Code	: DA184405
	Credit(s)	: 3
	Semester	: IV

DESCRIPTION OF COURSE		
LEARNING OUTCOMES		
Attitude	1.9	Demonstrating attitude of responsibility on work in his/her field of expertise independently
Knowledge	2.1	Understanding theoretical concepts of architecture, architectural design, aesthetics, structural system and building services and security and building safety
	2.3	Understanding presentation techniques of architectural conceptual design
Specific Skills	3.3	Being able to communicate thoughts and design results through graphics, writings, and communicative models with manual or digital techniques
	3.4	Being able to present several alternative design solutions and to make a decision based on scientific considerations in architecture
General Skills	4.2	Being able to demonstrate independent performance, quality, and measurable
	4.5	Being able to take decisions appropriately in the context of problem solving in the area of expertise based on the results of information and data analysis
	4.8	Being able to conduct self-evaluation process to work group under his/her responsibility, and able to manage learning independently
COURSE LEARNING OUTCOMES		
SUBJECTS		
PREREQUISITES		

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REFERENCE(S)
1. Nadel, B. A. (2004), Building Security, Handbook for Architectural Planning and Design, New York: McGraw Hill.
2. Hall, F. dan Greeno, R. (2001), Building Services Handbook, Oxford: Butterworth Heinemann.
3. DPU, Dirjen Cipta dan LPMB (.....) Peraturan Bangunan Nasional, Dirjen Cipta Karya, Jakarta
4. Lechner, N. (2001), Heating, Cooling, Lighting: Design Methods for Architects, Canada: John Wiley & Sons, Inc.
5. • Juwana J.S. (2002), Sistem Bangunan Tinggi; Untuk Arsitek dan Praktisi Bangunan, Jakarta: Penerbit Erlangga.

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COURSE	Course Name	: History of Architecture
	Course Code	: DA184603
	Credit(s)	: 3
	Semester	: VI

DESCRIPTION OF COURSE		
LEARNING OUTCOMES		
Attitude	1.9	Demonstrating attitude of responsibility on work in his/her field of expertise independently
Knowledge	2.1	Understanding theoretical concepts of architecture, architectural design, aesthetics, structural system and building services and security and building safety
	2.2	Understanding principles of building science, landscape, urban planning and design, settlement, Nusantara architecture, ecology, and meaning in architecture
	2.3	Understanding presentation techniques of architectural conceptual design
Specific Skills	3.1	Being able to develop Architecture Design concept that integrates studies on behavior, environment, technical aspects and values related to architecture
	3.2	Being able to design architecture independently with research-based design methods, and produce creative architectural works, which is a solution to contextual architectural problem, and verified theoretically to the rules of architecture
	3.3	Being able to communicate thoughts and design results through graphics, writings, and communicative models with manual or digital techniques
	3.4	Being able to present several alternative design solutions and to make a decision based on scientific considerations in architecture
	3.5	Being able to utilize design capability to assist the supervision and / or implementation of environmental development and building construction
General Skills	4.1	Being able to apply logical, critical, systematic and innovative thinking in the context of development or implementation of science and technology that concerns and implements the value of humanities in accordance with their area of expertise

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	4.2	Being able to demonstrate independent performance, quality, and measurable
	4.3	Being able to examine the implications of the development or implementation of the science of technology which concerns and implements the value of humanities in accordance with its expertise based on rules, procedures and scientific ethics in order to produce solutions, ideas, designs or art criticism, compile scientific descriptions of the study results in the form of thesis or final project report , and uploaded it in the college page
	4.4	Arrange the scientific description of the results of the above study in the form of a thesis or final project report, and upload it on the college page
	4.5	Being able to take decisions appropriately in the context of problem solving in the area of expertise based on the results of information and data analysis
	4.6	Being able to maintain an expanded network with mentors, colleagues, colleagues both inside and outside the institution
	4.7	Being able to take responsibility for the achievement of group work and supervise and evaluate the work completion assigned to the worker under his/her responsibility
	4.8	Being able to conduct self-evaluation process to work group under his/her responsibility, and able to manage learning independently

COURSE LEARNING OUTCOMES

SUBJECTS

PREREQUISITES

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REFERENCE(S)

1. Sejarah Arsitektur : Sebuah Pengantar oleh Setiadi Soepandi, Penerbit Gramedia
2. A Global History of Architecture : Frank Ching 1995

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COURSE	Course Name	: Professional Ethics and Practice
	Course Code	: DA184802
	Credit(s)	: 2
	Semester	: VIII

DESCRIPTION OF COURSE		
LEARNING OUTCOMES		
Attitude	1.9	Demonstrating attitude of responsibility on work in his/her field of expertise independently
Knowledge	2.1	Understanding theoretical concepts of architecture, architectural design, aesthetics, structural system and building services and security and building safety
	2.2	Understanding principles of building science, landscape, urban planning and design, settlement, Nusantara architecture, ecology, and meaning in architecture
	2.3	Understanding presentation techniques of architectural conceptual design
Specific Skills	3.1	Being able to develop Architecture Design concept that integrates studies on behavior, environment, technical aspects and values related to architecture
	3.2	Being able to design architecture independently with research-based design methods, and produce creative architectural works, which is a solution to contextual architectural problem, and verified theoretically to the rules of architecture
	3.3	Being able to communicate thoughts and design results through graphics, writings, and communicative models with manual or digital techniques
	3.4	Being able to present several alternative design solutions and to make a decision based on scientific considerations in architecture
General Skills	4.1	Being able to apply logical, critical, systematic and innovative thinking in the context of development or implementation of science and technology that concerns and implements the value of humanities in accordance with their area of expertise
	4.2	Being able to demonstrate independent performance, quality, and measurable

