Short Syllabus of Architecture (252) Curriculum

RK6011, Urban Design Methods (2 SKS)

Short Syllabus

Related Courses

Bibliography

RK6012, Urban Conservation (2 SKS)

Short Syllabus
This is an advanced course in built environment planning and design. The physical appearance of an urban area is part of an on-going transformation process. Urban culture through a series of historic journey is a rich source of form and spatial process in the future. Lectures will provide advanced knowledge in urban conservation, which is a basic component in sustainable environmental policy. The significance of critical assessment and culture will be analyzed for an urban area.

Related Courses

Bibliography

RK6111, History and Theory of Urban Design (3 SKS)

Short Syllabus
A critical analysis of urban design and planning in historic terms showing increasing complexity of factors and forms of built environment; built architectural forms to urban architecture. The lectures will discuss various tangible and intangible factors which are the basis for urban design theories and principles. Urban design approaches will be
examined which focus on the urban as a product and process plus urban design case studies of 3 typologies: infill, redevelopment and new town. The objective is to achieve a comprehensive knowledge which increases the analytical capability for the various habitat creation phenomenons.

**Related Courses**

**Bibliography**
2. Spiro Kostof., The City Assembled, Elements of Urban Form and Through History., London: Thames & Hudson

**RK61W1, Urban Design Studio I (3 SKS)**

**Short Syllabus**
The course introduces the students to standards in urban/built environment design; and experiences through field surveys. The students will understand various issues, approaches, precedents and alternative design solutions for architectural/urban design problems for urban design analysis, problem solving and conceptual development.

**Related Courses**

**Bibliography**
1. Dieter Prinz, Stadtebau, Bd. 2: Stadtebauliches Gestalten., Stuttgart; Kohlhammer
3. Allan B. Jacobs, Great Streets., Massachusetts; MIT Press

**RK6211, Urban Design and Sustainable Development (2 SKS)**

**Short Syllabus**
Based on management of urban resources, the course provides a critical analysis of urban development (design and planning) issues in terms of sustainable development. Urban/human settlements design is critical for a sustainable urban/human settlement. The objective is to provide a comprehensive knowledge which increases the analytical capability for the creation of various habitats.

**Related Courses**

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Bibliography
1. Hildebrand Frey., Designing the City, Towards a More Sustainable Urban Form, Routledge: E & FN SPON

RK6212, Urban Design Administration (2 SKS)

Short Syllabus
The lectures consist of 4 main topics: urban planning and design form, status and regulations; urban design administration which covers institutional, administrative as well as technical aspects; influence of political process and urban design policies which include community and private sector participation as well as design review; and case studies on estate management administration.

Related Courses
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Bibliography
1. Anthony Filipovith., Introduction The City., Kendall/hunt Publishing
2. Dept. Kimpraswil., Himpunan Peraturan Banunan,

RK62W1, Urban Design Studio II (3 SKS)

Short Syllabus
The course introduces the students to principles of site development as part of an urban design process. Students will be required to develop selected sites through observation and secondary data, problem solving through field observation, interviews with stakeholders, feasibility study based on facility, financial and pre-design capacities.

Related Courses
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Bibliography

RK70S1, Thesis Seminar on Urban Design (2 SKS)
Short Syllabus
Discussions on specific topics on urban design. Collection of information and substantive studies on urban design in preparation for thesis.

Related Courses
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Bibliography
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RK70Z1, Thesis (6 SKS)

Short Syllabus
Independent study to write academic work based on research results. Students must be able to write their thoughts and research findings correctly and to observe the rules of proper academic scholar writing. Students will be assigned thesis supervisors for consultation and examination.

Related Courses
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Bibliography
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RK7111, Urban Design Controls (2 SKS)

Short Syllabus
The course will discuss general principles and forms of control for urban development, specifically urban design. Topics will include implementation of development planning and urban design; basics of development and design controls; technique and regulation on urban design control as well as consideration in urban design control implementation.

Related Courses
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Bibliography
2. Punter, John; Matthew Carmona., “The Design Dimension of Planning”, E&FN Spon
3. Alder, John, “Development Control”, Sweet & Maxwell

RK7112, Special Topics in Urban Design Praxis (2 SKS)

Short Syllabus
Discussion of case studies in strategic issues of urban design with emphasis on concepts, relevance to local condition as well as vision and speculation on future cities in Indonesia
and developing countries. Guest lectures by urban design and planning practitioners on decision making issues. Topics may differ over the years ranging from sustainable urban development, high density human settlement, community participation and use of public space.

