



Architecture

**Faculty of Engineering
Universitas Muhammadiyah Surakarta**

<http://arsitektur.ums.ac.id/>

Program Specification (Bachelor/Undergraduate)

Architecture

Faculty of Engineering

Universitas Muhammadiyah Surakarta

Update: 20/09/2020

1. Description of Study Program

Architecture Program of Universitas Muhammadiyah Surakarta was established in 1993 with the SK no: 91/DIKTI/Kep/1993. It has become one of recognized architecture program in Indonesia after receiving an excellent award on accreditation from National Accreditation Board (Accredited with grade A). Meanwhile, the philosophy of architectural education itself is influenced by the position of the prophetic education concept: humanization, liberation, and transcendence. On the completion of SP-Architecture UMS, *'architecture graduates should be able to master knowledge, progress to be professional architect, and contribute to the community development based on Islamic value'*.

2. Degree

Undergraduate: Sarjana Arsitektur (S.Ar.)

3. Accreditation

Accreditation A (Excellent) by BAN-PT (National Accreditation Board) Decree no. 2043/SK/BAN-PT/Akred/S/IX/2016

4. Type of Study: Full time, campus based

5. Head of Study Program: Dr. Ir. Widyastuti Nurjayanti, M.T

6. Vision and Mission of the Study Program

The vision of SP-Architecture is organized consistently, in line with vision and mission at university and faculty level. UMS has a vision that by 2029, it will become the center of Islamic science and technology development and education and provide direction for change. At the faculty level, Faculty of Engineering is expected to become the center of excellence for the education and development of Islamic science, art, and technology in engineering field. The vision of the SP-Architecture is to become the centre of excellent for Islamic Architecture education, which then transformed into Program Educational Objectives to be 'the centre of excellent for the education and development of Islamic Architecture'.

The missions of SP-Architecture are following:

1. Developing Islamic Architecture professionally, scientifically and sustainably at macro, mezzo and micro level.
2. Preparing skilled graduates in Islamic Architecture design, entrepreneurship based and information technology.
3. Developing research and devotion based on Islamic Architecture.
4. Developing human resources, facilities and infrastructure as well as cooperation network under one umbrella of Islamic Architecture.

7. Expected Learning Outcomes

Attitudes

- ELO 1.1. Representing Islamic characteristics, personally and interpersonally
ELO 1.2. Representing distinguished characteristics, academically and professionally

General skill

- ELO 2.1. Organizing scientific thinking approach, independently and responsibly, with problem-solving-orientation
ELO 2.2. Presenting the communication of thinking and ideas on writing, verbal, and graphics with manual and digital techniques

Knowledges

- ELO 3.1 Explaining the knowledge of social-cultural context, theory, and methods related to architectural design
ELO 3.2. Exemplifying the knowledge of science and technology related to architectural design
ELO 3.3. Implementing the knowledge in entrepreneurship and architecture related profession in accordance with the regulation
ELO 3.4. Integrating the knowledge in Islamic architecture design

Specific Skills

- ELO 4.1. Creating architectural design at building and urban level
ELO 4.2. Creating architectural design based on the Islamic concepts of *rahmatan lil alamin* (well-being for the universe)