	4.3	Being able to examine the implications of the development or implementation of the science of technology which concerns and implements the value of humanities in accordance with its expertise based on rules, procedures and scientific ethics in order to produce solutions, ideas, designs or art criticism, compile scientific descriptions of the study results in the form of thesis or final project report , and uploaded it in the college page
	4.4	Arrange the scientific description of the results of the above study in the form of a thesis or final project report, and upload it on the college page
	4.5	Being able to take decisions appropriately in the context of problem solving in the area of expertise based on the results of information and data analysis
	4.6	Being able to maintain an expanded network with mentors, colleagues, colleagues both inside and outside the institution
	4.7	Being able to take responsibility for the achievement of group work and supervise and evaluate the work completion assigned to the worker under his/her responsibility
	4.8	Being able to conduct self-evaluation process to work group under his/her responsibility, and able to manage learning independently

COURSE LEARNING OUTCOMES

SUBJECTS

PREREQUISITES

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REFERENCE(S)

1. Undang Undang No 6 – 2017, tentang Arsitek
2. Kode etik profesi arsitek dari Ikatan Arsitek Indonesia
3. Dep. P.U RI, Manajemen Pelaksanaan Pekerjaan Konstruksi I; II; II
4. (Construction Management I, II, III).
5. Soegihardjo, Gambar Ilmu bangunan I. II. III (Shop Drawing I, II, III).
6. Design and Build : Planning Through Development, Jeffre L Beard, Mc Graw Hill, 2004
7. Manajemen Proyek dari Konseptual Sampai Operasional, Imam Suharto, Erlangga 1997
8. Buku Standar Arsitektur

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COURSE	Course Name	: Tropical Architecture
	Course Code	: DA184611
	Credit(s)	: 3
	Semester	: VI

DESCRIPTION OF COURSE

The Tropical Architecture course studies the buildings' behavior as an architectural medium in the tropics, with the focus of the discussion emphasized on the location of Indonesia. Tropical architecture will address the mindset and tropical life, the basic principles of Architecture Design in the tropics, and how the buildings' response to the climate.

LEARNING OUTCOMES

Attitude	1.9	Demonstrating attitude of responsibility on work in his/her field of expertise independently.
Knowledge	2.1	Understand the theoretical concepts of architecture, architectural design, aesthetics, structural system and building services and security and building safety
	2.2	Understand the principles of building science, landscape, urban planning and design, settlement, Nusantara architecture, ecology, and meaning in architecture
	2.3	Understand the presentation techniques of architectural conceptual design
Specific Skills	3.3	Able to communicate thoughts and design results in the through graphics, writing, and communicative models with manual techniques and digital
General Skills	4.1	Being able to apply logical, critical, systematic and innovative thinking in the context of development or implementation of science and technology that concerns and implements the value of humanities in accordance with their area of expertise;
	4.2	Being able to demonstrate independent performance, quality, and measurable;
	4.3	Being able to examine the implications of the development or implementation of the science of technology which concerns and implements the value of humanities in accordance with its expertise based on rules, procedures and scientific ethics in order to produce solutions, ideas, designs or art criticism, compile scientific descriptions of the study

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		results in the form of thesis or final project report , and uploaded it in the college page;
	4.5	Being able to take decisions appropriately in the context of problem solving in the area of expertise based on the results of information and data analysis;
	4.8	Being able to conduct self-evaluation process to work group under his/her responsibility, and able to manage learning independently;
	4.9	Being able to document, store, secure and recover data to ensure validity and prevent plagiarism;
	4.12	Being able to implement information and communication technology (ICT) in the context of implementation of his/her work.

COURSE LEARNING OUTCOMES

1. Show responsible attitude towards work in Architecture Design related to the tropical architecture independently
2. Understand the theoretical concepts, principles, and the presentation techniques of architectural conceptual design related to d building science and ecology.
3. able to plan the concept and architecture design of tropical architecture independently and communicate thinking and design result in communicative graphic, writing, and model with manual technique and digital and also present some alternative design solution and make decision based on scientific consideration of architecture
4. able to apply logical, critical, systematic, and innovative thinking, show independent performance, quality, and measurable, and examine the implications of developing or implementing the science of technology
5. able to develop scientific descriptions and make decisions appropriately in the context of problem solving in the field of Architecture Design related to the tropical architecture
6. able to maintain and develop network, to take responsibility for the achievement result of group work and do supervision and evaluation of work completion, and also to conduct process of self evaluation towards work group

SUBJECTS

1. Tropical environment, mindset, and living
2. Tropical design paradigm
3. Climate and comfort

4. Climatic analysis and design: Thermal, ventilation, and lighting strategy
5. Working with climate: sun, wind, and light
6. Working with material and Technology

PREREQUISITES

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REFERENCE(S)

1. Bay, J-H, Ong, B.L. (2006). Tropical Sustainable Architecture, Social and Environmental Dimensions. Oxford: Architectural Press.
2. Chang, J-H. (2016). A Genealogy of Tropical Architecture: Colonial Networks, Nature and Technoscience (Architext) 1st Edition. New York: Routledge.
3. de Reus, M. (2011). Tropical Experience: Architecture + Design. ORO Edition.
4. Lauber, W. (2005). Tropical Architecture; Sustainable dan Humane Building in Africa, Latin-America and South-East Asia, Munich: Prestel.
5. Tzonis, A., Lefaivre, L., Stagno, B. (2001). Tropical Architecture: Critical Regionalism in the Age of Globalization. Academy Press.