**Related Courses**

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**Bibliography**

**RK71W1, Urban Design Studio III (3 SKS)**

**Short Syllabus**
The studio focuses on training the students with the capacity to implement theory, concept and principles of urban design taught in previous courses into an Urban Design Program. Students will carry out rational design process and review for a selected site and presented to public for feedback in the final design.

**Related Courses**

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**Bibliography**
1. Cutler, LS, ”Recycling City for People: The Urban Design Process, Van Nostrand Reinhold Company
2. Appraisal Institute, ”The Appraisal of Real Estate”, Chicago

**PL5004, Adv Planning Information System (2 SKS)**

**Short Syllabus**

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**Related Courses**
1. PL3103 Planning Information System, Pre-requisite.

**Bibliography**
1. Robert Laurini and Derek Thompson, Fundamentals of Spatial Information Systems;, Academic Press

**PL5121, Urban Renewal and New-town (2 SKS)**

**Short Syllabus**

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**Related Courses**

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**Bibliography**

2. Djoko Sujarto, Peremajaan Kota, Monografi, Departemen Planologi, ITB
3. Djoko Sujarto, Perkembangan Kota Baru, Mimeograf Jurusan Teknik Planologi, FTSP, Institut

**PL6122, (2 SKS)**

**Short Syllabus**

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**Related Courses**

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**Bibliography**


**PL6222, Land Management (2 SKS)**

**Short Syllabus**

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**Related Courses**

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**Bibliography**

PL6231, Transport Planning and Principles (2 SKS)

Short Syllabus

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Related Courses

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Bibliography

AR5111, Historic Building Restoration (2 SKS)

Short Syllabus
This is an introduction course on built environment conservation. The lectures will introduce the essentials of restoration and conservation. Through lectures, discussion and group work, students will learn simple methods for critical assessment of cultural significance of a building object or group of buildings

Related Courses

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Bibliography

AR5112, Design, Behavior & Environment (2 SKS)

Short Syllabus
The course discusses the transactional relationship between the environment and human behavior. Behavior is defined as human response to physical as well as social environmental stimuli. Studies on relationships are discussed in terms of design criteria which focus on user needs and desires which will be implemented in the design process.

Related Courses

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Hopkins University Press
Bibliography
1. John Zeisel, Inquiry by Design., Cambridge

AR5113, Precedent in Interior Design (2 SKS)

Short Syllabus
The course will cover topics on architectural design process that is related to interior design; composition, space and furniture based on function and activity; and visual layout between interior elements and considerations for psychological and behavioral factors to develop integrated design. Methods to analyze the influence of new activities so that such precedents can be used for design concept.

Related Courses
1. AR3200 Architectural Design Studio IV, Pre-requisite.

Bibliography
1. Rob Krier., Architectural Composition,
3. Habraken., The Structure of the Ordinary., MIT Press

AR5114, Introduction to Landscape Arch (2 SKS)

Short Syllabus
Introduction to concepts on built environment forms in the Western civilization (Europe and America), the East (China, Japan and India) as well as civilizations in Central Asia. The students will also be introduced to various contemporary issues related to landscape planning and design.

Related Courses
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Bibliography
1. Sutherland Lyall., Designing The New Landscape, van Nostrand Reinhold Company, NY
3. William A., Mann. Landscape Architecture,

AR5115, Art and Architecture (2 SKS)
**Short Syllabus**
The course clarifies issues on the relationship between visual arts and architecture in terms of esthetics. The objective is to train student’s sensitivity through discussion and comparison among works of art and architecture from various cultures.

**Related Courses**
-

**Bibliography**
1. Carol Strickland., The Annotated Monalisa, A Crash Cause in Art History from Prehistoric to Post-Modern., Andrews and McMeel
2. Horst de la Croix; Richard G Tansey., Art through the Ages., Harcourt: Brace & World.
3. Carol Strickland, The Annotated Arch, A Crash Cause in History of Architecture, Andrews and McMeel

**AR5121, Facility Programming (2 SKS)**

**Short Syllabus**
The students will be introduced to master planning and architectural design. Students are expected to be aware of the boundary as well as the specific objectives that must be met that are relevant to the project and focus contexts.