8. Program Structure (Curriculum)

	SEMESTER 1	SEMESTER 2	SEMESTER 3	SEMESTER 4	SEMESTER 5	SEMESTER 6	SEMESTER 7	SEMESTER 8
GENERAL		Civil Society Education (2)	Pancasila (2)	Indonesian Language (2)				
	Islamic Study I (Attitude) (2)	Islamic Study 2 (Act and Deed) (2)	Islamic Study 3 (Science and Technology) (2)	Muhammadiyah Value (2)				
	English: Academic Purposed (2)	English: Standardized Test Preparation (2)						
CORE	Architecture Design Studio 1 (3)	Architecture Design Studio 2 (4)	Architecture Design Studio 3 (4)	Architecture Design Studio 4 (4)	Architecture Design Studio 5 (4)	Architecture Design Studio 6 (4)		Thesis (3)
	Building Structure and Utility 1 (2)	Building Structure and Utility 2 (2)	Building Structure and Utility 3 (3)	Building Structure and Utility 4 (4)	Building Structure and Utility 5 (2)			Final Design Studio (5)
SUPPORTING SKILLS & KNOWLEDGE	Nusantara Architecture History (2)	World Architecture History (2)	Islamic Architecture History (2)	Islamic Architecture Concept (2)	Architecture Bureau (2)	Project Management (2)	Internship (2)	
	Engineering Mechanics (2)	Engineering Concept (2)	Building Physics 1 (2)	Building Physics 2 (2)	Housing and Settlement (2)	Life-skill (2)	Syari'ah Real Estate (2)	
	Architectural Drawing (2)	Architectural Building Material Technology (2)	Site and Landscape Design (3)	Tropical Architecture (2)	Environmental Architecture and Behaviour (2)	Building Economics (2)	Field Study (3)	
	Working Drawing (2)	Geometric Mathematics (2)	Computer Application 1 (2)	Computer Application 2 (2)	Computer Application 3 (2)	Mosque Architecture (2)		
	Two- and Three-Dimensional Design (3)				Architectural Research Method and Statistics (2)	Urban Morphology and Planning (2)	Research Seminar (3)	
					Interior Architecture (2)	Architecture Conservation (2 SKS)		
ELECTIVE				Sustainable Architecture (2)		Elective 1A (2) Options: Javanese Traditional Architecture; The Art of Islamic Geometry; Green Architecture	Elective 1B (2) Options: Green Open Space; Syari'ah Tourism Precinct; Urban Architecture Pathology	
						Elective 2A (2) Options: Islamic Architecture Typology and Morphology; Architecture Critics; Multidisciplinary Project	Elective 2B (2) Options: Waterfront Architecture; Experimental Architecture; KKN-MU (Public Service)	
	20	20	20	20	20	20	16	8
								Total 144 Credit

Course code		Courses	Credit
SEMESTER I			20
1	TKA10133	Architectural Design Studio 1	3
2	TKA10232	Structure and Utility 1	2
3	TKA10332	History of Archipelago Architecture	2
4	TKA10433	Two and Three Dimensional Design	3
5	TKA10532	Architectural Drawings	2
6	TKA10632	Engineering Drawings	2
7	UMS10112	Religion 1 (Aqidah & Akhlak)	2
8	TKA10822	Engineering Mechanics	2
9	UMS10312	English for Academic Purposes	2
SEMESTER 2			20
10	TKA20134	Architectural Design Studio 2	4
11	TKA20232	Structure and Utility 2	2
12	TKA20332	World Architecture History	2
13	TKA20432	Architectural Building Material Tech.	2
14	TKA20522	Mathematical Geometry	2
15	ENG20421	Concept Engineering	2
16	UMS20112	Religion 2 (Worship & Muamalah)	2
17	UMS20812	Citizenship Education	2
18	UMS20312	Standardized Test Preparation	2
SEMESTER 3			20
19	TKA30134	Architectural Design Studio 3	4
20	TKA30233	Structure and Utility 3	3
21	TKA30332	Islamic Architecture History	2
22	TKA30432	Building Physics	2
23	TKA30533	Site and Landscape Engineering	3
24	TKA30632	Computer Applications I	2
25	UMS30112	Islam, Science & Technology	2
26	UMS10212	Pancasila	2
SEMESTER 4			19
27	TKA40134	Architectural Design Studio 4	4
28	TKA40234	Structure and Utility 4	4
29	TKA40332	Islamic Architecture Concept	2
30	TKA40432	Building Physics II	2
31	TKA40532	Tropical Architecture	2
32	TKA40632	Computer Applications II	2
33	UMS40112	Muhammadiyah Value	2
34	UMS30212	Indonesia Language	2

