

Master of Architecture

Faculty of Architecture

Name of the Curriculum: Master of Architecture Program

Name of the Degree: Master of Architecture

Degree abbreviation: M. Arch.

Plan A1 Structure

	Term 1	Term 2
1st Year		
Total credits	9	9
Core courses (credits)	9	9
Elective courses (credits)	-	-
2nd Year		
Total credits	9	9
Core courses (credits)	9	9
Elective courses (credits)	-	-

Plan A2 Structure

	Term 1	Term 2
1st Year		
Total credits	9	10
Core courses (credits)	6	7
Elective courses (credits)	3	3
2nd Year		
Total credits	10	7
Core courses (credits)	7	4
Elective courses (credits)	3	3

1. Structure Program

1.1 Plan A1 not less than 36 credits

Dissertation 36 credits

709691	Thesis 1, Type A 1	9 Credits
709692	Thesis 2, Type A1	9 Credits
709693	Thesis 3, Type A1	9 Credits
709694	Thesis 4, Type A1	9 Credits

Required Non-credit courses not less than 4 credits

709611	Research Methodology in Science and Technology	3 (3-0-6)
709689	Seminar	1 (0-2-1)

1.2 Plan A2 not less than 36 credits

Coursework not less than 24 credits

Core courses not less than 12 credits

709612	Built Environment and Sustainability	3 (2-2-5)
709613	Planning and Project Management	3 (2-2-5)
709614	Theory and Literature Review in Architecture	3 (2-2-5)
709615	Research Proposal and Publication	3 (2-2-5)

Elective not less than 12 credits

Architecture program

709621	Ecological Design	3 (2-2-5)
709622	Global Warming and Human Behaviour	3 (2-2-5)
709623	Built Environment Critical and Creative Thinking	3 (2-2-5)
709624	Cultural Design Management	3 (2-2-5)
709625	Selected Topic in Architectural Study	3 (2-2-5)

Building Technology Program

709631	Solar Energy and Lighting	3 (2-2-5)
709632	Environmentally Responsive Building Design	3 (2-2-5)
709633	Building Environmental Analysis and Evaluation	3 (2-2-5)
709634	Building Material and Life-cycle	3 (2-2-5)
709635	Hybrid Building Construction	3 (2-2-5)

Urban Community Program

709641	Urban Design and Sustainable Community Development	3 (2-2-5)
709642	Land Economics and Policy	3 (2-2-5)
709643	Rural and Urban Development Planning	3 (2-2-5)
709644	Urban Conservation	3 (2-2-5)
709645	Stakeholder Participation Process	3 (2-2-5)

Thesis 12 credits

709695	Thesis 1, Type A2	4 credits
709696	Thesis 2, Type A2	4 credits
709697	Thesis 3, Type A2	4 credits

Required Non-credit courses not less than 4 credits

709611	Research Methodology in Science and Technology	3 (3-0-6)
709689	Seminar	1 (0-2-1)

2 Study Program

2.1 Study Program Plan A1

First year

1st Semester

709611	Research Methodology in Science and Technology (non-credit)	3 (3-0-6)
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709691	Thesis 1, Type A 1	9 Credits
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Total 9 Credits

2nd Semester

709692	Thesis 2, Type A 1	9 Credits
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Total 9 Credits

Second year

1st Semester

709689	Seminar (non-credit)	1 (0-2-1)
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709693	Thesis 3, Type A 1	9 Credits
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Total 9 Credits

2nd Semester

709694	Thesis 4, Type A 1	9 Credits
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Total 9 Credits

2.2 Study Program Plan A 2

First year

1st Semester

709611	Research Methodology in Science and Technology (non-credit)	3 (3-0-6)
709612	Built Environment and Sustainability	3 (2-2-5)
709613	Planning and Project Management	3 (2-2-5)
xxxxxx	Elective Course	3 (x-x-x)

Total 9 Credits

2nd Semester

709614	Theory and Literature Review in Architecture	3 (2-2-5)
xxxxxx	Elective Course	3 (x-x-x)
709695	Thesis 1, Type A 2	4 credits

Total 10 Credits

Second year

1st Semester

709615	Research Proposal and Publication	3 (2-2-5)
xxxxxx	Elective Course	3 (x-x-x)
709689	Seminar (non-credit)	1 (0-2-1)
709696	Thesis 2, Type A 2	4 credits

Total 10 Credits

2nd Semester

xxxxxx	Elective Course	3(2-2-5)
709697	Thesis 3, Type A2	4 credits

Total 7 Credits

3. Course Descriptions

709611 Research Methodology in Science and Technology 3 (3-0-6)

Research definition, characteristic and goal; type and research process; research problem determination; variables and hypothesis; data collection; data analysis; proposal and research report writing; research evaluation; research application; ethics of researchers; and research techniques in science and technology.