**Related Courses**
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**Bibliography**
1. Preiser W.F.E., Facility Programming., Stroudsburg: Dowden Hutchinson & Ross Inc

**AR5122, Design Approach (Issue & Context) (2 SKS)**

**Short Syllabus**
The course covers introduction to various design issues, contexts and approaches. Students are expected to understand the inter-relationships between topics with design issues, context and approaches.

**Related Courses**
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**Bibliography**
AR5131, Building Operation (2 SKS)

Short Syllabus
The course provides students with knowledge on building management and operations in the occupation stage which cover topics on energy management, building maintenance and finance efficiency. Students will learn the various tendencies in building operations.

Related Courses
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Bibliography

AR5141, Contemporary Architectural Issues (2 SKS)

Short Syllabus
Exploration of issues in theory and practice of contemporary architecture with emphasis on philosophical and ideological foundations as well as advance study on relevance to condition in Indonesia and developing countries.

Related Courses
-

Bibliography
3. Peter Noever (ed)., Architecture in Transition: Between Deconstruction and New Modernism., Munich: Prestel

AR5151, Socio Tech of Built Env Design (2 SKS)

Short Syllabus
Inter-relationship and influence of social aspects on contemporary development issues in Indonesia which define an artificial environment in terms of fair/just human settlements, progress in economics, technology and globalization; disaster/ecological environment; and gender and generation issues.

Related Courses
-
Bibliography
1. Abidin Kusno, Behind the Post Colonial, Architecture, urban space and political culture in Indonesia., Routledge
2. Kevin Lynch, Good City Form,

AR5152, Introduction to Real Estate (2 SKS)

Short Syllabus
An introduction to real estate industry in which many architects practice. As would be architects, students are expected to widen their horizons on real estate that has a potential significant role in economic development. The manner in which a real estate is managed can impact negatively or positively on development. The lectures will cover 2 views: from the developers’ aspects on real estate business practices; and the government’s view on development of real estate entrepreneurship to avoid social, economic and political burdens.

Related Courses
-

Bibliography
1. Halbert C. Smith., Real Estate and Urban Development,
2. Jack Jacobus., Real Estate: An Introduction to The Profession,
3. Raymond J. Struyk et. al., The Market For Shelter in Indonesia Cities,

AR6011, Computer Simulation in Environmental Design (2 SKS)

Short Syllabus
The class is conducted in a computer lab which covers topics on computer programs used by urban designer to support urban design process from the analysis stage to final presentation. Other topics covered are introduction to GIS, 3 dimensional simulations of objects, building, groups of buildings and environment in the urban context. Students are required to present final urban design as report as well as interactive presentation via the internet.

Related Courses
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Bibliography

AR6021, Quantitative Analysis (2 SKS)
Short Syllabus
An introduction to fundamentals of statistical theories; data collection and classification; data types; data analysis; descriptive statistics; and statistical methods (regression analysis, factor analysis and multivariate analysis).

Related Courses
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Bibliography
3. Andrew F. Siegel, Charles J. Morgan, Statistics and Data Analysis An Introduction., John Wiley & sons

AR6100, Design/Research I (4 SKS)

Short Syllabus
This course examines theoretical bases of significant cases in architecture and build environment; and covers the following topics:
- Concept implementation in architectural and built environment design relevant to field of study.
- Research based on precedent and secondary sources based on topics relevant to field of study.

Related Courses
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Bibliography
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AR6111, Landscape Ecology (2 SKS)

Short Syllabus
Students will be introduced to ecological principles in landscape architecture. Ecocentrism, Anthropocentrism and Technocentrism will be discussed in general as as well as the history in the development and paradigm shift towards sustainable development which influences landscape architecture.

Related Courses
1. AR6100 Design/Research I, Co-Requisite.

Bibliography
AR6112, History and Theory of Landscape Architecture (2 SKS)

**Short Syllabus**
An introduction to historical development of landscape architecture since prehistoric age; and an understanding of cross-cultural influence on landscape form of an area/place/country.