Course code		Courses	Credit
SEMESTER 5			20
35	TKA50134	Architectural Design Studio 5	4
36	TKA50232	Structure and Utility 5	2
37	TKA50332	Architecture Bureau	2
38	TKA50432	Settlement Principles	2
39	TKA50532	Environmental and Behaviour Arch.	2
40	TKA50632	Computer Applications 3	2
41	TKA50732	Sustainable Architecture	2
42	TKA50832	Interior Architecture	2
43	TKA50932	Methods & Statistics of Arch Research	2
SEMESTER 6			20
44	TKA60134	Architectural Design Studio 6	4
45	TKA60232	Mosque Architecture	2
46	TKA60332	Project Management	2
47	TKA60432	Morphology and Planning of City	2
48	TKA60632	Building Economics	2
49	TKA60732	Architectural Conservation	2
50	UMS60112	Life Skill	2
51		Elective Courses 1	2
	TKA60842	Javanese Traditional Architecture	
	TKA60942	Islamic Geometry Art	
	TKA61042	Green Architecture	
52		Elective Courses 2	2
	TKA61142	Typology Morphology of Islam Arch	
	TKA61242	Architecture Critique	
	ENG70122	Multidisciplinary Project	
SEMESTER 7			17
53	TKA70133	Field Study	3
54	TKA70232	Internship	2
55	TKA70333	Research Seminar	3
56	TKA70432	Syari'ah Real Estate	2
57		Elective Courses 1	3
	TKA70543	Green open space	
	TKA70643	Syari'ah Tourism Area	
	TKA70743	Pathology of Urban Architecture	
58		Elective Courses 2	3
	TKA70843	Water Front Region	
	TKA70943	Experimental Architecture	
	UMS71013	KKNMU	
SEMESTER 8			8
59	TKA80133	SKPA	3
60	TKA80235	Final Project Studio	6

9. Registration Period

The normal period of registration starts in January and ends in August every year.

10. Typical Entry Requirement

Requirements for SP-Architecture students are: high school graduates majoring in Science or Vocational Schools, not color blind, and passing the entrance test at the Muhammadiyah University of Surakarta. Entrance test pass scores is 50. Details of entry requirement follow UMS procedures mentioned in <https://pmb.ums.ac.id/>

11. Program Regulation

- **Credit**

The program consists of 144 credits with average 20 credits taken at each stage. Normally not more than 24 credits would be allowed in any one term, particularly for students with a Grade Point Average (GPA) of a semester higher than 3.5; see appendix for more detail rule: <https://www.ums.ac.id/id/krs-online-semester-gasal-tahun-akademik-2020-2021>. The pass mark for award of credit in each module is 40%.

- **Pre-requisite**

Architecture Design Studio 1-6: must pass with minimum C to take the next level

Building Structure and Utilities: must have taken previous level with minimum E

Internship: complete minimum 99 credit

Research Seminar: complete minimum 119 credit, passed 9 related courses with minimum C

Design Thesis: complete 135 credit

Final Design Studio: complete 138 credit, with maximum 14% D, except English minimum C

- **Progression**

In case students cannot pass the exam, he or she will be entitled for a reassessment of the course. Architecture Design Studio (ADS) are the core courses which requires students to pass in order to take the next level of ADS.

In order to progress to next academic year, students must pass following condition:

- Pass 30 credit in the end of first year with minimum GPA of 2.00
- Pass 60 credit in the end of second year with minimum GPA of 2.00
- Pass 90 credit in the end of third year with minimum GPA of 2.00

- **Completion**

To graduate from the study program, the students should:

- complete 144 credits (*Sistem Kredit Semester/SKS*) in minimum and have a cumulative grade point average/GPA (*Indeks Prestasi Kumulatif/IPK*) of 2.0 in minimum.
- Achieve at least C mark for Al Islam and Kemuhammadiyah
- Achieve at least C mark for Pancasila and Kewarganegaraan (Civic Education)
- Achieve score at least of 400 for English for Academic Purposes (EAP) test
- Have no more than 14 credits of D mark

12. Regulation of Assessment and Academic Standards

The grading scheme of the student assessment is regulated by the University (*SM-UMS 04: Standar Mutu Penilaian*). The grading scheme for students is stated in A, AB, B, BC, C, D and E marks with criteria and grade point representation as follows:

Score	Letter	Grade Point
>=77	A	4.0
70-76.99	AB	3.5
63-69.99	B	3.0
56-62.99	BC	2.5
50-55.99	C	2.0
35-49.99	D	1.0
<=0	E	0.0