709612 Built Environment and Sustainability 3 (2-2-5)

Concepts of sustainability and expected characteristics of architecture according to sustainability concepts; ideas and practices of efficient use of energy, renewable energy, and other resources in architecture and manmade environment; examination of renewable energy; roles of designers and architects on environmental conservation and creation of sustainability through professional practice.

709613 Planning and Project Management 3 (2-2-5)

Basic principles of project management; techniques in organisation for project management; organisation preparation; project feasibility and planning; budget, resource and technology management; project control and project closeout.

709614 Theory and Literature Review in Architecture 3 (2-2-5)

Review, analysis and criticism on literatures and theories; study on the relationships between the development of architectural theory and change in economy, society, politics, arts, culture, and technologies.

709615 Research Proposal and Publication 3 (2-2-5)

Selection of research questions and topic; appropriate research methodology and study process; preparation of research proposal; academic writing and publication of research results.

709621 Ecological Design 3 (2-2-5)

Theory and approach of ecological design, green architecture, environmental architecture and sustainable architecture; examples of such architecture; design

government policy and roles to Central Business District (CBD), urban area and rural area; impact factors such as economic, social and urban development.

709643 Rural and Urban Development Planning 3 (2-2-5)

Urban elements and structures; visions and goals in rural and urban development; assessment of situations, problems, and trends in rural and urban development; processes, techniques, and methodologies in rural and urban planning; public hearing; types and forms of control measures in urban planning; laws and regulations in urban planning; Geographic Information System (GIS) and the basic applications of the system in relation to urban planning; creating and editing database associated with maps; analysing problems from data in order to assist in rural and urban planning.

709644 Urban Conservation 3 (2-2-5)

Study of approaches and principles of architectural and urban conservation; relationship between conservation and urban design; conservation process and methods; relevant regulations.

709645 Stakeholder Participation Process 3 (2-2-5)

Objectives of public participation; public participation process; methods for public participation; definition of stakeholders; stakeholder analysis process; negotiating process; project risk management.

709651 Housing and Property Development 3 (2-2-5)

Housing and property development; basic concept, methods and process of real estate development; limits, subsidy and control of real estate development through government organisation and policy. Urbanisation and city development from real estate development, roles, authority and mechanism of public and private sectors involved housing and property development

709652 Project Design for Quality 3 (2-2-5)

Principle of Design for Quality (DFQ) through project procedures; role of quality in the total production cycle, including customer input, competitive benchmarking, performance specifications, product and process design, manufacturing variability and product reliability; DFQ exercises and industry-based projects with the emphasis on teamwork and problem solving; related tools and software.

709661 Building Heat Transfer 3 (2-2-5)

Principles of heat transfer; heat transfer behaviour consisting of conduction, convection and radiation; factors affecting heat transfer; understanding basic calculations of types of heat transfer by using heat transfer equation.

709662 Advance Building Experiment 3 (2-3-5)

Advance study in theoretical and methodological experiments on building materials and structural elements; relationship between stress and strain; terms of the failure mechanisms; fracture mechanics and stability theory to construct sustainable buildings in the environmental setting of Thailand.

709671 Quality of Life and Urban Environmental Management 3 (2-2-5)

Urban environmental management for quality of life; improvement of quality of life through physicality aspect of urban area; environmental management and environmental engineering system for urban area; codes, regulations, and related environmental laws.

709672 Urban Transportation Design and Planning 3 (2-2-5)

Principles of land-use and urban transportation system relationship; specification of traffic and transportation systems; route distribution methods; traffic design and management.

709689 Seminar 1 (0-2-1)

Seminar and review on selected architectural topics, discussion, and presentation of research progress.

709691 Thesis 1, Type A 1 9 credits

Thesis outline; scope of study; definitions and related theories; literature review; thesis format.

709692 Thesis 2, Type A 1 9 credits

Selected methods of experiment or data collection; experiment or data collection; records management; data analysis; progressive report; thesis proposal examination.