**Related Courses**
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**Bibliography**
1. Monique Mosser and Georges Teyssot., The history of Garden Design,
2. John Oldham., Gardens in Time,
3. Philip Pregill., History of Landscape Architecture,

AR6121, Architectural Planning and Design Methodology (2 SKS)

**Short Syllabus**
This course covers topics on architecture/urban design procedures; design solutions; design strategy and approach; and creativity exploration. Students will be introduced to basic design approach and are expected to understand the benefits and limits of a design approach in order to determine the appropriate approach for a project.

**Related Courses**
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**Bibliography**
1. Peter G Rowe., Design Thinking, Cambridge:, The MIT Press
2. Rem Koolhas., Harvard Project on the City, Barcelona: Ingoprint SA

AR6122, Research Methodology in Architecture (2 SKS)

**Short Syllabus**
Students will be provided with research framework and procedures which cover objectives, theory, hypotheses, data collection method, instrument and data for analysis; research domain and substance as well as the technique for creative exploration in research process.

**Related Courses**
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Bibliography

AR6123, Qualitative Analysis (2 SKS)

Short Syllabus
An introduction to various qualitative and quantitative data; and qualitative analytical approaches to decision making in architectural design process.

Related Courses
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Bibliography

AR6131, Construction Management (2 SKS)

Short Syllabus
An introduction to general management, engineering economics and construction management. Construction management assumes that contract documents bind the contractor to develop a realistic and cost efficient work plan based on management principles and engineering economics.

Related Courses
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Bibliography
1. James O’ Brien., Contractor’s Management Handbook,
2. Glen Peters., Project Management and Construction Control,
3. F. Harris., Construction Plant, Excavating And Materials Handling Equipment and Methods,

AR6132, Advanced Building Technology (2 SKS)

Short Syllabus
The students will be introduced to influence of various factors on developments in building technology in terms of materials, structure, economics, management,
environment and health. Course materials are given through lectures, discussion, simulation and presentation.

Related Courses
1. AR6100 Design/Research I, Co-Requisite.

Bibliography
1. Fischer Robert., Engineering for Architecture., Architectural Record

AR6133, Advanced Building Structure (2 SKS)

Short Syllabus
This is an advanced course on Advanced Building Structure I. This course provides advanced theories, principles and examples as well as exercise in building structural engineering in architecture. Structural engineering is not limited to building floor area and height but by depth. Approaches in structural engineering cover esthetics, efficient structural system, building methods and construction management; these are expected to increase overall design capacity in support of studio work and thesis.

Related Courses
1. AR6132 Advanced Building Technology, Co-Requisite.

Bibliography
2. Daniel Schodek, Struktur., Bandung: PT Eresco

AR6134, Building Environment Control I (2 SKS)

Short Syllabus
Students are taught aspects on building environment control related to architectural planning and design such as thermal environment, solar energy and acoustics, through lectures, simulation and discussion.

Related Courses
1. AR6100 Design/Research I, Co-Requisite.

Bibliography
1. Leslie Doyle., Akustik Lingkungan., Erlangga
AR6141, History and Theory of Architecture (2 SKS)

Short Syllabus
This course is a critical study on the history of development in architecture, change processes, factors influencing changes in world architecture in particular the period after industrial revolution.

Related Courses

Bibliography

AR6151, History & Theory of Housing and Human Settlements (2 SKS)

Short Syllabus
This course covers topics on settlements in the development of human civilization, the architecture of settlement in development of human civilization, development concepts and human settlement planning; and approaches in analyzing human settlement problems.

Related Courses

Bibliography

AR6152, Housing & Human Settlements Analysis (2 SKS)

Short Syllabus
This course covers topics on method of analysis of human settlement form, growth and development; partial and integrated environment quality; segregation and dichotomy in human settlements; post occupancy evaluation, housing satisfaction, housing demand and policy analysis

Related Courses
Bibliography

AR6200, Design/Research II (4 SKS)

Short Syllabus
Empirical study of significant cases in architecture and built environment in terms of architectural design as a solution; and to identify solution from various approaches.

Related Courses
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Bibliography
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AR6211, Architectural Design Theory (2 SKS)

Short Syllabus
This course critically examines architectural design from a theoretical viewpoint through literature study, design competition results, interviews with architects and observation on architectural works.