The completion of a subject is determined using the criteria as follows:

1. Minimum passing grade is C or 2.0 out of 4.0.
2. Minimum 75% attendance.

13. College Support for Students and Students' Learning

For learning and teaching activities, SP-Architecture provide a number of facilities such as six classrooms (distributed in Building J and H), an audio visual room, laboratories (Building Phisic, Digital Architecture, Building Structure), design studios, a final design studio, a thesis exam room, and a reading room (mini library). The mini library (reading room) supports architecture students to read and learn on some collection including final project and research seminar documentation In addition, four rooms for seminar or large class are available in Building G, Building I, Building J, and Main Building Siti Walidah. SP-Architecture also developed with Islamic Architecture Research Centre. To bring professional

atmosphere into campus, the faculty developed a unit called PPKS (Pusat Pengembangan Kawasan Strategis), a unit for strategic regional development.

To improve leadership, teamwork, and soft skills, SP-Architecture supports student extra-curricular activities particularly under KMTA Svarga Citra, the Architecture Students Association. This covers several sub-activity unit such as photography (Artephac), design community (Diskomvis), architectural sketch (Sinan Aga), discussion club on Islamic Architecture (KAI-Kelompok Arsitektur Islam), and so on.

UMS policy states that all students should actively interacts with the academic supervisor and academic tutors. Academic tutors are particularly helpful for students at the initial stage, for example through mentoring program. Academic supervisor is responsible to monitor students' academic progress personally. UMS creates a mechanism which allow students to also consult for non-academic related problems, either with the academic supervisor or counseling office provided by the university. The main duty of the advisor is to control the student's academic achievement and to guide the student to optimize their ability.

14. University Support for Students and Students' Learning

Learning Resources: UMS Library maintains its principal collections in the Central Library buildings in Campus II. UMS also provides a Book Store in Campus I for students to purchase stationaries and reference book for their study.

Wellbeing Supports: Health facilities are available across the university, for example Muhammadiyah Medical Centre (MMC) and Dentish and Mouth Hospital. Sport facilities are available, such as Sport Centre and Football court. UMS also developed a new Edutorium within an Edupark, which combine education, sport, exhibition, and park facilities near Campuss IV. At least three big mosques are also available within the main campus area. For social activity, a number of student's activity groups are available both at university level and faculty level. UMS supports 27 student activity units (<http://kemahasiswaan.ums.ac.id/daftar-ukm/>).

IT Services provide a wide range of services throughout all UMS campuses, including 24/7 wireless internet connection. The IT Office also provides an IT Helpdesk for all staff and students on 5th floor of Gedung Induk Siti Walidah (rectorat building). Student can also access the internet using a personal computer provided in the main library building.

15. Indicators of Quality and Standards

In 2016, SP-Architecture UMS undergraduate program received an A-grade accreditation by the National Accreditation Board for Higher Education (BAN-PT). This demonstrates that the study program presents an excellent quality management system; it received the recognition at national level.

16. Methods for Evaluating and Improving Quality and Standards

SP-Architecture maintains the quality and standards on the basis of several elements such as: Key Performance Indicator (KPI), staff evaluation, teaching and learning evaluation, student evaluation, and feedback from stakeholders and alumni. UMS sets up a unit called LJM (Lembaga Penjaminan Mutu/Quality Assurance Unit) to monitor the quality and standards. LJM extends its task to faculty and study program level. LJM runs an annual internal audit for all unit and study program across the university.

Besides that, a major curriculum review is carried out every five years, along with some minor review throughout the years. In every 5 years, SP-Architecture must also submit institutional progression report to National Accreditation Board. Selain itu, review besar terhadap kurikulum dilakukan setiap lima tahun, disertai beberapa review kecil sepanjang tahun. Setiap 5 tahun, Prodi Arsitektur juga harus menyampaikan laporan perkembangan kelembagaan kepada Badan Akreditasi Nasional.

17. Partner College(s)/institution

- Indonesian Association for Architecture Higher Education (APTARI/Asosiasi Pendidikan Tinggi Arsitektur Indonesia)
- Institute of Indonesian Architects (IAI/Ikatan Arsitek Indonesia)