Related Courses
1. AR6200 Design/Research II, Co-requisite.

Bibliography
3. Hendrik Gedenryd., How Designers Work., Sweden

AR6212, Professional Ethics (2 SKS)

Short Syllabus
Students are required to do an internship at one of the professional practice firms that are associated with the construction industry.

Related Courses
**AR6213, Landscape Engineering (2 SKS)**

**Short Syllabus**
Students are introduced to the principle function in landscape architecture and are taught to manipulate land morphology by focusing on technological, ecological as well as esthetical aspects.

**Related Courses**

**Bibliography**
1. Strom, S & K. Nathan, Site Engineering for Landscape Architects, John Wiley

**AR6214, Case Study in Landscape Arch (2 SKS)**

**Short Syllabus**
A critical understanding of landscape architecture through literature study and actual condition.

**Related Courses**
1. AR6112 , Pre-requisite.

**Bibliography**

**AR6221, Facility Programming (2 SKS)**

**Short Syllabus**

**Related Courses**

**Bibliography**
AR6231, Project Management (2 SKS)

Short Syllabus
This course covers topics on concepts, specific characteristics and functions of project management.

Related Courses
1. AR6131 Construction Management, Co-Requisite.
2. AR6233 Introduction to Quantity Survey, Co-Requisite.

Bibliography
1. HN. Ahuja., Project Management., JW & S

AR6232, Introduction to Building Economics (2 SKS)

Short Syllabus
Building cost estimate, investment analysis and tendering process. A brief introduction to principles of economics as fundamentals of the construction industry, process and firms. Students will learn general economic models for analysis of construction projects and to examine projects from micro perspective and marketing strategy.

Related Courses
1. AR6231 Project Management, Co-Requisite.

Bibliography
1. Patricia M. Hillebrandt., The Analysis of the British Construction Industry., Mac Millan Publisher Ltd
3. Team M2S., Analisa Upah dan Bahan., Bandung: Penerbit M2S

AR6233, Introduction to Quantity Survey (2 SKS)

Short Syllabus
Introduction to theory on quantity survey, role of the surveyor community in building procurement and survey techniques.

Related Courses
-

Bibliography
2. Team M2S Bandung, Analisis BOW., Penerbit M2S  
3. RICS & NFBTE., Standard Method of Measurement of Building Works,

**AR6234, Building Environmental Control II (2 SKS)**

**Short Syllabus**
Students will be provided with knowledge on aspects of building environment controls related to architectural planning and design. Aspects on comprehensive fire prevention and control; and influence of building materials with respect to pollution, environmental degradation will be discussed.

**Related Courses**
1. AR6100 Design/Research I, Co-Requisite.

**Bibliography**

**AR6241, Architecture Criticism (2 SKS)**

**Short Syllabus**
Various perspectives and methods on evaluation of architectural process and products based on case studies of buildings that students can visit.

**Related Courses**
-

**Bibliography**
1. Matthys Levy., Why Buildings Fall Down., WW Norton Corp  
2. Herman Hertzberger., Lessons for Students in Architecture., Uitgeverijolo Publ  
3. Sven Hesselgren., Man’s Perception of Man Made Environment,

**AR6242, Advanced Theories of Architecture (2 SKS)**

**Short Syllabus**
Development of theories on contemporary architecture as a cultural production mode that is related to thought paradigm, epistemological concept, spirit of the era and predominant social-political condition in the community.

**Related Courses**
1. AR5141 Contemporary Architectural Issues, Pre-requisite.
2. AR6141 History and Theory of Architecture, Pre-requisite.
3. AR6241 Architecture Criticism, Co-Requisite.

Bibliography

AR6251, Sustainable Human Settlement Dev (2 SKS)

Short Syllabus
Sustainable Development Agenda 21, Habitat Agenda of the Istanbul Declaration, Suitable Housing for the Society, sustainable human settlement, general housing and human settlement conditions in Indonesia, local case studies in Bandung.

Related Courses
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Bibliography
2. UN on Susdev., Dokumen Earth Summit Agenda 21,
3. IAHS Congress on Housing, Housing Challenges For The 21st Century,

AR6252, Urban Infrastructure (2 SKS)

Short Syllabus
The course will discuss infrastructure issues focus on system engineering, planning and design which are the bases for urban and built environment spatial development. Infrastructure will include public works such as road, drainage, sewerage, energy and telecommunication; social facilities such as housing; and economic facilities.

Related Courses
1. AR5151 Socio Tech of Built Env Design, Co-requisite.

Bibliography
1. Nana Rukmana, Florian S., Manajemen Pembangunan Prasarana Perkotaan,
2. Dimitron, HT, An Integrated Approach to Urban Infrastructure Development,
3. W.Ronald Hutson, R. Hass, Waheed Uddin. Infrastructure Management,

AR70Z0, Research/Design Thesis (6 SKS)
Short Syllabus
This is a final project course for a master program which can be in the form of design or research thesis which should reflect student’s capabilities in theoretical foundation, structure of thought, problem formulation and analysis, and interpretation and discussion of findings.

Related Courses
1. AR6100 Design/Research I, Pre-requisite.
2. AR6200 Design/Research II, Pre-requisite.
3. AR7100 Design/Research III, Pre-requisite.

Bibliography
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AR7100, Design/Research III (4 SKS)

Short Syllabus
Integration of theoretical and empirical studies to be further developed into thesis topics presented as:
- Problem analysis, alternative solution and communication of architectural product design.
- Research based on quantitative/qualitative approaches.

Related Courses
1. AR6100 Design/Research I, Pre-requisite.
2. AR6200 Design/Research II, Pre-requisite.

Bibliography
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AR7111, Thesis Seminar on Arch Design (2 SKS)

Short Syllabus
Discussion on topics specific to architectural design; data collection and substantive study on architectural design for thesis preparation.

Related Courses
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Bibliography
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AR7112, Thesis Seminar on Landscape Architecture (2 SKS)
Short Syllabus
Discussion on topics specific to landscape architecture; data collection and substantive study on architectural design for thesis preparation.

Related Courses
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Bibliography
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AR7131, Seminar Thesis on Building Tech (2 SKS)

Short Syllabus
Discussion on topics specific to building technology; data collection and substantive study on architectural design for thesis preparation -

Related Courses
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Bibliography
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AR7132, Construction Law (2 SKS)

Short Syllabus
Legal aspects of the construction industry will be examined which will involve various stakeholders such as the central government, regional government, consultant, contractors, community and others. Aspects of procurement will also be discussed.

Related Courses
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Bibliography
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AR7141, Thesis Seminar on History, Theory & Criticism of Architecture (2 SKS)

Short Syllabus
- Discussion on topics specific to history, theory and critic of architecture; data collection and substantive study on architectural design for thesis preparation

Related Courses
-
AR7142, Historiography of Architecture (2 SKS)

Short Syllabus
Introduction to philosophy, theory and historical approach as well research technique and historical writing. Exploration of architectural histographic works.

Related Courses
1. AR5141 Contemporary Architectural Issues, Pre-requisite.
2. AR6141 History and Theory of Architecture, Pre-requisite.
3. AR6241 Architecture Criticism, Pre-requisite.
4. AR6242 Advanced Theories of Architecture, Pre-requisite.

Bibliography
2. Brian Fay, et.al. (eds.), History and Theory: Contemporary Readings., Blackwell Publishers Ltd

AR7152, Urban Institutions (2 SKS)

Short Syllabus
This course covers topics on institutional development which include administrative procedures, development technique, legal bases, political process, design policy, community and private participation in the development process.

Related Courses

Bibliography
1. Anthony Filipovith., Introduction The City., Kendall/Hunt Publishing
2. Nick Devas, Carole Rakodi., Managing Fast Growing City., Ongman
3. Marsono., Undang-Undang dan peraturan di Bidang Perumahan dan Pemukiman., Djambatan

AR7151, Thesis Seminar on Housing and Human Settlements(2 SKS)

Short Syllabus
Discussion on topics specific to housing and human settlements; data collection and substantive study on architectural design for thesis preparation -

Related Courses
Bibliography
Syllabus vs Curriculum: Key Differences between Syllabus vs Curriculum, What role they play in ensuring the academic structure of a program. Curriculum contains the overall content as provided by an education board for a particular course spanning across a stipulated time period. Whereas syllabus explains the summary of different topics covered or units that will be taught in a specific subject or discipline under that particular course.